CHARTERING AGENCY
City College of San Francisco was chartered by the Board of Education, State of California, on April 17, 1935.

MAILING ADDRESS & MAIN TELEPHONE NUMBER
50 Phelan Avenue,
San Francisco, CA 94112
(415) 239-3000

CCSF INTERNET ADDRESS
www.ccsf.edu

CCSF ONLINE CATALOG ADDRESS
www.ccsf.edu/Catalog

ACKNOWLEDGEMENTS
This catalog is published by the Office of the Vice Chancellor of Academic Affairs with special thanks to Editor, Nino Kikilashvili.

All information in this catalog is subject to change without prior notice. Information is as of March 7, 2018. Please consult other official college publications as well as the online catalog for updates.

Dividers: Nino Kikilashvili and Eriberto Nacion
OUR VISION

CCSF shall provide a sustainable and accessible environment where we support and encourage student possibilities by building on the vibrancy of San Francisco and where we are guided by the principles of inclusiveness, integrity, innovation, creativity, and quality. Empowered through resources, collegiality, and public support, the college will provide diverse communities with excellent educational opportunities and services. We will inspire participatory global citizenship grounded in critical thinking and an engaged, forward thinking student body.

MISSION STATEMENT

Consistent with our Vision, City College of San Francisco provides educational programs and services that promote student achievement and life-long learning to meet the needs of our diverse community.

Our primary mission is to provide programs and services leading to

- Transfer to baccalaureate institutions;
- Associate Degrees in Arts and Sciences;
- 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 individual educational goals, students will improve their critical thinking, information competency, communication skills, ethical reasoning, and cultural, social, environmental, and personal awareness and responsibility.

In addition, the college offers other programs and services consistent with our primary mission 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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| Conlan 205 ........................ 239-3296 | Student Union, Upper Level..... 239-3109 | Conlan 104 ........................ 239-3345 |
| Art 201 ................................ 452-5235 | Financial Aid Office | Pierre Coste Dining Room |
| Cloud 207 .......................... 452-5235 | Cloud 324 .......................... 239-3577 | Statler Wing, Ocean Campus... 239-3855 |
| MUB 039 ............................. 452-5235 | Foreign Student Admissions | Police/Public Safety |
| Adding & Dropping Classes | Cloud 212 .......................... 239-3837 | Cloud 119 .......................... 239-3200 |
| Smith Hall 118 ....................... 239-3732 | Foreign Students Intensive English Program | Project SURVIVE, Sexual Violence Prevention |
| Admissions & Records (Credit) | Cloud 208 .......................... 239-3895 | Cloud 402 .......................... 239-3899 |
| Conlan 107 .......................... 239-3285 | Gateway to College | Puente Program |
| Admissions & Records (Noncredit) | Science 127 ....................... 452-5773 | MUB 013 .......................... 452-5630 |
| Smith Hall 118 ....................... 452-5997 | Grades, Mid-Term & Final | Mission Center 120 ........... 920-6065 |
| African-American Scholastic Programs | Log on to Web4 at www.ccsf.edu | Prerequisite Information Desk |
| Rosenberg LLRC 209 ............... 452-5315 | Graduation Petition & Transfer Credit Evaluation | Conlan 204 ........................ 239-3573 |
| Asian/Pacific American Student Success Program (APASS) | Conlan 107 .......................... 239-3840 | Registration Center/Fee Payment |
| Batmale 208 ......................... 452-5620 | Gender Diversity Project | Smith Hall 118 .................... 239-3858 |
| Associated Students | MUB 301 ............................. 452-5202 | Residency Requirements |
| Student Union 209 .................. 239-3108 | HIV/STI Education Office | Conlan 107 .......................... 239-3287 |
| Awards/Certificates Evaluation | MUB 301 ............................. 452-5202 | Resident Fees, Foreign Student & Non-Resident Tuition |
| Conlan 107 .......................... 239-3046 | Honors Program | Smith Hall 118 .................... 239-3521 |
| Bookstore (Textbooks) | Cloud 214 .......................... 239-3376 | Room Usage, Facilities Rental |
| Conlan 109 .......................... 239-3470 | International Student Counseling | Central Shop Facility ............ 239-3546 |
| CalWORKS | MUB 101 ............................. 239-3942 | Scholarship Information |
| Cloud 232 .......................... 452-5700 | Language Center | MUB 130 .......................... 239-3339 |
| Career Development Center (CDC) | Rosenberg LLRC 403 ................ 452-5555 | Student Account Services |
| MUB 039-101 ........................ 239-3117 | Latino Services Network | Bungalow 619 ..................... 239-3450 |
| Child Development & Family Studies | Cloud 364 .......................... 452-5335 | Student Accounting |
| Ocean Campus, MUB 249... 239-3172 | Learning Assistance Center | Conlan 104 ........................ 239-3760 |
| Child Care Eligibility | Rosenberg LLRC 207 ................ 452-5502 | Student Activities |
| List at Centers ...................... 561-1895 | Lesbian, Gay, Bisexual, & Transgender Counseling | Student Union 205 ............... 239-3212 |
| Child Care Center Locations: | Cloud 207 .......................... 452-5235 | Student Health Services |
| Ocean Campus, Mission Center | Library, Louise & Claude Rosenberg, Jr. Library | Health Center (HC 100) .......... 239-3110 |
| Teacher Prep Center | Library & Learning Resource Center | Study Abroad Programs |
| MUB 249 ............................. 239-3890 | Ocean .............................. 452-5400 | Cloud 212 .......................... 239-3778 |
| K-12 TPREP .......................... 239-3890 | Link Center | Testing & Assessment |
| ECE/PDP ............................ 452-5605 | MUB 301 ............................. 452-5070 | Conlan 203 ........................ 239-3128 |
| Computer Labs: | Lost and Found | Transcripts |
| Academic Computing Resource Center | Cloud 119 .......................... 239-3200 | Conlan 107 ........................ 239-3838 |
| Batmale 301 ......................... 239-3492 | Marketing/Public Information | Transfer Center |
| Business Department | Bungalow 606 ....................... 239-3497 | Science 132 ....................... 239-3748 |
| Cloud 111 .......................... 239-3769 | Matriculation Services | TULAY Program |
| Continuing Education | Conlan 204 ........................ 239-3751 | (Filipino American Student Success Program) |
| Fort Mason Art Center .......... 561-1840 | Rosenberg LLRC 403 ................ 452-5423 | Cloud 363 .......................... 452-5922 |
| Disabled Student Programs/Services | Rosenberg LLRC 207 ................ 452-7403 | Veteran's Educational Transition Services |
| (DSPS) | Rosenberg .......................... 452-7403 | Cloud 333 ........................ 239-3486 |
| Rosenberg LLRC 323 ............... 452-5481 | Online Courses Office | Women's Resource Center |
| (VTDD 452-5451) | Batmale 310 ........................ 239-3885 | Smith Hall 103 ................... 239-3112 |
| Educated Palate Restaurant | MUB 130A .......................... 239-3557 | Working Adults Degree Program |
| Downtown Center ................. 908-7522 | Parking Information & Enforcement | Mission Center .................. 267-6573 |
| English Eligibility | Cloud 119 .......................... 239-3200 | Downtown Center ................ 267-6573 |
| Batmale 514 ........................ 239-3574 | | |
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 Information Form.”

For further information, please contact Admissions and Records, Conlan Hall, Room E-107, telephone (415) 239-3285.

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. Selective Services registration card is available in the Office of Financial Aid at the Ocean Campus. Selective Services registration can also be done online at http://www.sss.gov.

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 transfer 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 http://srtk.cccco.edu/index.asp
ACCESS TO PUBLIC RECORDS AND INFORMATION

City College of San Francisco maintains a website (www.ccsf.edu) that provides the public with information regarding the structure and operation of the College. In addition, information about the Board of Trustees, including meeting agendas and minutes, are available to the public through this website.

Procedures for accessing public records held by City College of San Francisco may be reviewed on the College’s website. For those interested in accessing public records, please contact Steve Bruckman, Chief Legal Counsel, 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.

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 law, 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 http://www.ccsf.edu/Policy/health_document.pdf for more information.
ADMINISTRATIVE STAFF

Dr. Mark Rocha
Chancellor

Luther Aaberge
Interim Associate Vice Chancellor/Chief Budget Office

Michael Almaguer
Associate Vice Chancellor, Centers and School Deans

André Barnes
Chief of Police/Public Safety

Leilani Battiste, S.J.D.
Deputy General Counsel & Title 5/EEO/ADA/Title IX Compliance

Jorge Bell
Dean, Mission Center

Tom Boegel
Interim Vice Chancellor of Academic Affairs

Steve Bruckman
General Counsel

Torrance Bynum
Dean, Evans and Southeast Centers

Kristin Hershbell Charles
Associate Vice Chancellor, Institutional Development

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Dean, Financial Aid and Student Success Programs

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Reginald Duhe
Director of Community Development

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Dianna Gonzales
Vice Chancellor, Human Resources

Alex Guiriba
Associate Dean of Outreach

John Halpin
Associate Dean, Perkins and Cooperative Work Experience Education

Jeff Hamilton
Executive Director to the Chancellor & Governmental Affairs

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Associate Dean of Student Equity

Kathy Hennig
Dean, Administrative Services

Vahe Hovakimian
Interim Associate Dean, Finance

Lidia Jenkins
Dean, Matriculation and Counseling Services

Edith Kaeuper
Interim Dean, Health & Social Services

Andrew King
Dean of Student Affairs & Wellness

George Kozitza
Interim Vice Chancellor of Finance and Administration

Carmen Lamha
Associate Dean, CTE Pathways

MaryLou Leyba-Frank
Dean Admissions, Records and Outreach

Monika Liu
Associate Dean, Admissions and Records

Dr. Vinicio J. López
Dean, School of ESL, International Education, and Transitional Studies

Dr. Geisce Ly
Dean Downtown Center, School of Business, Fashion & Hospitality

Dr. Lillian Marrujo-Duck
Dean of Instruction

Ilona McGriff
Dean, Grants and Resource Development

Dr. Pamela Mery
Dean, Institutional Effectiveness

Wendy Miller
Associate Dean, Adult Education Programs

William Mosley
Interim Associate Dean, Human Resources

Monique Pascual
Director of Apprenticeship & Instructional Services Agreement

Donna Reed
Dean, Library and Learning Resources

Theresa Rowland
Associate Vice Chancellor, Workforce and Economic Development

Lucy Runkel
Assistant Director, Adult Education Block Grant

Rueben Smith
Interim Vice Chancellor of Facilities, Planning, and Construction

Clara Starr
Associate Vice Chancellor, Human Resources

Guillermo Villanueva
Associate Dean, Financial Aid Services and Student Success Programs

Trudy Walton
Vice Chancellor, Student Development

Kristina Whalen
Dean, School of Fine, Applied, and Communication Arts

Kerry Wilhite
Associate Dean, Payroll

Yarkin, Cherisa
Director of Planning

David Yee
Dean, School of Science, Technology, Engineering and Mathematics (STEM)

Jill Yee
Interim Dean, School of Behavioral Sciences, Social Sciences and Multicultural Studies
CCSF PRINCIPAL LOCATIONS

A. Ocean Campus, 50 Phelan Ave.
B. Civic Center, 1170 Market St.
C. Chinatown/North Beach Center, 808 Kearny St. at Washington 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.
J. Airport Center, SF Airport, Bldg. 928

In addition to the principal locations, CCSF offers classes at many other locations throughout the city.
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 Title 5/EEO/ADA/Title IX Compliance Officer, 50 Phelan Avenue, B213, San Francisco, CA 94112, (415) 452-5053. Information concerning the provisions of the applicable laws and complaint procedures is available from the District Title 5/EEO/ADA/Title IX Compliance 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.

IGUALDAD DE OPORTUNIDADES

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 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 subencionadas por fondos federales y/o estatales.

El District Affirmative Action Officer (Autoridad de Acción Afirmativa), es la autoridad responsable for coordinar y hacer cumplir estos reglamentos. Sus oficinas se hallan en el 50 Phelan Avenue, B213, San Francisco, CA 94112, (415) 452-5053. Para mayor información sobre estos reglamentos o sobre el procedimiento para sentar una queja, se debe consultar con la Autoridad de Acción Afirmativa del San Francisco Community College District.

PAHAYAG TUNKOL 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 kapatidirang edukasyonal nang walang diskriminasyon, harassment (paulit-ulit na pagpaggulo), pananakot, pagbabanta, o pagpili at magbigay ng katayuang ipagtanggol batay sa batas. Sa gayon, ito ang patakarang 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, kulay, angkang pinagmulan, ban-sang pinangalingan, pagkilala ng grupong panlahi, relihiyon, edad, kasarian, kalagayan, kalagayan ng pag-asaw, kalagayan may kasamang pantahanan, orientasyon ng tao, pagkainit o lagay na may AIDS/HIV, kondisyon medikal, pagkakakilanlan ng kasarian, o kalagayan bilang isang betanero sa panahon ng digmaan sa Vietnam.
Ang mga kategoriyang ito, lalong lalo na ay kabilang na ang kalagayan bilang isang lesbian (parehong babaing magkasintahan), gay (parehong lalaking magkasintahan), taong may dalawahang kasarian, taong nagsalin ng kasarian o taong hindi malinaw ang kasarian sa alinmang programa ng distritong pampaaralan o pagkikilos. Dagdag pa nito, hindi pahintulutan ng Distrito ang paghihiganti o sakdal sa ilalim ng mga kondisyong na pamamaraan, naaangkop na pagtanggap ng pondo galing sa federal at/o state.

Ang impormasyon tungkol sa mga tadhana ng mga naaangkop na batas at pamamaraan ay puwedeng maikua sa District Affirmative Action Officer.

THÔNG TIN VỊ CH ogó BỊNH ĐÃNG

Họp theo và hoạt động theo các quy định mà cơ quan có thẩm quyền đã ban hành và quy định mà cơ quan có thẩm quyền dựa trên các quy định mà cơ quan có thẩm quyền đã ban hành.

Người đại diện cho cơ quan có thẩm quyền mà cơ quan có thẩm quyền đã ban hành và quy định mà cơ quan có thẩm quyền dựa trên các quy định mà cơ quan có thẩm quyền đã ban hành.

XII
OVERVIEW OF THE COLLEGE

[Image of the college building with a flower bed in the foreground]
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, and 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, students 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 and hybrid 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.

College Accreditation
City College of San Francisco is accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges, 10 Commercial Blvd., Suite 204, Novato, CA 94949, (415) 306-0234, an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education. Additional information about accreditation, including the filing of complaints against member institutions, can be found at: www.accjc.org. Information related to the College’s accreditation is available at www.ccsf.edu/accreditation.

The following programs are subject to additional accreditation and certification standards:

Administration of Justice Department
ADMJ 85. PC 832 Arrest & Control
Presenter number 4540
Accredited by:
California Commission on Peace Officer Standards and Training
860 Stillwater Road, Suite 100
West Sacramento, CA 95605
916-227-3909

Aircraft Maintenance Technology Program
Certified by:
The Federal Aviation Administration
US Department of Transportation
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591
1-866-TELL-FAA (1-866-835-5322)

Culinary Arts and Food Service Management Programs
Accredited by:
The American Culinary Federation
Send comments in writing to:
American Culinary Federation Education Foundation
Attn: Accreditation
180 Center Place Way
St. Augustine, FL 32095
Fax: 904-940-0741

Dental Assisting Program
Accredited by:
The Commission on Dental Accreditation (CODA)
American Dental Association
211 East Chicago Avenue
Chicago, IL 60611-2678
312-440-2500
Submit comments: www.ada.org/314.aspx
Approved by:
Dental Board of California
2005 Evergreen Street, Suite 1550
Sacramento, CA 95815
877-729-7789 (Toll Free)
916-263-2300 (Direct)

Diagnostic Medical Imaging (DMI) Program
Accredited by:
The Joint Review Committee on Education in Radiologic Technology
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Phone: 312-704-5300
Fax: 312-704-5304
Approved by:
The Radiologic Health Branch of the California State Department of Public Health
1500 Capitol Avenue, 5th Floor, MS 7610
Sacramento, CA 95814-5006
Phone: (916) 327-5106 Fax: (916) 440-7999

Drug and Alcohol Studies Certificate
Accredited by:
California Association of Alcohol and Drug Educators (CAADE)
5230 Clark Ave., Suite 3
Lakewood, CA 90712
707-722-2331
Comments or Questions: office@caade.org
EMT & Paramedic Programs
The EMT Program is approved by the State of California EMS Authority and local approving EMS agency.
The Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) under the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Profession (CoAEMSP). Program #600218

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
25400 U.S. Highway 19 North Suite 158
Clearwater, FL 33763
Phone: 727-210-2350
www.caahep.org

Committee on Accreditation of Educational Programs for the Emergency Medical Services Profession (CoAEMSP)
8301 Lakeview Parkway, Suite 111-312
Rowlett TX 75088
Phone: 214-703-8445
Fax: 214-703-8992
www.coaemsp.org

Fire Science Technology Program
Accredited by:
The California State Fire Marshal’s Office of State Fire Training
PO Box 944246
Sacramento, CA 94244-2460
http://osfm.fire.ca.gov/training/accreditedacademies.php

Health Information Management Program (Associate in Science)
Accredited by:
The Commission on Accreditation for Health Informatics and Information Management (CAHIIM)
233 N. Michigan Ave, 21st Floor
Chicago, IL 60601-5800
Phone: 312-233-1100
http://www.cahiim.org

Licensed Vocational Nursing Program
Approved by:
The Board of Vocational Nursing and Psychiatric Technicians
2535 Capitol Oaks Drive, Suite 205
Sacramento, CA 95833
916-263-7800
bvnpt@dca.ca.gov

Medical Assisting Program
Accredited by:
The Commission on Accreditation of Allied Health Education Programs (CAAHEP)
25400 U.S. Highway 19 North Suite 158
Clearwater, FL 33763
Phone: 727-210-2350
Fax: 727-210-2354
Submit complaints: http://www.caahep.org/File-Complaints/

Registered Nursing Program
Approved by:
The California State Board of Registered Nursing
P.O. Box 944210
Sacramento, CA 94244-2100
http://www.rn.ca.gov/about_us/whatisbrn.shtml

Submit complaints:
Board of Registered Nursing, Attn: Complaint Intake
P.O. Box 944210
Sacramento, CA 94244-2100
Fax: 916-574-7693

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, Student Health Services, 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, students receive individual counseling from a professional counselor. Instructors also advise and help students. Through its counseling programs, the College helps students choose an occupation; plan a program of study based on individual interests, abilities, and needs; develop educational plans; provide various types of educational counseling, including academic, career, transfer, and personal, and assist students with personal problems or other matters affecting their studies or college career.

Career Center
CCSF students and alumni are entitled to all the career services provided by the Career Center. Counselors will assist in making career/job choices, setting educational career goals, selecting a major, becoming job ready and seeking employment.
Career services include individual career counseling, online advising, workshops, career success courses, and job resource information. 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 students 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 is available for some subjects.

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 campus and centers to facilitate communication, leadership, and advocacy. Further, the AS Executive Council appoints all student members to serve on participatory governance committees. There are active Associated Student Councils at various CCSF locations including: Chinatown/North Beach, Civic Center, Downtown, Evans, John Adams, Mission, Ocean and Southeast. Each Associated Student Council may adopt its own set of by-laws to guide local governance.
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Each spring, the Associated Students elects a student trustee to represent its interests on the San Francisco Community College Board of Trustees.

The AS Ocean Campus funds diverse resource centers and programs including: the Bookloan Program, the Multi Cultural Resource Center; Dr. Betty Shabazz Family Resource Center, Guardian Scholars, HARTS, Queer Resource Center, Women's Resource Center, Student Health, Students Supporting Students (S3), and more than 60 clubs and campus organizations. There is a $5 optional Student Activity Fee, payable at registration, to help support these centers and programs.

For information regarding the Associated Students, please contact the Student Activities Office in the Student Union Building, Room 205, Ocean Campus.

Inter-Club Council (ICC)
Recognized and funded by the Associated Student Council - Ocean Campus, the ICC consists of elected representatives from over 60 clubs. For more information about an existing club or about starting a new club, please stop by the Student Union Room 209 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 participatory 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 clubs and 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: Chinatown/North Beach, Civic Center, Downtown, Evans, John Adams, Mission, Ocean, 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. Other articulation information for City College can be found at www.ccsf.edu/artic.
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<tr>
<td>Diagnostic Medical Imaging Major (AS)</td>
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<td><strong>Russian</strong></td>
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<td>Russian Certificate</td>
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<tr>
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<td><strong>Theatre Arts</strong></td>
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<td><strong>Transitional Studies</strong></td>
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<td>CCSF High School Diploma Program</td>
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<td><strong>NONCREDIT CERTIFICATE</strong></td>
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<td>Adult Basic Education Level 1 Noncredit Certificate</td>
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<td>Adult Secondary Education Level 3 Noncredit Certificate</td>
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<td>Academic Skills Elementary Level 1 Noncredit Certificate</td>
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<tr>
<td>Academic Skills Intermediate Level 2 Noncredit Certificate</td>
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<tr>
<td><strong>Visual Media Design</strong></td>
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<td>ASSOCIATE DEGREE</td>
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<tr>
<td>Graphic Design Major (AA)</td>
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<td>Collaborative Design Certificate*</td>
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<td>Digital Animation Certificate</td>
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<td>Digital Art Foundation Certificate</td>
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<td>Digital Illustration Certificate</td>
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<td>Game Development Certificate</td>
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<td>Visual &amp; Interactive Design Certificate</td>
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<td>Visual Design Foundation Certificate</td>
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<td>Visual Media Production Certificate</td>
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<td><strong>Women’s Studies</strong></td>
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<td>ASSOCIATE DEGREE</td>
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<td>Social Justice Studies: Gender Studies Major (AA-T)</td>
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<td>Women’s Studies Major (AA)</td>
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<td>CREDIT CERTIFICATE</td>
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<tr>
<td>Sexual Health Educator Certificate</td>
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# CALENDAR OF INSTRUCTION

<table>
<thead>
<tr>
<th>Event</th>
<th>Fall 2018</th>
<th>Spring 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residency Determination Date</td>
<td>August 17, 2018</td>
<td>January 13, 2019</td>
</tr>
<tr>
<td>Instruction begins</td>
<td>August 18, 2018</td>
<td>January 14, 2019</td>
</tr>
<tr>
<td>First Monday, Monday/Wednesday, Monday/Wednesday/Friday Day and Evening Classes</td>
<td>August 20</td>
<td>January 14</td>
</tr>
<tr>
<td>First day of Saturday classes</td>
<td>August 18</td>
<td>January 19</td>
</tr>
<tr>
<td>First day of Sunday classes</td>
<td>August 19</td>
<td>January 20</td>
</tr>
<tr>
<td>Martin Luther King, Jr's Birthday</td>
<td></td>
<td>January 21</td>
</tr>
<tr>
<td>Last day to request GPA verification for CAL Grants</td>
<td>August 28</td>
<td>February 25</td>
</tr>
<tr>
<td>Last day to drop or reduce full-term course work to obtain a 100% refund for enrollment fee &amp; N/R foreign student tuition fee. Please consult the College website at <a href="http://www.ccsf.edu/schedule">www.ccsf.edu/schedule</a> for deadline dates for short-term courses</td>
<td>August 31</td>
<td>January 28</td>
</tr>
<tr>
<td>Last day to add credit classes and change sections in person &amp; on the web</td>
<td>September 1-3</td>
<td>February 1</td>
</tr>
<tr>
<td>Last day to drop credit classes with no notation on academic record</td>
<td>September 7</td>
<td>February 1</td>
</tr>
<tr>
<td>Last day to drop or reduce course work to qualify for a 50% pro-rated nonresident and foreign student tuition refund fee. Please consult the College website at <a href="http://www.ccsf.edu/schedule">www.ccsf.edu/schedule</a> for deadline dates for short-term courses</td>
<td>September 12</td>
<td>February 6</td>
</tr>
<tr>
<td>Last day to request a pass/no pass grading option</td>
<td>September 20</td>
<td>February 14</td>
</tr>
<tr>
<td>Lincoln's Birthday</td>
<td></td>
<td>February 15</td>
</tr>
<tr>
<td>Presidents' Birthday weekend. No Saturday/Sunday classes</td>
<td></td>
<td>February 16 – 17</td>
</tr>
<tr>
<td>Washington's Birthday</td>
<td></td>
<td>February 18</td>
</tr>
<tr>
<td>Last day to petition to receive AA-T/AS-T Degrees for students transferring to CSU</td>
<td>October 4</td>
<td>February 26</td>
</tr>
<tr>
<td>Last day to petition for Degree or Certificate</td>
<td>October 4</td>
<td>February 26</td>
</tr>
<tr>
<td>Faculty Flex Day (Professional Development) - No classes</td>
<td>October 16</td>
<td>February 5</td>
</tr>
<tr>
<td>End of the midterm period</td>
<td>October 19</td>
<td>March 15</td>
</tr>
<tr>
<td>Spring Vacation</td>
<td></td>
<td>March 25-30</td>
</tr>
<tr>
<td>Cesar Chavez Day</td>
<td></td>
<td>March 31</td>
</tr>
<tr>
<td>Last day for student/instructor initiated withdrawal from classes and change sections for the same department</td>
<td>November 8</td>
<td>April 11</td>
</tr>
<tr>
<td>Veteran's Day</td>
<td>November 12</td>
<td></td>
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<tr>
<td>Thanksgiving Holiday</td>
<td>November 22-25</td>
<td></td>
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<tr>
<td>Last day to remove an Incomplete received in the previous semester</td>
<td>December 12</td>
<td>May 14</td>
</tr>
<tr>
<td>First day of final examinations for day classes</td>
<td>December 13</td>
<td>May 15</td>
</tr>
<tr>
<td>Last session &amp; final examinations for Saturday classes</td>
<td>December 15</td>
<td>May 18</td>
</tr>
<tr>
<td>Event</td>
<td>Fall 2018</td>
<td>Spring 2019</td>
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<tr>
<td>----------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Last session &amp; final examinations for Monday evening classes</td>
<td>December 17</td>
<td>May 20</td>
</tr>
<tr>
<td>Last session &amp; final examinations for Tuesday evening classes</td>
<td>December 18</td>
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</tr>
<tr>
<td>Last session &amp; final examinations for Wednesday, Monday/Wednesday classes</td>
<td>December 19</td>
<td>May 22</td>
</tr>
<tr>
<td>Last session &amp; final examinations for Thursday, Tuesday/Thursday classes</td>
<td>December 20</td>
<td></td>
</tr>
<tr>
<td>Last session &amp; final examinations for Sunday classes</td>
<td>December 16</td>
<td>May 19</td>
</tr>
<tr>
<td>Last day of final examinations for day classes</td>
<td>December 20</td>
<td>May 22</td>
</tr>
<tr>
<td>Mid-year recess</td>
<td>December 21, 2018 – January 13, 2019</td>
<td></td>
</tr>
</tbody>
</table>
Admissions Policy (Credit Classes)
City College has an Open Enrollment Policy. You are eligible to attend, if you meet the following requirements:

1. You are 18 years of age or on before the first day of instruction of the term for which you are applying.
2. You are a high school graduate.
3. You have the equivalent of a high school diploma. (i.e. you have passed the General Education Development test (GED) or a state’s high school proficiency examination.

Please note that other factors may determine eligibility. Contact the Office of Admissions and Records for more details or visit our website at http://www.ccsf.edu. Applications for Admission are available in the Office of Admissions and Records or are available online.

Open Enrollment Policy
It is the policy of the District that, unless specifically exempted by statute or regulation, every course, course section or class, reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the District and who meets such prerequisites and/or corequisites as may be established pursuant to regulations commensurate with Section 58100 of Title 5 of the California Code of Regulations as related to limitations on the receipt of state aid.

Readmission to the College
Students who have previously attended City College, but have not registered in classes for two semesters or more, must reapply to the college. The entire matriculation process needs to be completed or waived before the student may register for classes. Please see Matriculation Steps for Enrollment In Credit Classes.

Admission 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 18 years of age to enroll in one or more college courses.
The California Code of Regulations, Section 76011, requires the recommendation of the high school principal and the consent of the parent or guardian for the student to be considered eligible to attend. For more information regarding admissions deadline dates and enrollment policies, please call (415) 452-5172 or (415) 452-5101. The High School webpage is http://www.ccsf.edu/en/student-services/admissions-and-registration/admissions/credit-admission/high-school-students.html.

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, Cloud Hall, Room 212, 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 Office, City College of San Francisco, 50 Phelan Avenue, Cloud Hall, Room 212, 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 415 239-3895i or e-mail: international@ccsf.edu

Cross-Registration
San Francisco Consortium: 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 San Francisco State University, but pay City College fees. 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. Forms for this program are available at the Office of Admissions and Records, Conlan Hall E107.

Mills Cross Registration Program: City College students may take up to four courses (one per semester) at Mills College in Oakland. Students must be enrolled in or have completed English 1A and have completed 12 units of UC or CSU transferable courses with at least a 2.0 grade point average. Applications are available from the Counseling Office in MUB 39.

UC Berkeley Cross Enrollment Program: Students may take a course at UC Berkeley if they have completed English 1A, have completed one semester at City College as a matriculated student, have at least a 2.0 grade point average, have met any prerequisites for the course, and are enrolled in 6 units at City College during the semester they wish
to take the UC Berkeley course. Students pay City College fees for the course. Applications are available from the Counseling Office in MUB 39.

**Student Success and Support Program (SSSP)**

It is the policy of the college to ensure equal educational opportunity for all students. Student Success and Support Services (previously known as Matriculation services) at CCSF assist students in developing and realizing their educational goals.

Each matriculating student is entitled to:

- Math and English/ESL course placement assessment
- Orientation to College programs and services
- Counseling and advisement
- Opportunity to develop a Student Educational Plan with the assistance of a counselor
- Challenge any prerequisite or corequisite based on established criteria
- Review the SSSP regulations and exemption criteria approved by the CCSF Board of Trustees

Each matriculating student is expected to:

- Declare an educational goal following completion of 15 semester units and participate in the development of a Student Educational Plan
- Attend classes regularly and complete assigned course work

**SSSP Services Exemption Policy**

Students may be excused from participating in any or all of the SSSP services if they meet the exemption criteria below:

- Student has already earned an A.A./A.S. degree or higher (at a U.S. accredited institution only), OR
- Student's educational goals do not include:
  - Transfer to a college or university, or
  - Attainment of certificate, degree or basic skills (i.e., math, English, and /or ESL), or
  - Career development, OR
- Student is enrolling only in courses mandated by industry or licensure standards

Please note: Students who exempt from any SSSP service will not receive course registration priority.

You may obtain the Matriculation (SSSP) Exemption Form at the Admissions and Records Office and the Matriculation Office in Conlan Hall, or online at [http://www.ccsf.edu/dam/ccsf/documents/matric/ExemptionForm.pdf](http://www.ccsf.edu/dam/ccsf/documents/matric/ExemptionForm.pdf)

For further information, call (415) 239-3751.

**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 online application for admission at [www.ccsf.edu](http://www.ccsf.edu). Applications are available from the Office of Admissions and Records, Conlan Hall, Room E107. Required.

**STEP TWO — ORIENTATION.** The online or in-person orientation session will focus on registration activities, interpretation of placement test results, 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](http://www.ccsf.edu/New_Students).

**STEP THREE — 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 Placement Testing Waiver or SSSP 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.

**Multiple Measures Course Placement Process:**

Placement testing is only one factor that determines your Math and English or ESL course placement level at CCSF. Other factors (such as relevant high school and college courses you've taken and your GPA) are considered together with your placement test results. A counselor, whom you will see as part of the SSSP process, will evaluate any additional background information you may provide to further determine appropriate course placement.

For further information, see [www.ccsf.edu/New_Students/test.htm](http://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 may begin Math placement testing with any of the following tests:

- 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 tests: Seating is limited, and first-come, first-served. Reservations are not required.
- Paper-pencil tests: Seating is not limited. Reservations are not 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](http://www.ccsf.edu/New_Students/test.htm)
STEP FOUR — MEET WITH COUNSELOR. At the counseling appointment, a student will receive a program of courses and registration information.

STEP FIVE — REGISTRATION. Students are notified of their date and time to register for classes via their CCSF email account and their Web4 student portal. Students may register for classes on that date and time and thereafter during the registration period.

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, P. O. Box 750932, San Francisco, CA 94175-0932, or by fax at (415) 452-5127.

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 Evidence Based Reading/Writing: 650
   - SAT Reasoning Test, Critical Reading Section: 500
   - SAT Reasoning Test, Writing Section: 680
   - SAT II Writing Subject Test: 660
   - SAT Verbal (before 4/95): 510
   - SAT Verbal (after 4/95): 590
5. ACT English Test with score of 22 or higher - Eligibility: English 1A
6. Advanced Placement (AP) Exams:
   - AP English Language & Composition Exam:
     - Score of 3, 4, 5: Equivalency of completion of English 1A
     - Eligibility for ENGL 1B, 1C, CMST 2
   - AP English Composition & Literature:
     - Score of 3 or 4: Equivalency of completion of English 1A
     - Eligibility for ENGL 1B, 1C, CMST 2
     - Score of 5: Equivalency of completion of English 1A+1B
7. EAP (Early Assessment Program) results - Eligibility: English 1A
   - "Ready for CSU or CCC mathematics college-level coursework" OR
   - "Conditionally ready for CSU or CCC college-level mathematics coursework" AND grade of C or higher in two semesters of a CSU approved senior-year high school mathematics course
8. Completion (with a "C" or higher) of a college English course equivalent to CCSF English 1A – University-Parallel Reading and Composition - Eligibility: English 1B and 1C and Speech 2

Mathematics
Students may be excused from taking the Math Placement Test by attaching proof of one of the following:

1. Any of the following SAT scores:
   - SAT I Math: 550
   - SAT II Math: 550
2. ACT Math score of Level I or II or 23:
   - Eligibility: MATH 70, 75, 80, 90, 95
3. Advanced Placement (AP) Exams:
   - Calculus AB score of 3: Eligibility: MATH 110A
   - Calculus AB score of 4 or 5: Eligibility: MATH 110B
   - Calculus BC score of 3 or 4: Eligibility: MATH 110B
   - Calculus BC score of 5: Eligibility: MATH 110C or 115
   - Computer Science AB score of 3, 4, 5: Eligibility: MATH 70, 75, 80, 90, 95
4. GRE (Graduate Record Exam) Quantitative Section score: 146
   - Eligibility: MATH 70, 75, 80, 90, 95
5. EAP (Early Assessment Program) -- Eligibility: MATH 70, 75, 80, 90, 95
   - "Ready for CSU or CCC mathematics college-level coursework" OR
   - "Conditionally ready for CSU or CCC college-level mathematics coursework" AND grade of C or higher in two semesters of a CSU approved senior-year high school mathematics course
6. Completion (with a "C" or higher) of a college-level math course equivalent to MATH 30 (Prealgebra with Basic Math) or higher.

Placement Test Retake Policy
Students may retake the Math and English or ESL placement tests after two weeks, for a maximum of two times per testing cycle (Pre-Fall cycle: March through Aug; Pre-Spring cycle: Oct through Jan). ESL students who have already enrolled in core ESL courses (ESL 110-160) must wait until after the last day of the semester to retake the ESL Placement Test. An ESL advisor is available during the final two weeks before the beginning of fall semester for continuing ESL students who wish to have their skills reassessed.

CCSF placement tests are designed to help determine your Math and English or ESL course placement levels before you enroll in Math, English or ESL courses. If you wish to skip to a higher level after you have enrolled, contact the Math Department Chair, English Eligibility Coordinator, or Credit ESL Coordinator for an individual assessment.

Alternative Matriculation Services
You can access or request alternative services for the matriculation process if you indicate the following:

Placement Testing:
1. English is not your primary language and you prefer to take the regular English as a Second Language Placement Test;
2. You have a physical, visual, or communication limitation which might require an accommodation;
3. You have extreme difficulty with reading, writing, spelling, math, or understanding and remembering information, which might require an accommodation.

Orientation and Counseling:
1. English is not your primary language and you prefer to take a translated Orientation (if available);
2. You have a physical, visual, or communication limitation which might require an accommodation;
3. You have extreme difficulty with reading, writing, spelling, math, or understanding and remembering information, which might require an accommodation.
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  .................... $243.00 + $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  ......................... $243.00 + $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 (nonrefundable): $17.00 for students registered in .50 semester unit or more.

NOTE: By law, students who qualify in the following categories will be exempt from the health fee payment:

1. Students who depend exclusively upon prayer for healing in accordance with the teaching 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.)

Please refer to Student Health Services website for the "Petition for Exemption for the Student Fee" at http://www.ccsf.edu/studenthealth

Reduced Fees Under AB540
AB540 is a California 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.

Students who meet all of the following requirements are eligible:

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

For more information, please contact the Office of Admissions and Records, Residency Department, Conlan Hall 107, call (415) 239-3287, FAX (415) 239-3936 or email resident@ccsf.edu.

Payment Methods and Policies
Payment of fees is due at the time of registration. Non-Payment of fees will result in a HOLD being placed on your account. Non-payment of fees MAY result in classes being dropped during the registration period. This could also result in not receiving college services. Students are liable for all fees for classes not dropped by the refund deadline dates.

Enrollment Fees, Nonresident and International tuition, and all other applicable fees are due and payable at the time of registration. Please note: it is the STUDENT’S responsibility to drop or withdraw from class(es) by the established deadlines published in the online class schedule.

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 prorated 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 residency 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 only 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 Admission & 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

Students are notified by email of their residency status after they apply to the college however 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 registered in 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 is registered in six or more semester units.

Half/Part Time Students – Students registered in a minimum of six semester units in the fall or spring semester are half/part time students for that semester.

**Advanced Standing**

Previously completed course work from regionally accredited institutions will be considered for transfer to satisfy City College of San Francisco academic requirements for an associate degree or certificate. One month after enrolling at the College, students may request an evaluation of their Official Transcripts from other institutions to determine which of their courses are transferable. For information on how course work transfers to universities, consult with a counselor.

**High School Honors Courses.**

City College grants advanced standing and units to students who have completed Advanced Placements Examinations with scores of 3, 4, or 5, certified by the College Entrance Examination Board. A grade of Pass will be recorded for an appropriate college course or courses when verification and petition form is provided to the Office of Admissions and Records.

**Enrollment Limitations**

Students may enroll in a maximum of eighteen (18) semester units, including physical education courses each fall and spring semesters. Students may enroll in a maximum of eight (8) semester units, including physical education courses during the Summer Session. Upon approval, the students may add these units at any time during priority registration and through the Add period.

Students wishing to enroll in more than the maximum units allowable must receive permission from an academic counselor. Approval they take more than eighteen (18) semester units 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 a GPA of 3.00 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 118, or at any Admissions and Enrollment Office at College Center locations.

**Time Conflict/Overlapping Courses**

Students are not allowed to enroll in two courses that overlap unless all of the following requirements are met:

- The students must provide sound justification other than mere scheduling convenience.
- The instructor and the school dean must review the justification and approve the request to enroll in the overlapping class.
- The students must make up the hours of overlap under the supervision of the instructor of the course.
- The instructor and the student must maintain documentation of the made-up hours.

At the end of the term, the instructor must submit the documentation to the administration. The administration will maintain the documentation according to Board Policies regarding records retention. Time conflict approval forms are available at the Admissions & Records office in Conlan Hall Room 107 or at the Admissions & Enrollment offices at the various Centers.

**Online Registration**

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

Students must be admitted to the College and have met the Matriculation requirements prior to registering for a class. A Registration Appointment is assigned to each student. You may begin Online Registration in Web4 any time after the appointment date and time. To view your Registration Appointment date and time, access your account in Web4 and select “Check Your Registration Status”.

**How to Register Online**

To protect your confidentiality, it is strongly recommended that each student process their own registration.

All administrative, financial and academic holds must be cleared before you are allowed to register for classes.

Be prepared. The class that is your first choice may not be open. Select an alternative section of the course before beginning your Web4 session.

The registration system does not allow time conflicts, multiple registrations in the same course, enrolling in a course without fulfilling the prerequisites, multiple unauthorized repeats and exceeding the maximum number of units (18 semester units, Fall and Spring; 8 semester units Summer).

After the 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.

**Class Attendance**

Students are expected to attend class regularly and punctually. At the first class meeting, the instructor provides the student with a class syllabus, defining the rules of attendance. If you are unable to attend the first class session, contact the instructor directly before the class begins.

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 class work that was required.

Excessive tardiness may be considered equivalent to an absence. If the instructor drops/withdraws the student from a class for excessive absence, the student may request an Instructor Reinstatement from the instructor, and may return to class upon the instructor's approval.

A student who stops attending a course and does not drop/withdraw from the class may receive a failing (F) grade from the instructor. Do not rely on the instructor to drop/withdraw you from class for non-attendance. It is the student's responsibility to drop/withdraw within the deadline dates. Please see the current semester's Calendar of Instruction.

**Auditing**

Classes may not be audited. Only students who are officially enrolled in a course may attend class.

The Office of Continuing Education in Partnership with the CCSF Credit Department offers course availability for students not eligible
for Course Repetition or for those students that do not need course credit for transfer or an associate degree.

- Registration for Co-Enrollment starts on the first day of instruction.
- Co-Enrollment registration will be processed after the Credit Add/Drop period is over.
- CRN numbers and Add Codes are not accepted for Co-Enrollment.
- To register for the Wellness Center, please visit our website: www.ccsf.edu/contined.

If you have any questions, please contact the Office of Continuing Education, 2 Marina Blvd. Bldg B, Fort Mason Center, S.F. CA 94123 FAX: (415) 561-1849

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.

Student Success and Support Program (SSSP) 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 INFORMATION

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. Most 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. A student pursuing career and technical education and transfer to a university should refer to the college catalog to determine which courses are transfer eligible and seek advisement to ensure they have an updated student educational plan on file.

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 diversity studies departments in the School of Behavioral Sciences, Social Sciences, and Multicultural Studies, the College seeks to promote greater understanding of the cultures, history, contributions, and intersecting identities of ethnic groups in the Americas and globally, the working class, the LGBT communities, and women. The departments are 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.

Admission. Enrollment is open to all students. Students may choose to transfer to a four-year institution, complete a major, earn a degree or certificate or complete a particular course or group of courses. In some instances, students may be required to satisfy prerequisites before enrolling.

Curriculum. The courses offered by the African American Studies Department (AFAM); Asian Studies Department (ASIA); Asian American Studies Department (ASAM); Interdisciplinary Studies (IDST); Labor and Community Studies (LBCS); Latin American and Latino/a Studies Department (LALS); Lesbian, Gay, Bisexual and Transgender Studies (LGBT); Philippine Studies Department (PHST) and Women's Studies (WOMN) are listed under the above headings/titles in the "Programs and Courses" section of this Catalog and throughout the schedule of classes.

Family Studies - CDEV Department
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 (415) 239-3172 or visit the Multi-Use Bldg., MUB 249 on the Ocean Campus. For enrollment information in CCSF Child Development Centers, call (415) 561-1895. Training for foster parents and kinship care providers 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 (415) 239-3172 or visit our website at: 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 courses you complete, even if you do not complete all 15 units.

UCLA 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.ageducation.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.” 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 skudsi@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 (IDST)
The Interdisciplinary Studies Department is committed to innovation, diversity, and collaboration. The College provides interdisciplinary instruction through courses in design, sexuality studies, diversity and social justice, middle east studies, pacific island studies, behavioral and social sciences, humanities, and ethnic studies. The courses are listed under "Interdisciplinary Studies" in the "Programs and Courses" section of this catalog.

Labor and Community Studies (LBCS)
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, social action theater and music. Students can earn an Associate in Science Degree.

Lesbian, Gay, Bisexual, and Transgender Studies (LGBT)
The LGBT Studies Department at CCSF was the first in the United States and the second in the world. In the 1980’s onward, this has been a vibrant program that now offers students an A.A. degree in the field. The courses in LGBT Studies focus on intersecting identities and the ways that race, ethnicity, socio-economics, religion, and other social structures interact with gender identity/gender expression and sexual orientation. The LGBT Studies department has articulation agreements with Napa Valley College’s certificate in LGBT Studies as well as San Diego State University’s B.A. in LGBT Studies. LGBT Studies aims to promote objective understanding of the complexity of gay, lesbian, bisexual, transgender and queer experiences while serving the broad educational needs of the student body. The department hopes to increase social and cultural awareness and competency particularly to students going into healthcare and/or educational settings.

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 students with disabilities can be made by prior arrangement and approval of the State GED Administrator only after providing supporting documents.

HiSet testing is also available. The HiSet Test is the new alternative test to the GED. The HiSet diploma/certificate is also accepted by employers and accredited colleges in all 50 of the United States.

Students and members of the public who wish prepare for the exams should enroll in Transitional Studies GED/HiSet 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. OLAD offers lifelong education providing opportunities for personal growth and creativity. Designed for ages 55 and over, courses are taught at more than 30 different locations in San Francisco. The no-fee classes are available in a variety of subject areas including art, stitchery, music, health and physical well-being, body dynamics and aging, principals of balance, theater, computers and more. Students may enroll on site at class locations at any time during the semester.

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/HiSet preparation and Adult Basic Education in reading, writing, mathematics and study skills. In the Transitional Studies Department, students may earn CCSF HS Diploma, transfer high school credits to other schools, study to pass the GED or HiSet, 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 and lab courses to which students may enroll at any
time during the semester. Telephone: 920-6042 website: www.ccsf.edu/trst

Online Learning
Online classes provide students with the opportunity to learn in an
environment that is physically remote from their instructors and class-
mates, making it easier to balance higher education goals with other
responsibilities. They offer convenience and modern tools that sup-
port learning. Some online classes require students to come to a CCSF
campus for orientations, weekly or monthly mandatory meetings, and
exams. Online classes may require textbooks, assignments, exams, and
frequent interaction between students and instructors. Some online
classes require program downloads as well as minimum hardware and
software requirements. CCSF uses the learning management system
called Canvas (https://ccsf.instructure.com) for all its online classes.
CCSF offers about 180 online classes, many meeting local (CCSF) asso-
ciate degree, transfer associate degree, certificate, and CSU/UC transfer
requirements. Students may choose to combine online learning with on-
campus classes or take an entire course load online. Online classes are
as demanding as lecture classes. Students must be self-motivated,
possess effective study skills, and be able to work independently. We
strongly encourage online students to have basic experience with the
Internet and we require that they have regular access to a web-enabled
device. (Students without such devices may use computers on campus
in CCSF labs.)

Registration for online classes is the same as for face-to-face classes.
Information on course offerings is listed in the printed and the online
versions of the Class Schedule as well as at http://www.ccsf.edu/online.
Visit that website for a list of online classes, for guidelines for suc-
cessful 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 oppor-
tunity 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 call-
ing 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.

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. Today, more than thirty courses are taught in various
disciplines, focusing on the complex roles of women in society. The
department houses Project SURVIVE, a sexual health education pro-
gram that works to end sexual assault, intimate partner violence, and
structural violence. Women's Studies courses are open to all students.

Please see "Women's Studies" in the "Announcement of Programs and
Courses” section of this catalog for details.

Working Adult Degree Program
WADP is a degree and transfer program for adults who work during the
weekday. The complete degree pathway for Liberal Arts degrees in
Social & Behavioral Sciences and Arts & Humanities, an AA-T in
Social Justice Studies with an emphasis in Ethnic Studies, along
with the ability to modify the program to earn degrees in Child
Development, Sociology, Psychology, and more are offered to the
WADP learning community on evenings and weekends. Please contact
WADP at WADP@ccsf.edu or visit our website: www.ccsf.edu/
WADP

Other Areas Of Interest
Concert and Lecture Series
A wide variety of concerts and lectures are presented by profession-
als 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.

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
California Community Colleges. Intercollegiate sports include base-
ball, basketball, cross-country, football, soccer, soft ball, swimming,
tennis, track, badminton, volleyball and water polo.

Intercollegiate Speech and Debate Team
CCSF’s Speech & Debate (Forensics) team is a unique program on
campus where students develop their personal and political voices.
Through creative and argumentative development students apply criti-
tical thinking and performance skills to contemporary social issues,
and then test those skills against other students in inter-collegiate
competition. CCSF is a nationally ranked forensics team, competing in
3 formats of debate and 11 public speaking and interpretation events.
For more information, contact Alexis Litzky or Nathan Steele by call-
ing 415-452-7126 or emailing forensics@ccsf.edu. Enroll in CMST 38
to prepare for competition.

Lost and Found Articles
Persons who find lost articles are requested to bring them to the col-
lege 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. Individuals may post advertisements on campus in accordance with the District Posting and Distribution Guidelines. 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.
Financial Aid Services

College Policy on Financial Aid

All financial aid at CCSF is administered in accordance with policies and procedures which have been established nationally. The basis of such programs is the understanding that students and their parents have the primary responsibility to meet educational costs and that financial aid is available 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 established a student budget to reflect the costs of each of these items based on a statewide cost survey.

Financial Aid Federal Programs

City College of San Francisco (CCSF) participates in a variety of federal and state financial aid programs. These programs are designed to assist students with tuition, fees, books, supplies, transportation and room and board.

Most financial aid programs require a student to be enrolled at least half-time in a degree, certificate, or transfer program. Federal aid eligibility is also limited to students who are U.S. citizens, permanent residents, or other eligible non-citizens. Additional eligibility requirements apply to each program and may be obtained from the Financial Aid Office. Students with bachelor's degrees are not eligible for grants. Financial aid consists of programs which are funded and regulated by the federal and state governments.

To apply, students must complete a Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov. CCSF Federal School Code is 012874. The priority deadline to apply is March 2 to be eligible for all available aid. However, you may still apply after March 2, although funding may be limited. Visit the Financial Aid Office for further information located in Cloud Hall, Room 324 or visit Financial Aid on the web page. The federal government offers a variety of grants for students.

Federal Pell Grant - This grant is available to all eligible applicants. Limited eligibility may also be available to less than half time students.

Federal Supplemental Educational Opportunity Grant - A limited number of grants are available through this program. Priority is given to students who apply by the priority deadline and have exceptional need.

Federal Work Study - This program allows students to seek employment for on and off-campus jobs. Students generally work up to 15 hours per week. 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.

Federal Direct Loan Program (FDLP) - Students may apply for a Subsidized or Unsubsidized loan from the federal government. Loans are monies which are borrowed now and must be paid back after leaving school with interest.

Financial Aid State Programs

The state of California offers a variety of grants for students. The California Dream Act of 2011 is the result of two assembly bills (AB130 and AB131). Together these bills allow undocumented and documented students who meet certain provisions of AB540 law to apply for and receive private scholarships funneled through public universities, state-administered financial aid, university grants and community college fee waivers. To apply, students must complete a free California Dream Act application with the California Student Aid Commission online at https://dream.csac.ca.gov each year by March 2nd for priority filing.

Cal Grants - The California Student Aid Commission awards Cal grants. Students must be legal residents of California and have financial need. To be considered, students must complete a Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov, or Dream Act application at https://dream.csac.ca.gov and submit a GPA Verification form by March 2 or September 2

• Cal Grant B - This grant helps disadvantaged students attending a community college with living expenses, books, supplies, transportation and other non-direct educational expenses.
• Cal Grant C - These awards help vocational program students with tuition and supplies.

Chafee Grants – This grant helps eligible current or former foster youth who are or have been in foster care between their 16th and 18th birthdays, and not reached the age of 22 by July 1 of the award year.

Full Time Student Success Grant – All full-time community college students receiving Cal Grant B or Cal Grant C will be offered this assistance. Only full-time students are eligible for this benefit.

Community College Completion Grant - Full-time community college students receiving the Full-Time Student Success Grant, enrolled in 15 units per semester, and who are on pace to complete their program within the determined time-frame in their comprehensive SEP can receive this benefit.

Board of Governors Fee Waiver - The Board of Governors Waiver (BOGW) helps to pay the per unit enrollment fee for all eligible applicants. If you request a fee waiver, you will be asked to sign a Fee Waiver Application under the penalty of perjury that all statements and information are correct. You must be a California resident in order to apply for these waivers.

• BOGW A - If you or your family receives Temporary Assistance for Needy Families (TANF), Supplemental Security Income (SSI), or General Assistance/General Relief, you may qualify for BOGW A.
• BOGW B – The student (or their parents, if dependent) must meet the maximum income guidelines.
• BOGW C - You have qualified for federal or state financial aid, such as a Federal Pell Grant or Cal Grant based on the FAFSA application results.
• BOGW Special – If you are a dependent student of qualified Veterans (CalVet), Congressional Medal of Honor recipients; Victims of the September 11, 2001 terrorist attack; and deceased law enforcement/fire personnel killed in the line of duty you may qualify for a BOGW Special. Proof of eligibility from the appropriate agency is required.
Financial Aid Institutional Programs
Free City - Free City is an institutional award program that began in Fall 2017. Supported by the voters of San Francisco, the Free City program represents a partnership between City College of San Francisco and the City & County of San Francisco. Created to fund the educational goals of San Francisco residents, the program provides eligible City College of San Francisco students with financial aid to cover their enrollment fees. The program is determined by the Financial Aid Office after all federal and state assistance has been exhausted. Free City is a Fall and Spring semester pilot program; Free City does not apply to summer sessions. To qualify for Free City program at City College of San Francisco, you must continue to be a California resident living in San Francisco AND complete a FAFSA or California Dream Application.

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:

- Maintain a cumulative GPA of 2.0.
- Must complete 67% of all units attempted
- Complete a financial aid eligible educational program within 150%% maximum time frame (MTF)

Return to Title IV Funds
In accordance with the Federal Regulations HEA, Section 4848, 34 CFR 668.22, CCSF will apply a refund policy to all eligible students under the Return to Title IV funds requirements. Students who receive federal financial aid and withdraw from all classes prior to completing at least 60% of the semester will have their financial aid eligibility recalculated and may have to repay any “unearned” portion of financial aid received.

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

Withholding of Services to Students in Default on Loans or Owing Refunds
If a student or former student is in default on a Title IV loan or on a Federal Perkins Loan or owes a refund on a grant (Pell, FSEOG), the District shall withhold the following services: provision of grades, provision of transcript, 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 child care. For additional information, please visit the website at www.ccsf.edu/info/CalWORKs.

Financial Aid, CalWORKs, EOPS, Guardian Scholars, HARTS, and Scholarships
Student Financial Resources are the offices of Financial Aid, CalWORKs, EOPS, Guardian Scholars, HARTS, and Scholarships. Together they serve students who need assistance in meeting the basic cost of their education. This section outlines the programs and the students the programs serve and basic eligibility requirements. Because funds are limited, federal and state regulations require that Financial Aid funds go to students who demonstrate financial need.

Extended Opportunity Programs and Services (EOPS)
The Extended Opportunity Programs and Services (EOPS) assists low-income, educationally disadvantaged students who are eligible for BOGW (A, B, or C with EFC $0) 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, priority registration, orientation to college, financial aid advising, book services, transfer workshops, and CSU and UC transfer application fee waivers, and other services. 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 and advising 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. Students must have earned less than 70 degree applicable units from all higher education institutions, in addition to meeting other eligibility criteria. Please note that EOPS services for eligible EOPS students are limited to 6 terms or up to completing 70 degree applicable units, which ever comes first. 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 on eligibility criteria or call (415) 239-3561.

Guardian Scholars
A program for current or former foster care college bound students; the program provides academic counseling, book assistance, scholarships, transportation passes, housing referrals and resources, and other support services. For additional information please visit the website at www.ccsf.edu/guardianscholars.

Homeless At-Risk Transitional Students Program (HARTS)
HARTS is a program that provides support to striving, college bound students in transitional housing care system. The program is designed to provide up to three years of financial and personal support, to ensure that full advantage is taken of all services and resources at CCSF in order for the student to meet their education goal. For further information, come to the Student Union MLK center, Ocean Campus, or call (415) 452-5355.

Scholarship Office
The Scholarship Office assists students in applying for scholarships. For additional information please visit the website at www.ccsf.edu/scholarships. Scholarships are competitively awarded and based on the criteria specific by the donor.
LEARNING RESOURCES AND STUDENT SERVICES
LEARNING RESOURCES AND STUDENT SERVICES

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

Library services are available at the Ocean Campus and every center throughout the district. The CCSF Library has print and media resources in excess of a quarter million items; it licenses Ebook, Reference resources, Streaming Video and Periodical databases which can be accessed on or off campus through the web. 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/en/library.

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 world languages a variety of activities to enhance their language study. World Languages 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.

Library Services support the development of program pathways for certificate and degree earners at locations throughout the city. The Airport Center, located at San Francisco International Airport, is served by a librarian present on a regular basis and additionally as needed. Collections supporting programs in Aircraft Maintenance Technology and Fire Science are available electronically and through delivery. 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 CCSF Civic Center Library, located on the 1st floor at 1170 Market Street, houses collections supporting programs in Business, ESL, Labor Studies, LGBTQ, and Transitional Studies. The 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 world languages lab. The Evans Center Library is located at 1400 Evans Avenue, 2nd Floor Room 223. The collection supports programs in automotive, basic skills, construction, custodial, ESL, fashion, motorcycle, solar, upholstery and woodworking. The Fort Mason site, located in Building B of Fort Mason Center in the Golden Gate National Recreation Area, is served by a librarian present on a regular basis and additionally as needed. Collections supporting courses in Art and Health Care Technology are available electronically and through delivery. 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 mathematics, chemistry, physics, accounting, economics, psychology, anatomy, physiology, statistics, music, nursing, and world languages and cultures 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. Limited online tutoring is available for students taking online courses, and courses at a variety of Centers.

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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Colleage 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, instruc-
tor-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,
exted, MS Office and a wide 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 applica-
tions 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.).

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 coordina-
tion 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 qual-
ified student tutors staff the laboratory. Hours of operation are posted at
the laboratory and on the biology department website.

The Communication Lab in Cloud 208B is operated by the
Communication Studies Department and provides one-on-one tutor-
ing in the construction, development and rehearsal of speeches. The
lab supports all CCSF students working on speeches, debates or perfor-
mances. Staffed by student tutors and supervised by Communication
Studies faculty, the Lab offers help in all stages of the speechmaking
process as well as assistance in understanding intercultural, interper-
sonal, and group dynamics. In particular, the Lab provides support in
anxiety reduction, topic selection, thesis writing, outline construction,
speech delivery and use of visual aids. Computers are available for
research, outline writing, and visual aids construction. Stop by Cloud
208B or visit www.ccsf.edu/commlab for hours of operation.

The Math Lab located in Bungalow 602 offers drop-in tutoring and
computer access for all students taking math courses up to the level of
Intermediate Algebra. The lab serves students enrolled in MATH 30
Prealgebra with Basic Math, MATH 40 Elementary Algebra, MATH 43
Preparation for Liberal Arts Math, MATH 45 Preparation for Statics,
MATH 46 Elementary and Intermediate Algebra (combined), MATH
55 Geometry, and MATH 60 Intermediate Algebra.

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 col-
collection of Audio-Visual References. A registered nurse serves as a
resource person for nursing students to answer questions, direct inde-
pendent 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/HiSet 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/HiSet
practice tests as appropriate. More in depth diagnostic tests are offered
by a faculty reading specialist. A disabilities counselor assists with
adaptations and GED/HiSet 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, a
computer lab, an annual book of student writings, and an annual GED
graduation/all-level student awards ceremony. Telephone (415) 561-
1871 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.

<table>
<thead>
<tr>
<th>Department</th>
<th>Location/Building</th>
<th>Phone 1</th>
<th>Phone 2</th>
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</thead>
<tbody>
<tr>
<td>Academic Counseling Department (NSCD)</td>
<td>Conlan 205</td>
<td>239-3296</td>
<td></td>
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<tr>
<td>Academic Counseling Services (CSCD)</td>
<td>Arts 201/Cloud 207/Multi-Use Bldg 39, Mezzanine</td>
<td>452-5235</td>
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<tr>
<td>Extended Opportunity Programs and Services (EOPS)</td>
<td>EOPS Bldg.</td>
<td>239-3561</td>
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<tr>
<td>International Student Counseling Program (ISCP)</td>
<td>Multi-Use Building 101</td>
<td>239-3942</td>
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<tr>
<td>Latino Services Network (LSN)</td>
<td>Cloud 364</td>
<td>452-5335</td>
<td></td>
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<tr>
<td>African American Scholastic Programs (AASP)</td>
<td>Rosenberg Library 209</td>
<td>452-5315</td>
<td></td>
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<tr>
<td>Asian Pacific American Students Success Program (APASS)</td>
<td>Batmale 208</td>
<td>452-5620</td>
<td></td>
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<tr>
<td>Tulay/Filipino American Student Success Program</td>
<td>Cloud 363</td>
<td>452-5195</td>
<td></td>
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<tr>
<td>Career Counseling</td>
<td>Multi-Use Building 101</td>
<td>239-3117</td>
<td></td>
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<tr>
<td>Transfer Center</td>
<td>Science 132</td>
<td>239-3748</td>
<td></td>
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<tr>
<td>Mental Health Services/Student Health Services</td>
<td>Health Center HC 100</td>
<td>239-3110</td>
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<tr>
<td>Veteran's Educational Transition Services (VETS)</td>
<td>Cloud 333</td>
<td>239-3486</td>
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<tr>
<td>Disabled Student Programs and Services (DSPS)</td>
<td>Rosenberg 323</td>
<td>452-5481</td>
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<tr>
<td>Lesbian/Gay/Bisexual/Transgender Counseling (LGBT)</td>
<td>Cloud 207</td>
<td>452-5249</td>
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<tr>
<td>Athletic Counseling Services</td>
<td>Well 139</td>
<td>452-5659</td>
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<tr>
<td>Homeless At-Risk Transitional Students (HARTS)</td>
<td>Cloud 205</td>
<td>452-5355</td>
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<tr>
<td>Financial Aid Counseling</td>
<td>Cloud 324</td>
<td>239-3576</td>
<td>239-3576</td>
</tr>
<tr>
<td>Civic Center Counseling</td>
<td>750 Eddy Street, Room 105</td>
<td>561-1878</td>
<td></td>
</tr>
<tr>
<td>Chinatown/North Beach Counseling</td>
<td>808 Kearny Street, Room 119</td>
<td>395-8611</td>
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</tr>
<tr>
<td>Downtown Center Counseling</td>
<td>800 Mission Street, 1st Floor</td>
<td>267-6503</td>
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</tbody>
</table>

Are you a new student to City College with less than 24 units? Do you need help with academic and career planning?

Do you need an Educational Plan, degree or transfer information?

Are you educationally disadvantaged, low income, eligible for BOG fee waiver and taking 12 units?

Are you a new or continuing International student here on an F-1 Visa? Do you need specialized assistance and orientation?

Are you interested in bilingual and bicultural (Spanish-English) programs and support services?

Are you interested in programs for African Americans and the Diaspora, Black College tours and transfer assistance?

Are you interested in bilingual and bicultural counseling (Cantonese, Mandarin, Tagalog, and Vietnamese), programs, and support services?

Are you interested in bilingual and bicultural (Tagalog-English) programs and support services?

Are you undecided about your educational or career interests and goals or looking for job and internship information?

Are you interested in programs to help students transfer including transfer admission guarantees? Need information to transfer or apply to a university?

Have you been feeling stressed or anxious lately? Having concerns of a personal nature? Stop by Student Health Services for assistance.

Do you qualify for Veteran's benefits? Come to the Veteran's Office for assistance.

Do you need an accommodation due to a medical, physical, or psychological condition or learning disability?

Want information about student activities, scholarships, support services, counseling, courses and programs for LGBT students?

Are you a member of a City College intercollegiate athletic team? Do you need academic, career, or personal counseling?

Are you homeless and in need of special services such as transportation, food, books, and housing?

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?

Do you hope to study English as a Second Language? Are you interested in citizenship, how to use computers, or communications?

Are you interested in Asian American Studies, Business, Child Development, Health Education, Sign Language, or ESL?

Are you interested in Computer Studies, ESL, Food Technology, Business, or Working Adults Degree Program?

Are you an entrepreneur seeking the support of our Small Business Development Center?
<table>
<thead>
<tr>
<th>Learning Resources and Student Services</th>
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<tbody>
<tr>
<td><strong>Evans Center Counseling</strong></td>
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</tr>
<tr>
<td>1400 Evans Avenue, Room 104</td>
<td>550-4409 or 550-4506</td>
</tr>
<tr>
<td><strong>Adult Learning and Tutorial Center at Civic Center</strong></td>
<td></td>
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<tr>
<td>1170 Market Street</td>
<td>561-1871</td>
</tr>
<tr>
<td><strong>John Adams Counseling</strong></td>
<td></td>
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<tr>
<td>1860 Hayes Street, Room 142</td>
<td>561-1925</td>
</tr>
<tr>
<td><strong>Mission Center Counseling</strong></td>
<td></td>
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<tr>
<td>1125 Valencia Street, First Floor</td>
<td>550-1130</td>
</tr>
<tr>
<td><strong>Southeast Center Counseling</strong></td>
<td></td>
</tr>
<tr>
<td>1800 Oakdale Street, Room 201</td>
<td>550-4320</td>
</tr>
</tbody>
</table>

**Evans Center Counseling**
Looking for assistance in entering vocational programs? Interested in apprenticeship programs and cooperative work experience?

**Adult Learning and Tutorial Center at Civic Center**
Looking for the Adult Learning and Tutorial Center? Literacy Education? Transitional Studies or GED/HiSet Preparation?

**John Adams Counseling**
Are you interested in the health professions, Child Development, computer training, Consumer Education, ESL, High School Diploma or GED/HiSet Preparation?

**Mission Center Counseling**
Are you interested in Digital Printing, Office Technology, GED/HiSet Prep in English and/or Spanish, High School Diploma Program, ESL, Working Adults Degree Program?

**Southeast Center Counseling**
Are you interested in ESL courses, or certificate programs?
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 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. Early registration in certain English and Math courses
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 a 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
• Early registration in certain English, Math and other courses
• 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 CC SF. The Faculty/Staff/Community Mentors 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
- Early registration in certain English, Math and other courses
- Learning community in Philippine Studies and PEP (Filipino/a Educational Partnerships) courses
- Recommended courses: IDST 50, 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.

**Academic Counseling Services**

CCSF’s Academic Counseling (CSCD) addresses the career, academic and personal counseling needs of students at City College of San Francisco. We strive to assist students to develop skills to succeed in college, graduate, earn certificates, transfer, and to create and maintain meaningful careers. Students can work with counselors to discuss their academic goals, develop or revise educational plans, course/major selection and career/vocational guidance. 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. Academic Counseling 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-Friday. Counselors are available on the Ocean Campus in A201, C207 and Multi-use Building 39, Mezzanine.

City College of San Francisco’s New Student Counseling Department (NSCD) 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

**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.

**Additional Counseling Services**

The Athletic Counseling Services (452-5659) 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 Academic Counseling Department (C207), as well as in the Disabled Student Programs and Services Department (DSPS), the Career Development and Placement Center (CDPC). For more information, please call Counseling in C207 at 452-5249, or the Queer Resource Center, B201, at 452-5919.

**Career Counseling Services**

The Career Development 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 Undecided Majors or Career Changers:** Students who have not yet chosen careers or majors, or who wish to change their careers or majors may obtain guidance 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 (CRER 60, Creating Career Options; 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 (Non-Credit) 1062, Job Search Skills, students will develop personal awareness and information essential in making sound decisions and choices about their major course of studies and careers.

**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 (CCSF) 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 CCSF 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. CCSF 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 Strategy 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) 395-8611. 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/dspss. Should you have questions or encounter difficulty regarding access, please contact DSPS at (415) 452-5481.

**Student Health Services**

The Student Health Services Program assists students in achieving their educational goals by providing services and programs that address the whole student, by empowering students to make healthy lifestyle choices and to be wise health care consumers. This includes a wide range of medical/nursing, mental health, consultation and referral services, as well as health education and promotion activities.

All currently enrolled credit students are eligible for clinical services. Appointments are encouraged and drop-in visits are accommodated as feasible and prioritized by level of urgency.

All students may take advantage of the Student Health Services website, which includes health information, community resources, an informative student health e-magazine and interactive online trainings. All CCSF centers have a small Health Information Station with health information and resource materials, also available to all students.

**Medical/Nursing Services**

Professional nurse practitioner assessment and treatment of common acute illnesses and infections, comprehensive reproductive health care, and referrals to specialists as needed is offered. Also provided are first aid, TB testing, blood pressure screening, selected immunizations (MMR, Tdap, Hepatitis A and B, seasonal flu), smoking cessation support, and nutrition education and counseling.

Most services are free of charge, although discounted charges are applied for some specific services (e.g. labs). Specific family planning and STI (Sexually Transmitted Infection) screening services for men and women are available free to those eligible through the state Family
PACT Program (this also includes PAP testing, breast exam, birth control counseling and dispensing).

Mental Health Services
Professional short-term psychotherapy for individuals and couples, as well as assessment, referral, crisis intervention, and information dissemination is provided by licensed clinicians and supervised interns. Support groups on topics such as procrastination, relationship concerns, managing anxiety and panic attacks, stress reduction and meditation are also conducted.

Consultation and Referral
Nurse practitioners and mental health providers are available for consultation with faculty, staff and administrators regarding student health/mental health issues and concerns regarding students.

When additional evaluation and/or treatment is warranted, students are referred to their primary care provider or a community health/mental health agency, as appropriate. Any costs incurred for off-campus health care is the responsibility of the respective student.

To make an appointment and/or to ask questions call 415.239.3110. For additional information refer to the website at www.ccsf.edu/studenthealth.

The LINK Center
The LINK Center, linking learning and action, is located in MUB 301 on CCSF’s Ocean Campus, overlooking Unity Plaza. Open to all, the Health Education Department’s resource center is home to Community Health Workers, WayPass, Gender Diversity Project, and mental health, substance use, trauma-informed care, and healthcare interpreting study programs. The center serves as a laboratory for applied learning and action on community health issues. We offer work spaces for groups and individuals, computers, safer sex supplies, HIV/STI information, and a Trans Health Library. We are open Monday through Thursday, 10:10 AM- 5 PM, during spring and fall semesters. Contact us at 415-452-5070 or email ccsfhealthed@gmail.com.

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 Academies 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, Teacher prep staff provide assistance to students and community members interested in entering the field of ECE, T-K, elementary, secondary, or CTE teaching. Call (415) 452-5605, PDP or (415) 239-3890, Teacher Prep, for additional information or visit the web at: www.ccsf.edu/Departments/Child_Development.

Transfer Center
Transfer Center is located in Science Hall, Room 132. Telephone: 415-239-3748. Website: www.ccsf.edu/transfer.

The Transfer Center is the core of the most current information to assist students to transfer to a baccalaureate institution. We work closely with CCSF’s Articulation Officer to ensure transfer information is accurate and up-to-date. The Transfer Center provides students with transfer options and strategies. We endeavor to impart on students a distinction between meeting minimum transfer requirements vs. being a competitive transfer applicant. Special programs the Transfer Center oversee include the UC Transfer Admission Guarantee Program (TAG), UCLA’s Transfer Alliance Program (TAP), and the “Degree with a Guarantee” – Associate Degree for Transfer (ADT) to CSU’s.

Check our website for a robust calendar of special events and visits from university representatives who come to meet directly with students for pre-admissions advising. Come to the annual Transfer Day/College Fair in October at Smith Hall Cafeteria on the Ocean Campus. Representatives from over 45 colleges and universities attend to meet CCSF students and discuss transfer opportunities and requirements. In addition, the Transfer Center offers and array of workshops for students on specialized transfer topics, for example, TAG, ADT, UC Personal Insight Questions, and College Admission Applications.

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/alumni. For more information, call (415) 452-4711.

Child Care Services
The Child Development & Family Studies Department administers child development centers in San Francisco at Mission Center and at the Ocean Campus for children of CCSF students and other low income families. These centers function as lab-schools for child development students. The centers feature subsidized child care and development services and are full time at two 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) 561-1895. The Department also features Parent/Child Observation courses at 7 sites throughout the city for parents who wish to participate in adult education opportunities. For further information on specific classes operated by the Department, please call 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.

**Metro Transfer Academies**
Metro Transfer Academies (Metro) prepares students for transfer, community engagement and meaningful careers. Metro students take general education classes together each semester over four semesters, building close relationships among peers, faculty and counselors and giving students a personalized educational home at City College. The Metro program includes academic counseling, tutoring and an emphasis on social justice and developing strong academic skills. Metro has four Academies with the following themes: Science, Health, Educaiton and Social Services, Diversity Studies at the Mission Center and Design, Media Arts and Communication.

Metro's outreach is geared towards high schools, community based organizations, and classes that serve students who are first-generation, low-income and/or historically underrepresented.

Ocean Campus, MUB 338. Contact metro@ccsf.edu or 415-452-5237 form more information.

**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, Counseling Development, 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.

**Peers-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/or abuse 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 specially trained English instructors and a counselors.

The program is open to all interested students. For more information call Gregoria Cahill (415) 920-6065 or Nixora Ferman at (415) 239-3593.

**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.

**Dr. Betty Shabazz Family Resource Center (FRC)**
The Family Resource Center (FRC) at CCSF is a multicultural center with members from all backgrounds, ethnicities, sexual orientations and cultures. Although all students are welcome, the mission is to provide a safe and supportive place for student parents to receive the support and resources they need to reach their educational goals.

The center provides information about on and off-campus resources, a child-friendly computer lab, a supervised child activity room for drop-in and the Parent Exchange Program (PEP). The PEP program provides students with children up to 9 hours a week of free child care while they attend classes. For further information, come to Student Union, Room 201, or call (415) 239-3109.

**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
Learning Resources and Student Services

further information, visit the Student Union, Room 203, or call (415) 239-3660.

Veterans Services
The VETS OFFICE 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 Transition Services Office (VETS) 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.

Veteran Students Parent School Policy. Veteran students are required to complete a majority of their coursework at City College of San Francisco (CCSF) in order for the institution to approve certification as a Parent School. Each term, a minimum of 75% of the semester units must be taken at CCSF. Appeals must be submitted and addressed to the Department Chair/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.
DEGREE AND CERTIFICATE 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

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<th>Option 1: CCFS Associate Degree</th>
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<td>Associate in Arts (AA)</td>
<td>Associate in Arts for Transfer (AA-T)</td>
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<tr>
<td>or Associate in Science (AS)</td>
<td>or Associate in Science for Transfer (AS-T)</td>
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## 1. General Education
- Completion of City College of San Francisco General Education pattern, Areas A-H.
- 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.
- Note: Details of IGETC and CSU GE requirements are in the Transfer Information section of the Catalog.

## 2. Mathematics
- Satisfactory math placement score, or completion of an approved math course, or satisfactory score on SAT, ACT, or Advanced Placement (AP) exam.
- Completion of Area B4 of the CSU General Education pattern, or Area 2 of the IGETC pattern.

## 3. Major
- 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.
- Completion of an AA-T or AS-T program as specified by the department.

## 4. Units
- A minimum of 60 semester units of degree applicable courses.
- 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.

## 5. Grade Point Average
- Cumulative grade point average of at least 2.0, including a grade of C or higher in each course taken towards the Major Requirement.

## 6. Residence
- Completion at CCSF a minimum of 12 degree applicable semester units required for graduation.

**Petitioning for the Associate Degree**
- Submission of a Petition for Graduation Form to the Office of Admission and Records by the deadline.
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, 2A
- Business English 74, 76
- Business Mathematics 68
- Career Development 60, 61*, 62*
- Communication Studies 1A, 3, 4, 6, 11, 12, 20
- Comp. Networking & Infor.Tech 131, 132
- Economics 5
- Engineering 38
- Engineering Technology 50
- English As Second Language 79
- French 1, 1A, 1B, 2, 2A, 2B, 3, 3A, 3B, 4, 10A, 10B, 10C, 10D, 10E, 11A, 11B, 15A, 15B, 22, 23
- 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, 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, 17, 18, 19, 20
- Journalism 19, 26
- Latin Amer & Latino/a Studies 5
- Learning Assistance 50
- Mathematics 70, 75, 80, 90, 92, 95, 97, 100A, 110A
- Music 3A, 29
- Philosophy 2, 4, 12A, 40
- Pilipino 1, 2, 10A, 10B, 10C
- Psychology 5
- Russian 1, 1A, 1B, 2, 2A, 2B, 3A, 3B, 10A, 10B, 10C, 10D, 15A, 15B, 16A, 16B, 21, 21A, 21B, 22, 22A, 22B
- Spanish 1, 1A, 1B, 2, 2A, 2B, 3, 3A, 3B, 5, 5S, 6, 6A, 6B, 7, 10A, 10B, 10C, 10D, 31A, 31B, 32A, 32B
- Supervision and Management 234
- World Languages and Cultures 100

Area B: Written Composition Requirement

Upon completion of this coursework, a student will be able to:
1. read critically to annotate, analyze, synthesize, and evaluate primarily non-fiction, college-level texts.
2. compose organized and coherent source-based essays that demonstrate critical thinking and rhetorical strategies.
3. demonstrate control over all major conventions of standard English grammar and punctuation.
4. select and integrate reliable, credible, and scholarly sources to support essays, using a standardized citation format.

The student may satisfy the graduation requirement in Written Composition and information competency in one of these three 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.
3. Completing with a grade of C or higher any accredited second semester English composition course approved as equivalent to CCSF’s English 1B or 1C or to Communications Studies 2.

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:

PHYSICAL SCIENCE
1. Apply scientific inquiry and investigation of evidence to critically evaluate physical science arguments.
2. Communicate scientific ideas and theories effectively.
3. Apply scientific principles, theories, or models to explain the behavior of natural physical phenomena.
Upon completion of this coursework, a student will be able to:

1. exhibit an understanding of the ways in which people in diverse cultures and eras have produced culturally significant works.
2. communicate effectively the meanings and intentions of creative expression.
3. use analytical techniques to assess the value of human creations in meaningful ways.
4. demonstrate an understanding of the human condition through language, reasoning, or artistic creation.

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

**Area D: Social and Behavioral Sciences Requirement**

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

1. exhibit an understanding of the methods of inquiry used by the social and behavioral sciences.
2. critically evaluate the ways people act, think, and feel in response to their societies or cultures.
3. analyze how societies and/or 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.

**BIOLOGICAL SCIENCE**

1. Apply scientific inquiry and investigation of evidence to critically evaluate biological science arguments.
2. Communicate scientific ideas and theories effectively.
3. Apply scientific inquiry and investigation of evidence to critically evaluate biological science arguments.
4. Apply biological science knowledge and reasoning to human interaction with the natural world and issues impacting society.

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 in diverse cultures and eras have produced culturally significant works.
2. communicate effectively the meanings and intentions of creative expression.
3. use analytical techniques to assess the value of human creations in meaningful ways.
4. demonstrate an understanding of the human condition through language, reasoning, or artistic creation.

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

**Area A: Natural Sciences Requirement**

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

1. analyze how societies and/or social subgroups operate.
2. critically evaluate the ways people act, think, and feel in response to their societies or cultures.
3. use analytical techniques to assess the value of human creations in meaningful ways.
4. demonstrate an understanding of the human condition through language, reasoning, or artistic creation.
Women’s Studies 10, 20
World Languages and Cultures 100

**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
- Asian American Studies 20
- History 1, 9, 12A, 12B, 17A, 17B, 21, 41A, 41B, 45
- Labor & Community Studies 70A, 70B
- Latin Amer & Latino/a Studies 1
- Political Science 1

**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**
- Biology 106, 130, 132, 134
- Child Dev/Family Studies 107
- Cul Arts & Hospitality Studies 244
- Health Education 10, 25, 27, 36, 38, 48, 53, 54, 67, 97, 171, 176, 177, 221
- Interdisciplinary Studies 17
- Physical Education 14, 20, 28
- Psychology 9

**Area G2**
- Disabled Students Prog & Serv 20
- Emergency Medical Technician 12, 14
- Fire Science Technology 17
- Health Education 50, 91M
- Intercollegiate Athletics 60, 61, 62, 63, 65, 66, 67, 68, 69, 80, 81, 82, 83, 85, 88, 89, 96, 97, 98, 99
- Psychology 17

Women’s Studies 55

The general education graduation requirement for Area G, Health Knowledge and Physical Skills, may be waived for those students who are pursuing high-unit majors for the Associate of Art or Associate of Science. A high-unit major is one that requires a minimum of 27 units. Not all high unit majors are eligible for Area G waivers.

The following is a list of high-unit majors that are eligible for Area G waivers during this catalog year:
- Accounting
- Administrative Support
- Aircraft Powerplant Maintenance Technology
- Airframe-Maintenance Technology
- Architecture
- Automotive Mechanics
- Avionics-Maintenance Technology
- Biological Sciences
- Biotechnology
- Cardiovascular Technician/Echocardiography
- Child Development
- Cinema Production
- Commercial Cut-Flower and Greenhouse Production
- Computer Science
- Construction Management
- Culinary Arts Management
- Dental Assisting
- Diagnostic Medical Imaging
- Electronic Engineering Technology
- Engineering
- Environmental Science
- Environmental Studies
- Fashion Design
- Fashion Merchandising
- Finance
- Fire Science Technology
- Floristry
- Food Service Management
- General Business
- Graphic Design
- Health Information Technology
- Hotel Management
- Interior Design
- Journalism
- Landscape Gardening and Landscape Contracting
- Mechanical Engineering Technology
- Medical Administrative Assisting
- Medical Assisting
- Nursery and Garden-Center Operation
- Oceanography
- Paralegal/Legal Studies
- Paramedic
- Photography
Registered Nursing
Travel and Tourism

The following high-unit majors are NOT eligible for Area G waivers:
Dance - Performance Art
Physics

Additional options for waiving the Area G requirement.
The Area G1 Health Knowledge graduation requirement may be
waived upon successful completion of a competency examination.
Students should contact their counselor or program adviser for addi-
tional 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. analyze the historical and cultural/aesthetic experiences of
   women, different ethnic/racial groups, or lesbian, gay, bisexual,
   and/or transgender persons
2. compare and contrast the values, attitudes, modes of creative
   expression, and/or dynamics of interpersonal interactions of
   people from diverse ethnic/racial groups, women, or lesbian,
   gay, bisexual, and/or transgender persons
3. analyze relationships of power within or between different social
   groups
4. use ethical reasoning and/or cultural, political, or social aware-
   ness in order to be effective citizens participating 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 require-
ment and one other area.

Area H1 (Ethnic Studies)
Administration of Justice 67
African American Studies 30, 40, 55, 60
Anthropology 3C, 11, 12, 15
Art 104, 105, 106, 107, 146A
Asian American Studies 6, 8, 10, 20, 22, 27, 30, 35, 40, 42, 63
Asian Studies 11, 15
Broadcast Electronic Media 104
Child Dev/Family Studies 93
Chinese 39
Communication Studies 5
Dance 32, 133A*
Economics 30
English 57, 58
Health Education 50
History 9, 15A, 15B, 18A, 18B, 20, 21, 34, 35A, 35B, 37, 41A, 41B
Humanities 48
Interdisciplinary Studies 14, 27A, 27B, 29, 30, 36, 37, 40, 42, 45, 46,
   80A*, 81A*, 81B*
Japanese 39
Labor & Community Studies 15
Latin Amer & Latino/a Studies 1, 9, 10, 11, 13, 14, 15
Lesbian, Gay, Bisexual & Trans 9
Music 21, 23, 24, 25, 26
Philippine Studies 20, 30
Pilipino 39A, 39B
Political Science 12, 18
Psychology 23
World Languages and Cultures 100
*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 105
Communication Studies 8
Economics 25
English 57, 58
Health Education 25
History 12A, 12B
Humanities 25
Interdisciplinary Studies 31, 80C*, 80G*
Latin Amer & Latino/a Studies 10
Lesbian, Gay, Bisexual & Trans 21
Physical Education 28
Psychology 25
Sociology 25
Supervision and 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
Child Dev/Family Studies 76
Economics 20
Health Education 25, 27, 67, 95*
History 45
Interdisciplinary Studies 80D*
Latin Amer & Latino/a Studies 9
Lesbian, Gay, Bisexual & Trans 5, 9, 10, 11, 12, 15, 18, 20, 21, 24, 50,
   55, 75
Music 27Q
Psychology 24
*Only partially satisfies the number of units required for this area

CCSF Associate Degree
2. Mathematics Requirement
Upon completion of this coursework, a student will be able to:
• apply mathematical concepts through numerical, symbolic,
   graphical, and verbal methods to interpret quantitative informa-
   tion, solve problems, and communicate results.
The student may satisfy the graduation requirement in mathematics in
any one of the following five ways:
1. Achieving a score on a CCSF mathematics placement examina-
   tion that places the student into a course at a level higher than
   MATH 60 (formerly MATH 860) Intermediate Algebra. (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 in MATH 46, MATH
   60 (formerly MATH 860), or MATH 55 (formerly 855), ET
   108B, or ET 50, or PSYC 5, or ECON 5, or LALS 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 Mathematics Section of the SAT Reasoning Test, or
   - 550 or higher on the SAT Subject Test in Mathematics (Level 1 or Level 2), or
   - 550 or higher on the Quantitative Section of the Graduate Record Examination (GRE), or
   - 23 or higher on the mathematics section of 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

5. Achieving either one of the following Early Assessment Program (EAP) results:
   - “Ready for mathematics college-level coursework,” or
   - “Conditionally ready for mathematics college-level coursework” AND a grade of “C” or higher in two semesters of a CSU-approved senior-year high school mathematics course.

**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 as indicated in the Programs and Courses section of this catalog.

**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.

**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 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
  - UC 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.

**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 semester units required for graduation.

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

**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.

Students completing the graduation requirements during the academic year (including the preceding and following summers) are invited to participate in the commencement ceremony which takes place once a year each May. For information on Commencement Ceremony participation, please see the CCSF Student Affairs website.

**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;
3. The majors are not in the same discipline, in the case where both the Associate Degree (AA/AS) and Associate Degree for Transfer (AA-T/AS-T) are offered; and
4. 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 discipline or all the requirements for the Associate Degree for Transfer (AA-T/AS-T) even if the student previously earned an associate degree (AA/AS) in the same discipline;
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 Degree (AA, AS, AA-T, or AS-T). 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 discipline or all the requirements for the Associate Degree for Transfer (AA-T/AS-T) even if the student previously earned an associate degree (AA/AS) in the same discipline;
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 certificate programs of study.

**Certificate Curricula — Credit**

City College offers two types of credit certificates, Certificates of Achievement and Certificates 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.

**All CCSF credit certificates require the following:**

- **Residency requirement:** Students must successfully complete at CCSF at least 20% of the units required to earn the certificate.
- **Grade requirement:** Students must pass all letter-graded certificate-applicable courses with a C or better and all P/NP certificate-applicable courses with a P.

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.

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:
- Students should discuss the curriculum requirements with their program advisor or department chair to assure that all program requirements are met.
- Students should submit a petition before the deadline indicated in the current College Catalog or Schedule of Classes.
- Students who are applying for multiple certificates should complete separate petitions for each.
- Students who wish to use courses taken at another college or university or substitute other equivalent CCSF courses for required certificate courses must have the department chair or faculty advisor complete and sign the appropriate areas of the petition form.

If a certificate petition is denied because of unmet requirements, consult the College Catalog for the catalog rights year being claimed. Students needing further clarification should 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.

Commencement Ceremony
The CCSF Commencement Ceremony takes place every Spring semester in May at the end of the academic year. Students completing their Associate Degree within that academic year (from the previous Summer, Fall, & current Spring term) are welcome to register and participate in the ceremony. Students should not petition for the Associate Degree until all the requirements are met or are about to be satisfactorily completed in the current school term.

Students wishing to participate in commencement exercises not within their corresponding academic year may do so in cases of extenuating circumstances only and with approval from the Office of Student Affairs & Wellness.

Commencement registration is available online starting in the Spring Semester. In order to participate in the Commencement Ceremony, all graduates must be registered NO later than the designated Spring term deadline. Every effort is made to ensure that all graduating students who register before the designated deadline are listed in the Commencement program. Students who do not register for the Commencement Ceremony before the deadline will not have their name listed in the Commencement program. The College has a printing approval deadline that will preclude inclusion of late registrants. However, please be aware of the following information:
- By law, students who have requested privacy protection for their academic records at any time will not have their name published in the program, unless they indicate on their commencement registration form that they desire their name to be included.
- Students whose names are not included in the printed program will still be individually recognized by name as they cross the commencement stage.

Students graduating with Honors, High Honors, or Highest Honors status shall have a special notation next to their name in the program. This information must show on the official school records at the time of registration to be included.

Commencement packages as well as other commencement related items are available for purchase at the CCSF Bookstore, Ocean Campus. As an alternative, the Cap and Gown Loan Program, which was founded in Spring 2008, loans caps & gowns to graduating students with financial need on a first come, first served basis.

All commencement related information including important links, forms, and deadlines is updated and released annually in the Commencement Circular which can be found online at http://www.ccsf.edu/commencement at the beginning of each Spring term.
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 L. 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.

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 request” 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, English, English as a Second Language, Engineering Technology, 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/impactinfo.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, ESL 75, 85, 110, 112, 120, 122, 130,
1. They do not accept credit earned in City College foundational courses. (These courses are named with only one letter—for example, English L.)

2. They do not accept credit earned in City College foundational courses. 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.

3. 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.

4. 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.

5. They grant six units of credit for one year or more of military service.

American Institutions and United States History Requirement

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

- US1: Analyze significant events from U.S. history, including cultural and regional influences.
- US2: Evaluate political institutions and processes in the United States.

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. (US-2&3) Political Science 1
Group 2. (US-1) Asian American Studies 20; History 1, 9, 12A, 12B, 17A, 17B, 41A, 41B; Labor and Community Studies 70A, 70B; Latin American and Latino/a Studies 1

General Education Requirements for the California State University (All Campuses) for 2017-18

CSU GE-Breadth handouts and related information are available from a counselor; the Transfer Center; ASSIST, 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.

Due to catalog publication deadlines, the following is a list of CSU General Education courses from the 2017-18 academic year. Updated information is available from a counselor; the Transfer Center; ASSIST, www.assist.org; or the CCSF articulation webpage, www.ccsf.edu/artic.

AREA A: Communication in the English language and critical thinking

(9 certifiable semester units or 12–15 quarter units with at least one course from each of A1, A2, and A3)

A1 Oral Communication:
Upon completion of this coursework, a student will be able to:
1. Demonstrate clear and precise oral expression.
2. Identify and use culturally competent communication practices.
3. Analyze how communication practices impact experiences.

One course from the following:
Communication Studies 1A, 3, 4, 6, 11, 12, 20

A2 Written Communication:
Upon completion of this coursework, a student will be able to:
1. Read critically to annotate, analyze, and evaluate primarily non-function, college-level texts.
2. Compose organized and coherent source-based essays that demonstrate critical thinking and rhetorical strategies.
3. Demonstrate control over all major conventions of standard English grammar and punctuation.
4. Select and integrate reliable, credible, and scholarly sources to support essays, using a standardized citation format.

Take the following course:
English 1A

A3 Critical Thinking:
Upon completion of this coursework, a student will be able to:
1. Practice inductive and deductive reasoning in written or oral contexts.
2. Integrate support for ideas into an argument structure.
3. Identify formal and informal fallacies of language in thought.

One course from the following:
Communication Studies 2, 3

B1 Physical Science:
Upon completion of this coursework, a student will be able to:

Physical Science
1. Apply scientific inquiry and investigation of evidence to critically evaluate physical science arguments.
2. Communicate scientific ideas and theories effectively.
3. Apply scientific principles, theories, or models to explain the behavior of natural physical phenomena.
4. Apply physical science knowledge and reasoning to human interaction with the natural world and issues impacting society.

One course from the following:
Astronomy 1, 17, 18, 19
Energy 3
Geography 1
Geology 10, 11, 30
Oceanography 1
Physical Science 11
Physics 2A, 2B, 4A, 4B, 4C, 4D, 10, 20, 40, 41

GROUP 1. (US-2&3) Political Science 1
GROUP 2. (US-1) Asian American Studies 20; History 1, 9, 12A, 12B, 17A, 17B, 41A, 41B; Labor and Community Studies 70A, 70B; Latin American and Latino/a Studies 1
B2 Life Science:
Upon completion of this coursework, a student will be able to:

Biological Science
1. Apply scientific inquiry and investigation of evidence to critically evaluate biological science arguments.
2. Communicate scientific ideas and theories effectively.
3. Apply scientific principles, theories, or models to explain the behavior of natural biological phenomena.
4. Apply biological science knowledge and reasoning to human interaction with the natural world and issues impacting society.

One course from the following:
- Anthropology 1
- Astronomy 4
- Biology 9, 10, 11, 12, 14, 19, 20, 31, 32, 33, 40, 51, 61, 100A, 100B, 106, 108, 111, 112, 114, 119, 120, 134, 225
- Environmental Monitoring 28
- Geography 31
- Psychology 1B
- Sustainability 31, 225

B3 Laboratory Activity (to be taken with course from B1 or B2)
Upon completion of this coursework, a student will be able to:

Laboratory Science
1. Investigate natural phenomena through a variety of scientific inquiry techniques.
2. Analyze and evaluate data from the natural world.
3. Apply scientific principles, theories, or models to predict and explain the behavior of natural phenomena.

One course from the following:
- Astronomy 16
- Biology 9, 10, 11, 12, 14, 19, 32L, 100A, 100B, 106, 108, 111, 112, 120
- Energy 3L
- Environmental Monitoring 28
- Genetics 11
- Geology 1L
- Oceanography 1L
- Physics 2AL, 2BL, 4AL, 4BL, 4CL, 4DL, 10L

B4 Mathematics/Quantitative Reasoning:
Upon completion of this coursework, a student will be able to:

1. Apply mathematical concepts through numerical, symbolic, graphical, and verbal methods to interpret quantitative information, solve problems, and communication results

One course from the following:
- Economics 5
- Engineering Technology 50
- Latin Amer & Latino/a Studies 5
- 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:
Upon completion of this coursework, a student will be able to:

1. Identify connections between the arts and cultural and social awareness.
2. Analyze the broader social/historical contexts of works of art.

C2 Humanities:
Upon completion of this coursework, a student will be able to:

1. Exhibit an understanding of the ways in which people in diverse cultures and eras have produced culturally significant works.
2. Communicate effectively the meanings and intentions of creative expression.
3. Use analytical techniques to assess the value of human creations in meaningful ways.
4. Demonstrate an understanding of the human condition through language, reasoning, or artistic creation.

At least one course from the following:
- African American Studies 30, 40, 60
- American Sign Language 2A
- American Studies 5
- Asian American Studies 6, 10, 30, 35
- Asian Studies 30
- Cinema 20A, 20B, 21, 22
- Classics 35
- Communication Studies 8
- French 1, 1A, 1B, 2A, 2B, 3, 3A, 3B, 4, 5, 10A, 10B, 10C, 10D, 10E, 11A, 11B, 15A, 15B, 41, 42
- German 1, 1A, 1B, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 10D, 11A, 11B
- History 1, 1A, 1B, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 10D, 11A, 11B
- Italian 1, 1A, 1B, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 10D, 11A, 11B
- Humanities 7, 8, 11, 12, 20, 25, 41A, 41B, 48
- Interdisciplinary Studies 3, 4, 14, 27A, 27B, 29, 30, 31, 36, 37, 42, 45, 46, 47
- Italian 1, 1A, 1B, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 10D, 11A, 11B, 15A, 15B
- Japanese 1, 1A, 1B, 2A, 2B, 3, 3A, 3B, 4, 4A, 4B, 10A, 10B, 10C, 39
- Latin Amer & Latino/a Studies 1, 12
- Lesbian, Gay, Bisexual & Trans 11, 15, 18, 75
- Phillipine Studies 30
- Philosophy 2, 4, 25A, 25C
- Pilipino 1, 2, 10A, 10B, 10C, 39A, 39B
Transfer Information

University Of California (All Campuses)

Admission Application Dates

To ensure consideration for admission to the campus of first choice, students are reminded to file a UC application during the appropriate Filing Period:

- University of California, Berkeley and Merced
  - Fall Semester: File November 1–30
  - Spring Semester: File July 1–31
- UC Berkeley application is accepted for the fall only

All Other University of California Campuses

- Fall Quarter: File November 1–30
- Winter Quarter: File July 1–31
- Spring Quarter: File October 1–31

For the fall term, all majors and programs are open to new students. Check with the specific campus Admissions Office if applying for other than the fall term.

Apply online. www.universityofcalifornia.edu/apply

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 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 for 2017-18

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.

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 restrict the University at the time of the publication of this catalog. The University at the time of the publication of this catalog. The University at the time of the publication of this catalog.

City College courses which are accepted for credit by all campuses of the University of California:

Academic Achievement Personal Success 103
Administration of Justice 52, 57, 59, 67
African American Studies 30, 40, 42, 55, 60
American Sign Language 1A, 1B, 2A
American Studies 5
Anthropology 1, 2, *3, *3C, 4, 8, 11, 12, 15, 20, 25,
*3 and 3C combined: maximum credit, one course
Architecture 22A, 29A, 29B, +31A, +31B, 32, 100, 101, 102, 103, +134,
218 +31A, 31B and 134 combined: maximum credit, two courses
Art 101 thru 109, 118, 122A, 123Q, 123U, 123V, 123W, 125A, 125B,
140C, 140D, 145A, 145B, 145C, 145D, 146A, 146B, 146C, 146D,
150A, 150B, 150C, 150D, 151A, 151B, 151C, 152A, 152B, 156,
190
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 11, 15, 30
Astronomy *1, 4, 16, *17, *18, *19
*1, 17, 18, 19 combined: maximum credit allowed, 2 courses

BIOLOGICAL SCIENCES:
Anthropology 1
Biology 9, *10, *11, 12, 14, 15, 19, 20, #31, *31L, 32, 32L, 33, 40, 51,
*1123
*No credit for 11 if taken after Biology 100A, 100B
*No credit for 10 if taken after Biology 111, 100A, 100B, or
Biology 111 (formerly: Physiology 1) or Biology 112 (formerly: Physiology 12)
*No credit for Biology 106 (formerly: Anatomy 14) if taken after
Biology 108 (formerly: Anatomy 25) or Biology 111 (formerly:

Physiology 1) or Biology 112 (formerly: Physiology 12); Biology
106 or Biology 108 combined with Biology 11 or Biology 112:
Maximum credit, 2 courses
#Same as GEOG 31, SUST 31
*Same as GEOG 31L, SUST 31L
+Same as SUST 225

Genetics 11
Biotechnology (see Engineering & Technology)

Broadcast Electronic Media Arts 103, 104, 105

BUSINESS:
Accounting 1, 2
Business Law 1, 2
General Business 119
Microcomputer Applications for Business +60, +62, 160
+CNIT 100, CS 100M, 101, MABS 60 and MABS 62 combined:
maximum credit, one course

Paralegal Studies 10
Supervision and Business Management 235

Career Development 60
Chemistry #40, *85, *101A, 101B, *103A, #110, **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
**Variable Topic Course - to be reviewed for credit by UC Campus
upon transfer.
**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: 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 combined: maximum credit allowed,
two courses

Classics 35
Communication Studies 1A, 2, 3, 4, 5, 7, 8, 20
Computer Aided Drafting (see Engineering & Technology)

Computer Networking and Information Technology +100, +100M
+CNIT 100, +CNIT 100M, CS 101, MABS 60 and 62 combined:
maximum credit, one course

Computer Science +101, 110A, 110B, 110C, 111A, 111B, 111C, 113A,
131A, #160A, #160B, 177, +199, 231, 270
+CNIT 100, CNIT 100M, CS 101, MABS 60 and 62 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

Culinary Arts and Hospitality Studies 247

*Any or all of these courses, HLTH 50 and MUS 47, (*)PE and (*)
PA courses combined: maximum credit, 4 units

Design *101, 105, **110, **150
*Same as PHOT 100, VMD 101
**Same as VMD 112

**Same as VMD 118
Disabled Students Program and Services *20
*Any or all of these courses, HLTH 50, MUS 47, (*PE and PE A courses combined: maximum credit, 4 units

Drama (see Theatre Arts)
Economics 1, 3, *, 5, 6, 15, 20, 25, 30
*5 combined with LALS 5, MATH 80 and PSYC 5: maximum credit allowed, one course

Emergency Medical Technician 14

Energy (see Engineering & Technology)
Engineering (see Engineering & Technology)

ENGINEERING AND TECHNOLOGY:
Biotechnology 5
Computer Aided Drafting 181
Energy 3, 3L
Engineering 1A, 10A, 10B, 20, 20L, 24, 36, 37, 38, 45
Environmental Monitoring, Sampling and Assessment 28
Sustainability #31, *31L, +225
#Same as BIO 31, GEOG 31
*Same as BIO 31L, GEOG 31L
+Same as BIO 225


English as a Second Language *140, *150, *160, 184, 186, 188
*Any or all of these courses combined: max. credit allowed, 8 units

Environmental Monitoring, Sampling and Assessment (see Engineering & Technology)

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

Fashion 22, 28

*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

Genetics (See Biological Sciences)

Geography 1, 1L, 3, 4, 7, *31, *31L, 41A, 110
#Same as BIO 31, SUST 31
*Same as BIO 31L, SUST 31L

Geology 10, 10L, 11, 11L, 30, 30L

German *1, *1A, *1B, +2, +2A, +2B, #3, #3A, #3B, **4, **4A, **4B, 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;

*Any or all of these courses, and PE 14 combined maximum credit allowed, one course
+50, MUS 47, (*)DANC, (*)PE and (*)PE A courses combined: maximum credit allowed, 4 units
+ Same as PE 20

+Independent Study/Variable Topics courses — to be reviewed for credit by UC campus upon transfer

*11, 12, 41A and 41B combined: maximum credit allowed, two courses

Independent Study
*Please note that the transfer credit for courses of this kind is contingent upon an evaluation of the course outline by a University of California campus.

Interdisciplinary Studies 3, 4, 7, 14, 17, 27A, 27B, +27C, +28(A-F), 29, 30, 31, 36, 37, 40, 42, 45, 46, 47, +50
+Independent Studies/Variable Topics course—reviewed by UC campus upon transfer

^Same as LERN 50

Interior Design 100

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

Japanese *1, *1A, *1B, +2, +2A, +2B, #3, #3A, #3B, **4, **4A, **4B, 16, 17, 18, 19, 20, 39
*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

Journalism 19

Labor and Community Studies ^15, 70A, 70B, 88, **98A, #98B, +98C,
^Same as LALS 15
**Same as MUS 48A
#Same as MUS 48B
+Same as MUS 48C

Latin American/Latino/a Studies 1, +5, 9, 10, 11, 13, 14, ^15, *70
*Independent Study course -- to be reviewed for credit by UC campus upon transfer

^Same as LGBT 9

^Same as LBSCS 15

+5, ECON 5, MATH 80 and PSYC 5 combined: maximum credit, one course

Learning Assistance *50

*Same as IDST 50

Lesbian/Gay/Bisexual/Transgender Studies 5, #9, 10, *11, 15, 18, 20, 50, 55, 75
*11 and 12, CINE 20A, 20B combined: maximum credit allowed, two courses
#Same as LALS 9

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 ECON 5, LALS 5 and PSYC 5: maximum credit, one course
***90 and 97 combined: maximum credit one course
*110ABC combined with 100A-B: max. credit allowed, one series

Microbiology (See Biological Sciences)

Music 1A, 1B, 3A, 3B, *4, 5A, 5B, 6A, 6B, 6C, 6D, 7C1, 7C2, 7C3, 7C4, 7P1, 7P2, 7P3, 7P4, 7T1, 7T2, 7T3, 7T4, 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, 27Q, 27R, 28, 29, 30, 41, 42, 46, ^47, **48A, ++48B, #48C, 200ABC
* No credit for 4 if taken after 1A or 3A
47, HLTH 50, (*DANC, (*)PE and (*)PE A courses combined: maximum credit, 4 units
**MUS 48A same as LBSCS 98A
++MUS 48B same as LBSCS 98B
#MUS 48C same as LBSCS 98C

Nutrition (See Biological Sciences)

Oceanography 1, 1L

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

Paralegal Studies (see Business)
Upon completion of this coursework, a student will be able to:

**Female**

- Read critically to annotate, analyze, synthesize, and evaluate primary non-fiction, college-level texts.

**Male**

- Write clearly and coherently in a variety of rhetorical contexts and for a variety of purposes.
- Engage in critical thinking and evaluate arguments and claims from different perspectives.
- Demonstrate knowledge of and proficiency in at least one language other than English.
- Demonstrate an understanding of historical, cultural, and societal perspectives.
- Engage in civic engagement and contribute to a diverse and inclusive community.
- Demonstrate an understanding of scientific principles and their impact on society.
- Demonstrate an understanding of environmental sustainability and the need for responsible natural resource management.
- Demonstrate an understanding of the physical world and the laws governing it.
- Demonstrate an understanding of the complex and interconnected nature of the world, including its economic, social, and political systems.

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

**World Languages and Cultures** 100

**Zoology** (see Biological Science)

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 transfer 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.

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**Intersegmental General Education Transfer Curriculum (IGETC) for 2017–18**

IGETC handouts and related information are 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 campus 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 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.

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.

Due to catalog publication deadlines, the following is a list of IGETC courses from the 2017-18 academic year. Updated information is available from a counselor; the Transfer Center; ASSIST, www.assist.org; or the CCSF articulation webpage, www.ccsf.edu/artic.

**AREA 1: English Communication**

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

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

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**1A-English composition:**

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

1. Read critically to annotate, analyze, synthesize, and evaluate primarily non-fiction, college-level texts.
2. Compose organized and coherent source-based essays that demonstrate critical thinking and rhetorical strategies.
3. Demonstrate control over all major conventions of standard English grammar and punctuation.
4. Select and integrate reliable, credible, and scholarly sources to support essays, using a standardized citation format.

One course from the following:
- English 1A

1B-Critical thinking—English composition:
Upon completion of this coursework, a student will be able to:
1. Practice inductive and deductive reasoning in written or oral contexts.
2. Integrate support for ideas into an argument structure.
3. Identify formal and informal fallacies of language in thought.

One course from the following:
- Communication Studies 2

1C-Oral communication (CSU-ONLY):
Upon completion of this coursework, a student will be able to:
1. Demonstrate clear and precise oral expression.
2. Identify and use culturally competent communication practices.
3. Analyze how communication practices impact experiences.

One course from the following:
- Communication Studies 1A, 3, 4, 20

AREA 2: Mathematical Concepts and Quantitative Reasoning
Upon completion of this coursework, a student will be able to:
1. Apply mathematical concepts through numerical, symbolic, graphical, and verbal methods to interpret quantitative information, solve problems, and communication results.

One course from the following:
- Economics *5
- Latin Amer & Latino/a Studies *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.

3A Arts:
Upon completion of this coursework, a student will be able to:
1. Identify connections between the arts and cultural and social awareness.
2. Analyze the broader social/historical contexts of works of art.
3. Evaluate the creative expression of self and others.

At least one course from the following:
- African American Studies 55
- Asian Studies 11
- Cinema 18, 23A, 23B
- Dance 30, 32
- Latin Amer & Latino/a Studies 14
- Lesbian, Gay, Bisexual & Trans 20, 55
- Photography 50A, 50B
- Theatre Arts 30, 31, 32
- Visual Media Design 110

3B Humanities:
Upon completion of this coursework, a student will be able to:
1. Exhibit and understanding of the ways in which people in diverse cultures and eras have produced culturally significant works.
2. Communicate effectively the meanings and intentions of creative expression.
3. Use analytical techniques to assess the value of human creations in meaningful ways.
4. Demonstrate an understanding of the human condition through language, reasoning, or artistic creation.

At least one course from the following:
- African American Studies 30, 40, 60
- American Sign Language 2A
- American Studies 5
- Asian American Studies 6, 10, 35
- Asian Studies 30
- Cinema *20A, *20B, 21, 22
- Classics 35
- Communication Studies 8
- German *3, *3A, *3B, 4, 4A, 4B
- Interdisciplinary Studies 3, 4, 14, 27A, 27B, 29, 30, 31, 36, 37, 42, 46, 47
- Italian 3A, 3B, 4A, 4B
- Latin Amer & Latino/a Studies 1
- Lesbian, Gay, Bisexual & Trans *11, 12, 15, 18, 75
- Phillipine Studies 30
- Philosophy 2, 4, 25A, 25C
- Pilipino 39A, 39B
- Women’s Studies 10

AREA 4: Social and Behavioral Sciences
Upon completion of this coursework, a student will be able to:
1. Exhibit an understanding of methods of inquiry used by the social and behavioral sciences.
2. Critically evaluate the ways people act, think and feel in response to their societies.
3. Demonstrate socio-cultural participation skills, ethical reasoning, and political awareness in order to be effective citizens in a diverse world.

At least three (3) courses from at least two (2) disciplines or an interdisciplinary sequence, 9 semester units (12 –15 qtr. units)
- Administration of Justice 57, 59, 67
- African American 42
- American Studies 5
- Anthropology 2, 3, 3C, 4, 8, 11, 12, 15, 20, 25
- Asian American Studies 8, 20, 22, 27, 30, 35, 40, 42
- Broadcast Electronic Media Arts 103, 104, 105
- Child Development 53, 67
- Communication Studies 5
Upon completion of this coursework, a student will be able to:

5C Laboratory Activity
Upon completion of this coursework, a student will be able to:
1. Investigate natural phenomena through a variety of scientific inquiry techniques.
2. Analyze and evaluate data from the natural world.

5B Biological Sciences
Upon completion of this coursework, a student will be able to:
1. Apply scientific principles, theories, or models to predict and explain the behavior of natural phenomena.

One course from the following:
Astronomy 16
Biology 9, 10, 11, 12, 14, 19, 32L, 100A, 100B, 106, 108, 111, 112, 120
Chemistry 40, 101A, 101B, 103A, 208A, 208B, 212A, 212B
Energy 3L
Genetics 11
Geography 1L
Geology 10L, 11L, 30L
Oceanography 1L
Physical Science 11L
Physics 2AL, 2BL, 4AL, 4BL, 4CL, 4DL, 10L

AREA 6: Language Other Than English
Upon completion of this coursework, a student will be able to:
1. Communicate effectively, beyond beginning level, in a language other than English.
2. Compose well-organized writing in a language other than English.
3. Demonstrate comprehension of the spoken non-English language in a variety of listening situations.
4. Interpret a variety of written texts in a 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: 500/510
   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.)

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

US1: Analyze significant events from U.S. history, including cultural and regional influences.

US2: Evaluate political institutions and processes in the United States.


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 70A, 70B; Latin American and Latino/a Studies 1

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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<thead>
<tr>
<th>C-ID Number</th>
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<tr>
<td>MATH 210</td>
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<td>MATH 220</td>
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<td>MATH 230</td>
<td>MATH-110C</td>
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<tr>
<td>MATH 240</td>
<td>MATH-125</td>
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<td>MATH 250</td>
<td>MATH-120</td>
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<td>MATH 900S</td>
<td>MATH-110A, MATH-110B</td>
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<td>PHIL-4</td>
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<tr>
<td>PHIL 130</td>
<td>PHIL-25A</td>
</tr>
<tr>
<td>PHIL 140</td>
<td>PHIL-25C</td>
</tr>
<tr>
<td>PHYS 100S</td>
<td>PHYC-2A, PHYC-2AL, PHYC-2B, PHYC-2BL</td>
</tr>
<tr>
<td>PHYS 105</td>
<td>PHYC-2A, PHYC-2AL</td>
</tr>
<tr>
<td>PHYS 110</td>
<td>PHYC-2B, PHYC-2BL</td>
</tr>
<tr>
<td>PHYS 200S</td>
<td>PHYC-4A, PHYC-4AL, PHYC-4BL, PHYC-4CL, PHYC-4D, PHYC-4DL</td>
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<tr>
<td>PHYS 205</td>
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<tr>
<td>PHYS 210</td>
<td>PHYC-4B, PHYC-4BL</td>
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<td>POLS 120</td>
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<td>POLS-2</td>
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<td>IDST-37</td>
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<tr>
<td>SPAN 100</td>
<td>SPAN-1A, SPAN-1B</td>
</tr>
</tbody>
</table>
PROGRAMS AND COURSES

Institutional Learning Outcomes
Students who successfully complete their educational programs at CCSF will achieve all or an appropriate set of the following Institutional Learning Outcomes:

1. Critical Thinking and Information Competency
   - Apply quantitative reasoning to questions or problems.
   - Locate, evaluate, and use information appropriately.
   - Use critical or creative reasoning, including diverse perspectives.

2. Communication
   - Communicate effectively
   - Demonstrate respectful interpersonal and intercultural communication
   - Recognize and interpret creative expression

3. Cultural, Social, and Environmental Awareness
   - Demonstrate an understanding of the history and values of diverse cultures
   - Evaluate the impact of civic, social, and/or environmental choices
   - Collaborate effectively in diverse social and cultural settings

4. Personal and Career Development
   - Assess one's own achievements and cultivate resources for educational and/or career growth
   - Maintain and improve one's health and safety and/or that of others
   - Use technology in pursuit of intellectual growth and/or career development.

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.

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. 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), a subject and a number/letter combination (for example, CS 110A), or by a subject and a letter (for example, ENGL L).

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 total number of hours of lecture (lec), laboratory (lab), and/or work experience (work) are given.

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 the “Challenge of a Prerequisite or a Corequisite” section of the Academic Policies section of this Catalog 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 field trips; 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 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 Offering Frequency
Unless otherwise noted, courses are generally offered in both Fall and Spring semesters.

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 signal 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.assist.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
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 this program, students will be able to:

- 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.

Students who wish to earn the Associate in Science in Administration of Justice for Transfer (AS-T) must complete 60 CSU transferable units with a minimum of 2.0 grade point average. This must include the units required for full completion of the IGETC or CSU GE curriculum and the 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.

Assuming students start this AS-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the Major in Administration of Justice**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMJ 51 Juvenile Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 52 Concepts of Criminal Law</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 53 Legal Aspects of Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 54 Principles and Procedures of the Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 62 Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 66 Forensic Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 1 Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 1 General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 5 Introductory Statistics for Economics, Business and Social Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>or MATH 80 Probability and Statistics</td>
<td>4.0</td>
</tr>
<tr>
<td>or PSYC 5 Statistics for Behavioral Sciences</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Total:** 18.0 – 20.0

**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 the units noted below receive the Associate in Science Degree in Administration of Justice.

**Learning Outcomes**

Upon completion of this program, 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.
- Demonstrate the ability to apply the legal, investigative, and written skills acquired in the administration of justice program.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the AS-T in Administration of Justice**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ADMJ 57 Introduction to the Administration of Justice</td>
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<td>ADMJ 59 Organized Crime</td>
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<tr>
<td>ADMJ 62 Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 63 Fingerprints</td>
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<tr>
<td>ADMJ 64 Progressive Policing in the 21st Century</td>
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</tr>
<tr>
<td>ADMJ 65 Narcotic Investigations</td>
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</tr>
<tr>
<td>ADMJ 66 Forensic Evidence</td>
<td>3.0</td>
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<tr>
<td>ADMJ 67 Terrorism and Counterterrorism</td>
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<tr>
<td>ADMJ 68 Criminal Justice Report Writing</td>
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<tr>
<td>ADMJ 70A Patrol Procedures</td>
<td>3.0</td>
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<tr>
<td>ADMJ 80 Introduction to Probation and Parole</td>
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</tr>
<tr>
<td>ADMJ 85 PC 832 Arrest and Control Certification</td>
<td>3.0</td>
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</tbody>
</table>

**Recommended additional coursework:**

- F SC 17, F SC 62, LALS 10, 11; LBCS 94D; PE 29; PHIL 12A, 40; POLS 1, 12, 43; PSYC 1, 4, 23; SOC 1, 2; CMST12; CDEV 100; IDST 47; HLTH 38, HLTH 48; WOMN 54, and 3 units from CDEV 72, 78, 101; HLTH 73, 83, 90C, 97, 103, 116; LBCS 81, CRER 63, 68; PSYC 15; TH A 171A, WOMN 20, WOMN 55 (part of the Trauma Prevention and Recovery Certificate); IDST 80A, C, D, E, F, G and 81A, B (part of the Certificate of Accomplishment in Diversity and Social Justice)

**Total:** 21.0
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. At least 9 units of Administration of Justice courses must be completed at City College of San Francisco for this certificate.

A student may obtain the Certificate of Accomplishment by completing 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 program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Administration of Justice

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>ADMJ 51 Juvenile Procedures</td>
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<td>3.0</td>
</tr>
<tr>
<td>ADMJ 64 Progressive Policing in the 21st Century</td>
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</tr>
<tr>
<td>ADMJ 65 Narcotic Investigations</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 66 Forensic Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 67 Terrorism and Counterterrorism</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 70A Patrol Procedures</td>
<td>3.0</td>
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<tr>
<td>ADMJ 80 Introduction to Probation and Parole</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>15.0</strong></td>
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</tbody>
</table>

Criminal and Constitutional Law Certificate
This certificate addresses a citizen’s criminal and civil rights under the United States Constitution. Students will learn about criminal statutes and protections provided by the Constitution. Students will review the court system, procedures from incident to final disposition in the criminal justice system, and principles of civil law with constitutional, federal, state and local emphasis.

Learning Outcomes
Upon completion of this program, students will be able to:
- Compare and contrast the relationship of the legislative and judicial branches of the government as they relate to the U.S. Constitution and the Penal Code of California
- Describe and explain each step of the criminal justice process from arrest to trial
- Compare and contrast the various types of law
- Evaluate ways that individuals can effectively participate in politics at the national, state, county, and/or local levels
- Evaluate the contemporary history and role of race and ethnicity in the American political system.

Students must complete 4 of the 5 courses at City College of San Francisco.

The minimum time for completion of this certificate is 2 years. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Certificate of Accomplishment in Criminal and Constitutional Law

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMJ 54 Principles and Procedures of the Justice System</td>
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</tr>
<tr>
<td>ADMJ 55 Criminal Law</td>
<td>3.0</td>
</tr>
<tr>
<td>AMSI 51 American Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 1 American Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 12 Ethnic Politics in the United States</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 43 The Constitution and Individual Rights</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>15.0</strong></td>
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</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.

Accreditation. The curriculum in Fire Science Technology is accredited by the State Fire Marshal’s Office of State Fire Training. For more information about this agency, see the “Overview of the College” section of this Catalog.

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, Fore Engineer, Fire Hydraulics, 1st Responder, Emergency Medical Technician, and Life Safety Directors in High Rise Buildings.

**Learning Outcomes**

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

- Identify minimum qualifications and entry-level skills for fire fighter 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.
- Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.
- Identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment.
- Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety.
- Differentiate between fire detection and fire suppression systems.
- Describe the Interface Zone (I-Zone) in wildland fire, describe the parts of a wildland fire, use of resources on a wildland fire, differentiate between strike teams and task forces, utilize the Incident Command System in a wildland fire situation, describe safety concerns to firefighters in wildland fire situation.
- Explain the operation of a Fire Prevention Bureau in a fire department.
- Describe a fire prevention program, implement a fire prevention plan in areas such as public buildings, commercial buildings, schools, and multi-family residences.

Students must complete six of the core courses at CCSE

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**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 Introduction to Fire Science</td>
<td>3.0</td>
</tr>
<tr>
<td>F SC 52A Fire Protection Equipment &amp; Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>F SC 53 Building Construction for Fire Protection</td>
<td>3.0</td>
</tr>
<tr>
<td>F SC 55 Wildland Fire Control</td>
<td>3.0</td>
</tr>
<tr>
<td>F SC 57 Principles of Fire and Emergency Services: Safety and Survival</td>
<td>3.0</td>
</tr>
<tr>
<td>F SC 61A Introduction to Fire Prevention</td>
<td>3.0</td>
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</tbody>
</table>

F SC 64 Fire Behavior and Combustion ............ 3.0

**Elective courses: Choose 3 units from the following:**

- F SC 51A Fire Tactics and Strategy ............ 3.0
- F SC 62 Rescue Practices ..................... 3.0
- F SC 107A Fire Training Work Experience ...... 3.0
- or F SC 107B Fire Training Work Experience ... 2.0-6.0
- or F SC 111 Firefighter One Academy ........... 11.5

LBCS 94D Labor Relations in America ............ 1.0

**Total: .......................................................... 27.0**

**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. 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 without completing the general education requirements for graduation from City College.

**Company Officer Certificate**

Company Officer is the first certification in the California Office of the State Fire Marshal (OSFM) Officer series. The Company Officer Certification utilizes NFPA 1021 Standard for Fire Officer Professional Qualifications (2014) and NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications (2012) to provide the qualifications for State Fire Training’s Company Officer certification.

**Learning Outcomes**

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

- Evaluate member performance, supervise personnel and integrate health and safety plans and safe procedures into daily activities in emergency and non-emergency environments.
- Describe general administrative functions and how the implementation of department policies and procedures conveys the fire department’s role, image, and mission to the public.
- Conduct fire inspections that require identifying hazards and addressing violations.
- Perform a fire investigation to determine preliminary cause and secure the incident scene to preserve incident evidence.
- Conduct incident size-up to develop and implement an initial plan of action involving single and mult/unit operating for various types of emergency incidents.
- Develop and implement a plan of action to deploy incident resources required to suppress a wildland fire incident.
- Deliver a course of instruction from a prepared lesson plan utilizing instructional aids and evaluation methods.

The minimum time for completion of this certificate is five semesters, based on current course offering capabilities. Completion time will vary based on student preparation and number of units or classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Company Officer**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>F SC 75A Company Officer 2A: Human Relations Management</td>
<td>2.0</td>
</tr>
<tr>
<td>F SC 75B Company Officer 2B: General Administrative Functions</td>
<td>2.0</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 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 program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Fire Protection

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>F SC 50 Introduction to Fire Science</td>
<td>3.0</td>
</tr>
<tr>
<td>F SC 52A Fire Protection Equipment &amp; Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>F SC 64 Fire Behavior and Combustion</td>
<td>3.0</td>
</tr>
<tr>
<td>F SC 53 Building Construction for Fire Protection</td>
<td>3.0</td>
</tr>
<tr>
<td>F SC 61A Introduction to Fire Prevention</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>15.0</strong></td>
</tr>
</tbody>
</table>

Announcement of Courses

Credit, Degree Applicable Courses:

- **ADMJ 51. Juvenile Procedures (3)** Lec-52.5
  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-52.5
  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 effect contemporary law. An understanding of the Penal Code and other criminal statutes is required for a comprehensive understanding of the course. UC/CSU C-ID AJ 120
ADMJ 53. Legal Aspects of Evidence (3)
Lec-52.5
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 & Procedures of the Justice System (3)
Lec-52.5
Comprehensive overview of the legal procedures and constitutional requirements followed by law enforcement, the courts and corrections in criminal cases. Every step of the criminal justice process from pre-arrest to appeal will be thoroughly reviewed and studied. CSU
C-ID AJ 122

ADMJ 57. Introduction to Administration of Justice (3)
Lec-52.5
ADVICE: ENGL 88
A critical thinking exploration of historical and contemporary issues in criminal justice. Includes the study and analysis of the core principles and components of the American criminal justice system (police, courts, and corrections), the evolution of criminal justice, criminal behavior theory, crime categories, policing models, challenges in policing, and career opportunities. UC/CSU
C-ID AJ 110

ADMJ 59. Organized Crime (3)
Lec-52.5
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. UC/CSU

ADMJ 62. Criminal Investigation (3)
Lec-52.5
A theoretical and empirical approach to study of criminal investigation, focusing on specific challenges of criminal investigations, as well as ethics in the criminal investigative process. The student will study the principles of investigation, the investigation of specific offenses, the investigator in the judicial process, and the specialized scientific methods of crime detection. CSU
C-ID AJ 140

ADMJ 63. Fingerprints (3)
Lec-52.5
Theory, practice, and critique of the science of fingerprints, including classification, comparison/identification, latent technology, preservation of evidence, court testimony, rolling prints, computers, and relevant case law. CSU
Offered Fall semesters

ADMJ 64. Progressive Policing in the 21st Century (3)
Lec-52.5
An examination of the evolution of policing as it relates to the current progressive policing era. Interrelationships and leadership role expectations among police and the public are studied. CSU
Offered on occasion

ADMJ 65. Narcotic Investigations (3)
Lec-52.5

ADMJ 66. Forensic Evidence (3)
Lec-52.5
This course introduces students to forensic evidence and the crime lab. Topics include history and sub-disciplines of forensic science, structure of crime labs, types and characteristics of evidence, methods of laboratory analysis, requirements of courtroom admissibility, and expert testimony. CSU
C-ID AJ 150
Offered Spring semesters

ADMJ 67. Terrorism and Counterterrorism (3)
Lec-52.5, field trips
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. UC/CSU

ADMJ 68. Criminal Justice Report Writing (3)
Lec-52.5
Prereq.: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
Develops students’ abilities in note taking, interviewing, and information gathering to produce clear, objective, organized, and legally sufficient criminal justice reports. Topics include report writing rules, codes, and formatting. Strong emphasis on writing mechanics. CSU

ADMJ 69. Crime Scene Documentation (3)
Lec-52.5
Advise: ADMJ 68
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 agencies. CSU

ADMJ 70A. Patrol Procedures (3)
Lec-52.5, field trips
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 agencies. CSU
Not required of Administration of Justice majors employed in law enforcement work.

ADMJ 71. Police Work Experience (1-8)
Work-60 to 600, field trips
Prereq.: ADMJ 52 and ADMJ 57 and ADMJ 70A or equivalent
POST course work; Approval Administration of Justice and Fire Science department
Repeat: Repeated up to 16.00 Units
Field application of principles taught in previous courses in Administration of Justice. Individual experience and training in the Campus Police Department. This course is also used with other
ADMJ 80. Introduction to Probation and Parole (3)
Lec-52.5
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 (1-3)
Work-60 to 225
Prereq.: ADMJ 57; ENGL 93 or placement in ENGL 96
Advise: ADMJ 51, 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 83. Police Career Preparation (1)
Lec-18
P/NP only
This course will prepare students to take the entry level Q2 Police Officer examination for the San Francisco Police Department. Emphasis will be placed on how to take examinations, preparation, writing skills, interview skills and developing a career plan. CSU

ADMJ 84. PC. 832 Arrest and Control Certification (3)
Lec-52.5, Lab-10
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 85. Law and the Media (.5)
Lec-16
Prereq.: Law Enforcement Officer
This course is designed to help police personnel understand the role of the Public Affairs/Public Information Office, the policies regarding news media contacts, and the interface between community policing and media. CSU

ADMJ 86. Law Enforcement and the Media (.5)
Lec-16
P/NP available
Prereq.: Law Enforcement Officer
This course is designed to help police personnel understand the role of the Public Affairs/Public Information Office, the policies regarding news media contacts, and the interface between community policing and media. CSU

ADMJ 87. Instructor Development (2)
Lec-40
P/NP available
Prereq.: Law Enforcement Officer
This course is designed to train the student in 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 88. Criminal Justice Work Experience (1-3)
Lec-27
P/NP only
This course will provide students with hands-on experience in the field of criminal justice. Emphasis will be placed on professional attitudes, application of principles, exposure to methods and problems. Weekly seminars to evaluate and review progress. CSU

ADMJ 89. Continuing Professional Training (2)
Lec-36, Lab-4
P/NP available
Prereq.: A California Peace Officer Standards and Training Basic Course certificate issued from an accredited regional police academy or equivalent as determined by the Division Dean or their appointee. NOTE: equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. 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. Successful completion of this course meets mandated bi-annual POST requirements for continuing professional training. CSU

ADMJ 90. Introduction to Homeland Security (3)
Lec-52.5
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 91. Police Career Preparation (1)
Lec-18
P/NP only
Prereq.: ADMJ 57; ENGL 93 or placement in ENGL 96
Advise: ADMJ 51, 52, or 64
Repeat: max. 6 units
This course will prepare students to take the entry level Q2 Police Officer examination for the San Francisco Police Department. Emphasis will be placed on how to take examinations, preparation, writing skills, interview skills and developing a career plan. CSU

ADMJ 92. Instructor Development (2)
Lec-40
P/NP available
Prereq.: Law Enforcement Officer
This course is designed to train the student in 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 100. Emergency Vehicle Operation (.5)
Lec-5, Lab-13
P/NP available
Prereq.: Law Enforcement Officer
This course of Advanced Officer training is designed to instruct and reinforce the participant’s knowledge in the lawful requirements of operating an emergency vehicle during code three and pursuit conditions. CSU

ADMJ 101. Basic Police Academy (38)
Lec-360, Lab-920
Prereq.: California P.O.S.T. (Commission on Peace Officer Standards and Training) reading and writing exam or employment by a P.O.S.T. approved agency; Department of Justice clearance; Medical verification: clearance from a licensed physician to participate in intensive physical activity commensurate with a police academy.
Advise: BOSS 5500; PE 29A; ENGL 88A or ENGL 88 or ENGL 93 or ENGL 95 or placement in ENGL 96 or ENGL 88B
Principles, procedures, and techniques of law enforcement; criminal law, patrol and investigative procedures, report writing, use of force tactics, weapons use, community relations, vehicle operations, traffic enforcement, accident investigation, first aid, CPR, academic and physical skills training and assessment required by the State Commission on Peace Officer Standards and Training to meet the minimum standards for employment as a police officer in California (1280 in-class hours). CSU

ADMJ 109. Booking and Detention (.5)
Lec-9
P/NP only
Prereq.: Law Enforcement Officer
A San Francisco Police Academy course to develop knowledge and understanding of guidelines and procedures pursuant to booking and detention of prisoners at police holding facilities. CSU

ADMJ 145. Introduction to Homeland Security (3)
Lec-52.5
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
Offered Fall semesters
## Fire Science

### Credit, Degree Applicable Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F SC 17</td>
<td>Public Safety-Emergency Medical Response</td>
<td>3</td>
<td>One of four Pre-requisites for CCSF’s Fire Academy. At the conclusion of this course, students will be able to: recognize a medical emergency, activate the Emergency Medical System, provide basic life support until Advanced Life Support arrives. This course meets National Highway Traffic Safety guidelines for Emergency Medical Responder 2009. CSU</td>
</tr>
<tr>
<td>F SC 50</td>
<td>Introduction to Fire Science</td>
<td>3</td>
<td>Introductory course to fire science that examines fire technology, department organizational structures, Incident Command System, fire protection systems and equipment, and provides an overview of careers in fire investigation, fire prevention, and fire suppression. The class meets the Fire Fighter I and II certification of the National Fire Protection Association's (NFPA151) Standard 1001. CSU</td>
</tr>
<tr>
<td>F SC 51A</td>
<td>Fire Tactics and Strategy</td>
<td>3</td>
<td>This elective in the Fire Science major is for students pursuing a career in the Fire Service to obtain a better understanding of situational awareness when responding to emergency incidents. This course also prepares those who hope to improve their firefighting skills and prepare for promotion. CSU</td>
</tr>
<tr>
<td>F SC 52A</td>
<td>Fire Protection Equipment and Systems</td>
<td>3</td>
<td>A study of automatic sprinkler systems, standpipe systems, fire detection devices and systems, manual fire suppression equipment, water supplies, extinguishing agents, pumps used in fire protection, smoke management systems and special extinguishing systems. CSU</td>
</tr>
<tr>
<td>F SC 53</td>
<td>Building Construction for Fire Protection</td>
<td>3</td>
<td>Components of building construction that relate to fire safety; elements of construction and design of structures as key factors when inspecting buildings; preplanning fire operations and operating at fires; development and evolution of building and fire codes studied in relationship to past fires in residential, commercial and industrial occupancies. CSU</td>
</tr>
<tr>
<td>F SC 55</td>
<td>Wildland Fire Control</td>
<td>3</td>
<td>The course will cover wildland fire behavior, fireline safety, fire prevention, fire extinguishment methods, strategy and tactics, Incident Command System, communications, use of fire apparatus, aircraft, bulldozers, and handcrews, and analysis of wildland fire incidents. CSU</td>
</tr>
<tr>
<td>F SC 57</td>
<td>Principles of Fire and Emergency Services: Safety and Survival</td>
<td>3</td>
<td>This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk evaluation and control procedures for emergency and non-emergency situations. The course curriculum will be guided by NFPA standards, such as National Fire Protection Association 1500, Fire Department Occupational Health and Safety Programs. CSU</td>
</tr>
<tr>
<td>F SC 61A</td>
<td>Introduction to Fire Prevention</td>
<td>3</td>
<td>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</td>
</tr>
<tr>
<td>F SC 62</td>
<td>Rescue Practices</td>
<td>3</td>
<td>Technical rescue practices of the fire service-vehicle extrication, confined space, trench rescue, high &amp; law 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</td>
</tr>
<tr>
<td>F SC 63</td>
<td>Vehicle Extrication</td>
<td>.5</td>
<td>This course provides the knowledge and skills to prepare a Firefighter to extricate victim(s) from a common passenger vehicle in a safe and effective manner in accordance with Authority Having Jurisdiction (AHJ) policies and procedures. CSU</td>
</tr>
<tr>
<td>F SC 64</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
<td>Theory and fundamentals of how and why fires start, spread and are controlled. An indepth study of fire chemistry and physics, fire characteristic of materials, extinguishing agents and fire control techniques. CSU</td>
</tr>
<tr>
<td>F SC 75A</td>
<td>Company Officer 2A: Human Relations Management</td>
<td>2</td>
<td>How company officers in fire departments use human resources to accomplish assignments, to evaluate members on performance, to supervise personnel, and integrate health and safety plans, policies, and procedures into daily activities, and during emergency incidents. CSU</td>
</tr>
</tbody>
</table>

### Offered Semesters:
- **Fall semesters**
- **Spring semesters**
- **Only in Summer semesters**

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**Advise:**
- F SC 50
- F SC 52A or F SC 53 or F SC 55 or F SC 61A or F SC 64 and ENGL 88 or ENGL 88A or ENGL 93 or ENGL 95 or placement in ENGL 96 or ENGL 88B
F SC 75B. Company Officer 2B: General Administrative Functions (2)
Lec-35  P/NP available
Advise: F SC 50
General administration functions along with implementation of department polices and procedures. Addresses projecting the fire department's role, image, and mission to the public. CSU
Partial certificate course requirement for new Company Officer, which replaces the former requirements for Fire Officer due to expired 12/31/2016

F SC 75C. Company Officer 2C: Fire Inspections and Investigations (2)
Lec-40, field trips  P/NP available
Advise: F SC 50
This course provides information on conducting inspections, identifying hazards and addressing violations consistent with fire service standards. The course also provides information for performing a fire investigation in order to determine the preliminary cause of the fire as well as procedures to follow for securing the incident scene and preserving evidence. CSU
One of six classes required for State Fire Training Certification as a Company Officer. The Company Officer Certificate replaces the retired "Fire Officer Certificate".

F SC 75D. Company Officer 2D: All-Risk Command Operations (2)
Lec-35, field trips  P/NP available
Advise: F SC 50
Approaching an emergency and observing scene, developing a strategy and assigning tactical resources to mitigate an emergency for single-family dwelling fires, multi-family dwelling fires, commercial fires, high rise fires, multi-casualty medical incidents and technical rescue incidents. CSU
Partial certificate course requirement for new Company Officer, which replaces the former requirements for Fire Officer due to expired 12/31/2016

F SC 75E. Company Officer 2E: Wildland Incident Operations (2)
Lec-35, field trips  P/NP available
Advise: F SC 50
Reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources completing all operations to suppress a Wildland fire, creating an incident action plan, and completing incident records and reports. CSU
Partial certificate course requirement for new Company Officer, which replaces the former requirements for Fire Officer due to expired 12/31/2016

F SC 75F. Instructor 1 - Fire Science Methodology (2)
Lec-35  P/NP available
Provides the skills and knowledge needed for entry level professional instructor to perform his or her duties, safely, effectively and competently. Follows NFPA 1041 Standard for Fire Service Instructor. CSU
Partial certificate course requirement for new Company Officer, which replaces the former requirements for Fire Officer due to expired 12/31/2016
Offered on occasion

F SC 105B. Fire Training Work Experience (1)
Work-60 to 75  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
Offered Spring semesters

F SC 105C. Fire Training Work Experience (2)
Work-120 to 150  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
Offered Fall semesters

F SC 105D. Fire Training Work Experience (2)
Work-120 to 150  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
Offered Spring semesters

F SC 105E. Fire Training Work Experience (2)
Work-120 to 150  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
Offered Spring semesters

F SC 106. High Rise Fire Safety Director (1.5)
Lec-27  P/NP available
Advise: ENGL 91 or ENGL 86 or ESL 150 or placement in ENGL 88 or 95 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 107A. Fire Training Work Experience (1)
Work-60-75  P/NP available
Prereq.: F SC 17 or EMT 100; F SC 50; F SC 55; F SC 62; PE 29A; Approval of Administration of Justice/Fire Science Department
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 for compliance to the National Fire Protection Association Standard 1001 physical skills. Meets requirements by California State Fire Training for Firefighter 1. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU
Formerly F SC 105A

F SC 107B. Fire Training Work Experience (2)
Work-120-150  P/NP available
Prereq.: F SC 107A; F SC 111 or a certificate of completion from a California Regional Fire Academy; EMT 100 or state EMT certification; approval of the Administration of Justice/Fire Science Department
Repeat max. 6 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
Offered Spring semesters
Francisco Fire department. Student job performance will be evaluated by an on-site supervisor for compliance to the National Fire Protection Association Standard 1001 physical skills. Meets requirements by California State Fire Training for Firefighter 1. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU Formerly F SC 105C

F SC 110. Basic Fire Academy (21)
Lec-232, Lab-412, field trips P/NP available
Prereq.: EMT 100; Pass the City of San Francisco Civil Service H2 Firefighter examination; Pass the Candidate Physical Agility Test (CPAT) and have a current CPAT Certification; Pass the SFFD Medical Examination; Pass the SFFD background investigation process; Other City of San Francisco Civil Service requirements or other San Francisco Fire Department requirements at time of job offer for hiring into the SFFD.

Basic Fire Academy is for entry level Firefighter positions with San Francisco Fire Department. Training meets the standards of the National Fire Protection Association and California State Fire Marshal Office of State Fire Training, and the Firefighter (2013) curriculum. Emphasis is on Firefighter training, Wildland Firefighter training, and Hazardous Materials /Weapons of Mass Destruction training. CSU Course is scheduled at San Francisco Fire Department training facilities, and is designed for the San Francisco Fire Department according to pre-requisites outlined in this course

Offered on occasion

F SC 111. Firefighter One Academy (11.5)
Lec-150, Lab-156, field trips P/NP available
Prereq.: F SC 17 or EMT 100+102; and F SC 50, 55, 62, and PE 29
Coreq.: F SC 105A or 105B
Advise: F SC 52A or 53 or 55 or 61A or 64

Students trained to State Fire Training Firefighter One standards. National Fire Protection Association standards for Firefighter One. F SC 111 covers municipal and wildland firefighting, tactics and strategy, technical rescue and hazardous materials, firefighter safety, manipulative skills, and Homeland Security Incident Command System, that will meet all mandated requirements. CSU

Noncredit Courses:
F SC 8900. Continuing Professional Training (30-50 hrs)
Advise: F SC 110
This course is designed to provide mandated training in live fire situations, specialized rescue , pre-hospital emergency medicine, CPR, and other training required in accordance with State Fire Training and National Fire Protection Association program standards or as determined necessary for professional performance standards.

F SC 145. Introduction to Homeland Security (3)
Lec-52.5
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

Offered fall semesters

African American Studies
Office: Science 222
Phone Number: (415) 239-3510
Web Site: www.ccsf.edu/african

Announcement of Courses
Credit, Degree Applicable Courses:
AFAM 30. African American Consciousness (3)
Lec-52.5 P/NP available
AFAM 30 is a course whose focus is what, a century ago, W.E.B. DuBois called “The Souls of Black Folk.” It explores, through the lenses of anthropology and psychology, the complex expressions of what African people think, feel, and image in their conscious existence, historically and geographically. UC/CSU

AFAM 42. From Funk to Hip Hop (3)
Lec-52.5 P/NP available
AFAM 42 explores the history of race theory and racism from early antecedents in antiquity through the emergence of modern race theory and racism in the 18th and 19th centuries to the present. It includes the ways that race theory has shaped intellectual discourse and popular consciousness. UC/CSU

AFAM 55. From Funk to Hip Hop (3)
Lec-52.5 P/NP available
Explores African American cultural outlook as reflected through the aesthetics and politics of black popular music from the Black Revolution of the 1960’s, up to and including Hip-Hop. Provides an understanding of contemporary African American political and social
African American Studies

Formerly DANC 130C
and combination. UC/CSU
ture, increasing vocabulary, movement through space, improvisation
Dance technique with emphasis on refining technique, rhythmic struc-

Advanced Jazz Dance builds upon skills learned in Intermediate Jazz

Advise: DANC 129C
Lab-35 P/NP available

DANC 129D. Advanced Jazz Dance (1)
Lab-35 P/NP available
Advise: DANC 129C
Advanced Jazz Dance builds upon skills learned in Intermediate Jazz
Dance technique with emphasis on refining technique, rhythmic struc-
ture, increasing vocabulary, movement through space, improvisation
and combination. UC/CSU
Formerly DANC 130C

DANC 138A. Beginning Hip Hop Dance (1)
Lab-35 P/NP available
Beginning Hip Hop dance with emphasis on increasing vocabulary, styles,
and length of dance combinations with more complex rhythms. UC/CSU

DANC 138B. Advanced Beginning Hip Hop Dance (1)
Lab-35 P/NP available
Advise: DANC 138A or demo of exit skills
Advanced Hip Hop dance builds upon skills learned in
Beginning Hip Hop with emphasis on increasing vocabulary, styles, and
length of dance combinations with more complex rhythms. Using
hip hop dance as a vehicle, students will be able to explore their own
movement expression and choreography. UC/CSU
Formerly DANC 137B

DANC 138C. Intermediate Hip Hop Dance (1)
Lab-35 P/NP available
Advise: DANC 138B or demo of exit skills
Intermediate Hip Hop dance builds upon skills learned in advance
Beginning Hip Hop with emphasis on increasing vocabulary, styles, and
length of dance combinations with more complex rhythms. Using hip hop
dance as a vehicle, students will be able to explore their own
movement expression and choreography in both group and solo settings. UC/CSU

DANC 138D. Advanced Hip Hop Dance (1)
Lab-35 P/NP available
Advise: DANC 138C or demo of exit skills
Advanced Hip Hop dance builds upon skills learned in Intermediate
Hip Hop with emphasis on increasing vocabulary, styles, and length
of dance combinations with more complex rhythms. Using hip hop
dance as a vehicle, students will be able to explore their own
movement expression and choreography in both group and solo settings. UC/CSU

ECON 30. Economics of the African American Community (3)
Lec-52.5 P/NP available
An introduction to the principles of Black political economy. Topics
will include: Black employment, employment discrimination, Black
capitalism, the Black underclass, homelessness, and community eco-

HIST 41A. The African American in the United States From the
Colonial Era to the Civil War. (3)
Lec-52.5 P/NP available
The political, social, artistic, and cultural history of the African
American in the United States, from the African heritage to the pres-
ent. UC/CSU
HIST 41B. The African American in the United States From the Reconstruction to the Present (3)
Lec-52.5 P/NP available
The political, social, artistic, and cultural history of the African American people in the United States from the Civil War to the present. UC/CSU

HUM 48. African-American Music, Art and Literature (3)
Lec-52.5, field trips P/NP available
Advise: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or PLACEMENT IN ENGL 96 or ENGL 88B
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. UC/CSU

IDST 80D. Diversity and Social Justice: Heterosexism (.5)
Lec-9 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of homophobia and heterosexism (discrimination based on perceived or real sexual orientation and identity) oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about heterosexism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

IDST 80E. Diversity and Social Justice: Ableism (.5)
Lec-9 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A consciousness raising analysis and evaluation of ableism (disability-based oppression) on individual, institutional, and cultural levels in the US. Expanding knowledge about ableism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

IDST 80F. Diversity and Social Justice: Class and Classism (.5)
Lec-9 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A consciousness-raising analysis and evaluation of class oppression and classism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about class, class oppression and classism, increasing awareness of one’s own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

IDST 80G. Diversity and Social Justice: Transphobia (.5)
Lec-9 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A consciousness-raising analysis and evaluation of transphobia and gender oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about transphobia and gender diversity, increasing awareness of one’s own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

IDST 81B. Diversity and Social Justice: Anti-Semitism/Anti-Arabism (1)
Lec-18 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of anti-Semitism and anti-Arabism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about anti-Semitism and anti-Arabism, increasing awareness of one’s own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

IDST 29. Islam: Identity & Culture (3)
Lec-52.5, field trips P/NP available
Advise: ESL 150 or ENGL 86 or ENGL 91 or PLACEMENT IN ESL 160 or ENGL 88
An interdisciplinary survey of Muslim identity and 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. UC/CSU

IDST 37. Introduction to Ethnic Studies (3)
Lec-52.5 P/NP available
An introduction to concepts, theories, and social policy related to the history, culture, concerns, and conditions of American ethnic and racial groups. Examines cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, and patterns of interaction between various racial and ethnic groups. UC/CSU

IDST 80A. Diversity and Social Justice: Racism (.5)
Lec-9 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of race-based oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about racism, increasing awareness of one’s own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

IDST 80C. Diversity and Social Justice: Sexism (.5)
Lec-9 P/NP available
A consciousness raising analysis and evaluation of sexism on individual, institutional, and cultural levels in the United States. Expanding one’s knowledge about sexism, increasing personal awareness of one’s own sexism and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU
LGBT 50. Lesbian/Gay/Bisexual/Transgender/Communities of Color in the U.S. (3)
Lec-52.5  P/NP available
ADVISE: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
This course examines the histories, cultures, identities, communities and unique contributions of lesbian/gay/bisexual and transgender people of color in the U.S. (Asian, Black, Latino, Middle Eastern and Native/Indigenous). UC/CSU
OFFERED ON OCCASION

MUS 8A. Beginning Jazz & Other Popular Piano (3)
Lec-52.5, field trips  P/NP available
ADVISE: 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. UC/CSU

MUS 8B. Intermediate Jazz & Other Popular Piano (3)
Lec-52.5, field trips  P/NP available
PREREQ.: MUS 8A or DEMONSTRATION OF EXIT SKILLS
An intermediate study of basic jazz, blues, Afro-Cuban, Brazilian and other popular piano techniques. UC/CSU

MUS 21. Traditional African Music (3)
Lec-52.5, 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. UC/CSU

MUS 23. Jazz History: Musical Traditions of the African American (3)
Lec-52.5, 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. UC/CSU

MUS 26. Music in American Culture (3)
Lec-52.5, field trips  P/NP available
A survey of music generated by America's diverse populations including Latino, African American, Hawaiian, Asians, Europeans, Native American, Cajun and Puerto Rican. UC/CSU

MUS 41. African Drumming Ensemble (3)
Lec-52.5, field trips  P/NP available
STUDENTS CAN REPEAT THREE TIMES (TOTAL 4 ENROLLMENTS)
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. UC/CSU
THE CONTENT OF THIS COURSE VARIES. STUDENTS MAY RE-ENROLL WITHOUT REPEATING SUBJECT MATTER.

PSYC 23. Psychology of Race and Ethnic Relations (3)
Lec-52.5  P/NP available
An exploration of the experiences, theories, and research concerning issues of race and ethnicity as they relate to individual and group behavior, emotion, and thinking, including attitudes, identity development, racism, privilege, coping strategies, and intersectional experiences. Psychohistorical analysis of the experiences of African Americans, Asian Americans, Latino(a) Americans, and Native Americans. UC/CSU

Aircraft Maintenance Technology
Office: Airport
Phone Number: (650) 821-0220
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.

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 Aircraft Maintenance Technology programs are certified by the Federal Aviation Administration. For more information about this agency, see the "Overview of the College" section of this Catalog.

The Federal Aviation Administration permits those who hold the Associate of Science (or Certificate of Achievement) 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 Achievement) in Airframe Maintenance Technology to take the examination for the F.A.A. Airframe Certificate.

Degree Curriculum

Students who complete all courses required for the major and satisfy general College graduation requirements will receive the Associate in Science Degree.

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 ENGL 93 or 95 or 88 or 88B with a C or higher, or place in ENGL 88; and
2. complete MATH E1 or E3 or 30, or place in MATH 40.

**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 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) all required subject areas associated with the Powerplant Maintenance Training as well as completing and passing the required General Education courses, the student will then qualify to receive the Aircraft Powerplant Maintenance Technology major and 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 program, students will be able to:

- 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.

Assuming students start this AA or AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

### Courses Required for the Major in Aircraft Powerplant Maintenance Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>First Semester:</td>
<td></td>
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<tr>
<td>AIRC 101 Introduction To Aircraft Maintenance</td>
<td>8.0</td>
</tr>
<tr>
<td>AIRC 102 Basic Electricity and Electrical Circuits</td>
<td>8.0</td>
</tr>
<tr>
<td>Second Semester:</td>
<td></td>
</tr>
<tr>
<td>AIRC 103 Powerplant Theory &amp; Maintenance</td>
<td>8.0</td>
</tr>
<tr>
<td>AIRC 104 Propulsion PowerPlant Systems</td>
<td>8.0</td>
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<tr>
<td>Third Semester:</td>
<td></td>
</tr>
<tr>
<td>AIRC 105 Powerplant Systems and Components</td>
<td>8.0</td>
</tr>
<tr>
<td>AIRC 106 Aircraft Structural Repair</td>
<td>8.0</td>
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<tr>
<td>Fourth Semester:</td>
<td></td>
</tr>
<tr>
<td>AIRC 107 Landing Gear, Hydraulics, and Pneumatics</td>
<td>8.0</td>
</tr>
<tr>
<td>AIRC 108 Airframe Systems &amp; Components</td>
<td>8.0</td>
</tr>
<tr>
<td>Total:</td>
<td>64.0</td>
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</tbody>
</table>

### Airframe-Maintenance Technology Major (AS)

This major is for potential AMT technicians that are interested in receiving training in Aviation Airframe maintenance. The Airframe 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 Airframe Maintenance Training include topics such as Assembly and Rigging, Hydraulic and Pneumatic Power Systems, Cabin Atmosphere Control Systems, Communication and Navigation Systems, Aircraft Fuel Systems, Position and Warning Systems as well as Fire Protection Systems. Students will learn the proper nomenclature of aircraft Airframe parts and components. Upon successfully completing and passing (with at least a 70% score) all required subject areas (associated with the Airframe Maintenance Training) as well as passing the required General Education courses, the student will then qualify to receive the Airframe-Maintenance Technology major and 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 Airframe Technician.

**Learning Outcomes**

Upon completion of this program, 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 system.
Courses Required for the Major in Airframe-Maintenance Technology
Course ................................................. Units
First Semester:
AIRC 101 Introduction To Aircraft Maintenance ........ 8.0
AIRC 102 Basic Electricity and Electrical Circuits ........ 8.0
Second Semester:
AIRC 103 Powerplant Theory & Maintenance .......... 8.0
AIRC 104 Propulsion PowerPlant Systems ............. 8.0
Third Semester:
AIRC 106 Aircraft Structural Repair .................... 8.0
Fourth Semester:
AIRC 107 Landing Gear, Hydraulics, and Pneumatics . 8.0
AIRC 108 Airframe Systems & Components ............ 8.0
Total: .................................................... 56.0

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) all required subject areas (associated with the Avionics Maintenance Training) as well as passing the required General Education courses, the student will then qualify to receive the Avionics-Maintenance Technology major.

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.

Learning Outcomes
Upon completion of this program, students will be able to:
- Inspect and repair sheet metal structures.
- 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.

Requirements for the Certificate of Achievement. Students may obtain the Certificate of Achievement in Aircraft Powerplant Maintenance Technology by receiving a final grade of “C” or higher in all of the following courses.

Aircraft Powerplant Maintenance Technology Certificate
Requirements for the Certificate of Achievement. Students may obtain the Certificate of Achievement in Aircraft Powerplant Maintenance Technology by passing a departmental final examination with a grade of B or higher and by receiving a final grade of C or higher in all of the following courses.

Learning Outcomes
Upon completion of this program, 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.
- Identify and demonstrate proper maintenance procedures as per specified references provided.
- Summarize and demonstrate the techniques utilized in overhauling an aircraft reciprocating engine.

Total: .................................................... 40.0

Airframe-Maintenance Technology Certificate
Requirements for the Certificate of Achievement. Students may obtain the Certificate of Achievement in Airframe-Maintenance Technology by passing a departmental final examination with a grade of B or higher and by receiving a final grade of C or higher in all of the following courses.

Learning Outcomes
Upon completion of this program, 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.
- Inspect, check and service landing gear position indicating and warning systems.
- Inspect and repair sheet metal structures.

The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Total: .................................................... 32.0
Courses Required for the Certificate of Achievement in Airframe-Maintenance Technology

Course ................................................. Units
Required courses:
AIRC 101 Introduction To Aircraft Maintenance .......... 8.0
AIRC 102 Basic Electricity and Electrical Circuits .......... 8.0
AIRC 106 Aircraft Structural Repair ........................ 8.0
AIRC 107 Landing Gear, Hydraulics, and Pneumatics . . 8.0
AIRC 108 Airframe Systems & Components ................. 8.0
Total: ................................................. 40.0

Announcement of Courses
Credit, Degree Applicable Courses:
AIRC 101. Introduction to Aircraft Maintenance (8)
Lec-87.5, Lab-175, field trips
This course an introduction to the General Section of the aircraft maintenance technician program. In this class students will learn many of the basic skills required to be an Aviation Maintenance Technician. CSU
Offered Fall semesters

AIRC 102. Basic Electricity and Electrical Systems (8)
Lec-87.5, Lab-175, field trips
This course acquaints the student with the basic principles of electricity and prepares the student to maintain, repair, overhaul basic aircraft electrical systems, and components. It is a foundational course for the aircraft maintenance training. Other topics covered in AIRC 102 are battery servicing, weight & balance, mathematics, and aircraft engine electrical systems. CSU
Offered Spring semesters

AIRC 103. Power-Plant Theory and Maintenance (8)
Lec-87.5, Lab-175, field trips
Advise: AIRC 101 and 102
Procedures for powerplant maintenance. Includes the construction, overhaul and inspection techniques used in powerplant maintenance; technical vocabulary, scientific physical properties, safety procedures; emphasis on measuring systems, and proper use of appropriate tools and equipment. Hands-on skills, will include basic maintenance and repair of aircraft reciprocating engines. CSU
Offered Fall semesters

AIRC 104. Propulsion Powerplant Systems (8)
Lec-87.5, Lab-175, field trips
This course covers basic training on turbine engines and their systems, reciprocating engine starting systems, and engine fire protection systems. Students will also gain practical hands-on experience that will be useful in the field. CSU
Offered Fall semesters

AIRC 105. Powerplant Systems and Components (8)
Lec-87.5, Lab-175
This course covers procedures necessary to properly repair and maintain propellers, fuel and fuel metering systems, induction systems, cooling systems, and exhaust systems, as well as providing practical hands on experience that familiarizes the student with the above. CSU
Offered Fall semesters

AIRC 106. Aircraft Metal Structures (8)
Lec-87.5, Lab-175, field trips
Advise: AIRC 101 and 102
The technological approach towards the complex airframe structures and the stresses absorbed by the skin coverings. Applied methods of airworthy repairs, including the forming processes, the bonding surfaces, plastic, composites and honeycomb repairs, the fusing of metals and its limitations. CSU
Offered Fall semesters

Lec-87.5, Lab-175
The subject areas covered in this course are assembly & rigging, landing gear, hydraulic/pneumatic systems, aircraft fuel systems, position & warning, ice & rain, and fire protection systems. The student is taught the basic nomenclature, theory of operation, inspection techniques, and troubleshooting of systems. CSU
Offered Spring semesters

AIRC 108. Airframe Systems and Components (8)
Lec-87.5, Lab-175, field trips
Federal Aviation Administration (F.A.A.) requirements for rigging aircraft, and flight control surfaces. Short introduction to the wood structures, fabric covering, applied theory of finishes, and effect on flight conditions. Maintenance techniques in electrical wiring, control switches, protective devices, and repair of AC electrical systems. CSU
Offered Spring semesters

Credit, Degree Applicable Courses:
AIRC 108 Airframe Systems & Components
Lec-87.5, Lab-175, field trips
AIRC 107 Landing Gear, Hydraulics, and Pneumatics Systems
Lec-87.5, Lab-175
AIRC 106 Aircraft Metal Structures
Lec-87.5, Lab-175
AIRC 105 Powerplant Systems and Components
Lec-87.5, Lab-175
AIRC 104 Propulsion Powerplant Systems
Lec-87.5, Lab-175
AIRC 103 Power-Plant Theory and Maintenance
Lec-87.5, Lab-175
AIRC 102 Basic Electricity and Electrical Systems
Lec-87.5, Lab-175
AIRC 101 Introduction to Aircraft Maintenance
Lec-87.5, Lab-175

Announcement of Courses
Credit, Degree Applicable Courses:
AMSL 1A. Elementary American Sign Language (3)
Lec-52.5 P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in English 96 or ENGL 88B or any City College or university foreign language course
This is a course for the student with no prior or minimal skills in and knowledge of AMSL. The course is designed primarily to develop the students’ receptive skills in functional settings. Everyday communication emphasizing vocabulary, syntax, and fingerspelling to enable students to communicate with Deaf individuals in a culturally appropriate manner. UC/CSU

AMSL 1B. Elementary American Sign Language (3)
Lec-52.5 P/NP available
Prereq.: AMSL 1A
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in English 96 or ENGL 88B or any City College or university foreign language course
Continued development of American Sign Language (AMSL) receptive/expressive skills and knowledge learned in AMSL 1A. Emphasis on conversational skills in functional situations, continued vocabulary and sentence structure expansion, and knowledge of Deaf culture and the Deaf community. UC/CSU

American Sign Language
Office: Art 202
Phone number: (415) 239-3223
Web Site: www.ccsf.edu/forlang

84 American Sign Language
American Studies
Office: Batmale 656
Phone number: (415) 239-3330
Web Site: www.ccsf.edu/socialsci

Announcement of Course:
Credit, Degree Applicable Course:
AMS 5. Comics, Power and Society (3)
Lec-52.5, field trips P/NP available
Introduction to social science using comic books, graphic novels, and related media illustrating central social science concepts. Examination of power, powerlessness, and superpower. The impact on past and present American society of comic books, graphic novels, cartoons, and animation as artistic expression and representation of socio-political issues. UC/CSU

Anthropology
Office: Batmale 354
Phone number: (415) 239-3433
Web Site: www.ccsf.edu/behavior

Announcement of Curricula

Anthropology 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 a broad introduction to the four fields of anthropology (biological/physical, archaeology, cultural, and linguistic), and the basic concepts of anthropological inquiry.

Learning Outcomes
Upon completion of this program, students will be able to:

- Compare the major contemporary theoretical perspectives in the four major subfields of anthropology
- Analyze and interpret anthropological data
- Apply the methods of cross-cultural comparison and the concept of cultural relativism to past and present cultures

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 units required 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.

For students who start this AA-T with transfer-level math and English 1A eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AA-T in Anthropology

Required Courses:
- ANTH 1 Biological Anthropology ......................... 3.0
- ANTH 2 Archaeology and Prehistory ..................... 3.0
- ANTH 3 Introduction to Social and Cultural Anthropology ........................................ 3.0

Choose ONE course from the following options:
- ANTH 4 Introduction to Linguistic Anthropology ........ 3.0
- PSYC 5 Statistics for Behavioral Sciences ............... 5.0
- ECON 5 Introductory Statistics for Economics, Business and Social Sciences. .................. 5.0
- MATH 80 Probability and Statistics ....................... 4.0

Choose ONE course (or lecture/lab combination) from the following:
- GEOL 10 Physical Geology ................................. 3.0
- and GEOL 10L Physical Geology Lab .................. 2.0
- GEOL 30 Environmental Geology ........................ 3.0
- and GEOL 30L Environmental Geology Lab .......... 1.0
- PSYC 2 Research Methods ................................ 3.0

Choose ONE course from the following:
- ANTH 8 Magic, Witchcraft, and Religion ............... 3.0
- ANTH 11 Latin American Cultures and Societies .... 3.0
- ANTH 12 North American Indian Cultures .......... 3.0
- ANTH 15 Philippine Culture and Society ............. 3.0
- ANTH 20 Lesbian Gay Bisexual Transgender Anthropology ........................................ 3.0
- ANTH 25 Culture, Gender and Sexuality ............. 3.0
- GEOG 4 Cultural Geography ............................... 3.0
- HUM 7 Comparative Religions ............................. 3.0

Total: .................................................................. 18.0 – 22.0

Announcement of Courses:
Credit, Degree Applicable Courses:
ANTH 1. Biological Anthropology (3)
Lec-52.5 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. UC/CSU
C-ID ANTH 110

ANTH 1L. Biological Anthropology Laboratory (1)
Lab-52.5, field trips P/NP available
Prereq: Completion of or concurrent enrollment in: ANTH 1 Laboratory course designed to accompany Anthropology 1. It includes hands-on study of human and primate skeletal materials and replica fossils, primate behavior and taxonomy, and human variation. Application of the scientific method and evolutionary theory are also included. CSU
Requires concurrent registration in Anthropology 1. One field trip required.
ANTH 2. Archaeology and Prehistory (3)
Lec-52.5  P/NP available
Overview of contemporary archaeological methods of survey, excavation, analysis, and interpretation. Discussion of various theoretical approaches used to explain past human behavior. Thematic discussion of the major events in prehistory from human origins to appearance of agriculture and cities. UC/CSU
C-ID ANTH 150

ANTH 3. Introduction to Social and Cultural Anthropology (3)
Lec-52.5, field trips  P/NP available
The structure and dynamics of cultures as seen in religions, marriage practices, gender roles, kinship, social classes, languages, laws, and political organization. Examples taken from foraging, tribal, and state cultures in many areas of the world. UC/CSU
C-ID ANTH 120
Not recommended for students who have completed ANTH 3AC

ANTH 3C. Introduction to Cultural Anthropology: Focus on American Cultures (3)
Lec-52.5, field trips  P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or PLACEMENT IN ENGL 1A
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. Meets the American Cultures requirement for UC Berkeley. Ethnography, history, literature, film, and music are integrated in an interdisciplinary approach to cultural studies. UC/CSU
Formerly ANTH 3AC
Offered on occasion

ANTH 4. Introduction to Linguistic Anthropology (3)
Lec-52.5  P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or PLACEMENT IN ENGL 1A
The study of language, including its general nature and its cognitive, biological, and social bases. Languages as they reflect the separate cultural realities of different societies. UC/CSU
Offered Spring semesters

ANTH 8. Magic, Witchcraft, and Religion (3)
Lec-52.5  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, taboos, cults, and sects. UC/CSU

ANTH 11. Latin American Cultures and Societies (3)
Lec-52.5, field trips  P/NP available
Advise: ENGL 86 or ENGL 91 or ESL 160 or PLACEMENT IN ENGL 93 or ENGL 88
Comprehensive and critical analysis of the cultures and traditions of the peoples in Latin America. Critical in-depth study of contemporary society and political systems, inter-ethnic relations, traditional medicinal healing, religions, and sorcery. Analysis of the history and development of Latin American cultures and the impact of state forms of social organization on its traditional societies. UC/CSU

ANTH 12. North American Indian Cultures (3)
Lec-52.5  P/NP available
The native people of North America are described in terms of their precontact adaptation to the natural environment. Language, kinship, religion and other aspects of culture are studied. UC/CSU
For ethnology of the North American Indian also see HIST 15A-15B.
Offered Fall semesters

ANTH 15. Philippine Culture and Society (3)
Lec-52.5  P/NP available
The course introduces students to the development of Philippine culture and the impact of Eastern and Western civilizations on the people; emphasis on the ways of life in Philippine rural and urban areas and also the cultures of the various ethnic groups. UC/CSU
Offered on occasion

ANTH 20. LGBT Anthropology (3)
Lec-52.5  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. UC/CSU

ANTH 22. Bay Area Archaeology: 1539-1846 (1)
Lec-18, field trips  P/NP available
Examination of the archaeological record left behind by early Spanish, Russian, and Mexican explorers and colonizers in the San Francisco Bay Area. Emphasis placed on artifacts, sites, and material culture to understand sociocultural behavior and organization, and Native American acculturation. CSU
Offered on occasion

ANTH 25. Culture, Gender and Sexuality (3)
Lec-52.5  P/NP available
This course explores how gender and sexuality are expressed in various cultures around the world. Focuses on gender 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. UC/CSU
Offered Spring semesters

Apprenticeship
Office: Ocean
Phone Number: (415) 452-5664
Web Site: https://www.ccsf.edu/en/educational-programs/cte/Earnandlearn.html

Announcement of Curricula
General Information
Apprenticeship is designed to prepare individuals (generally high school graduates) and produce highly qualified, well-trained workers, who have the knowledge and 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.

### Course Occupation Prog. Yrs. Class Hrs.

<table>
<thead>
<tr>
<th>Course</th>
<th>Occupation</th>
<th>Prog. Yrs.</th>
<th>Class Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPR 9710</td>
<td>Meat Cutting Appr</td>
<td>1</td>
<td>144</td>
</tr>
<tr>
<td>APPR 9713</td>
<td>Plastering Appr</td>
<td>4</td>
<td>576</td>
</tr>
<tr>
<td>APPR 9714</td>
<td>Plumber Appr</td>
<td>5</td>
<td>1080–1296</td>
</tr>
<tr>
<td>APPR 9716</td>
<td>Roofing/Waterproofing Appr</td>
<td>3.5</td>
<td>378</td>
</tr>
<tr>
<td>APPR 9720</td>
<td>Stnry Engin Appr</td>
<td>4</td>
<td>670–864</td>
</tr>
</tbody>
</table>

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 Programs at (415) 452-5664.

### Announcement of Courses

**Noncredit Courses:**

**APPR 9710. Meat Cutting Apprentice (72 hrs)**

A study in all areas of training for meat apprentices to become journey persons in the meat industry. Includes: history, knives, tools equipment, sanitation, mathematics, weights measures, and USDA grades, breakdown of beef, veal, pork, lamb, variety meats, poultry, fish, sausage making, storage and merchandising.

*Offered on occasion*

**APPR 9713. Plastering Apprentice (72 hrs)**

Study of and practice in the trade of plastering as required by the apprenticeship program established by the local joint apprenticeship 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.

*Offered on occasion*

**APPR 9714. Plumbing 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 9716. Roofing/Waterproofing Apprenticeship (40 hrs)**

Overview and application of a variety of roofing/waterproofing materials and practices. Includes hot and cold applied built-up roofing and waterproofing, asphalt shingles, tiles and single ply roofing materials such as EPDM, PVC, TPO, Modified Bitumen, above and below grade applications of waterproofing, and Photovoltaic.

*Offered on occasion*

**APPR 9720. Stationary Engineer Apprentice (108 hrs)**

Training required for employment as a journeyman 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.

*Offered on occasion*

### Architecture

**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.

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 after completing this course of study.
Learning Outcomes
Upon completion of this program, students will be able to:

- Develop architectural graphics using digital and analog tools that communicate design intentions and document construction requirements.
- Create architectural solutions to a set of project requirements.
- Compare exemplary historical examples of architecture as impacted by social, political, economic, and/or 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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the Major in Architecture**

<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 20 Architectural Graphics I</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 29A Freehand Drawing</td>
<td>1.0</td>
</tr>
<tr>
<td>ARCH 100 Introduction to Architecture and Design</td>
<td>2.0</td>
</tr>
<tr>
<td>PHYC 10 Conceptual Physics</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 55 Geometry</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Second Semester (spring):</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 22A Delineation and Rendering</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 101 Architecture Design Studio I</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Third Semester (fall):</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 120 Fundamentals of Building Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 102 Architecture Design Studio II</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Fourth Semester (spring):</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 127 Fundamentals of Building Structures</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 31B History of Architecture</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 160 Professional Practice</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Fourth Semester (spring): choose one of the following:</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 214 AutoCAD I</td>
<td>3.0</td>
</tr>
<tr>
<td>BIM 120 Revit Architecture I</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>38.0</td>
</tr>
</tbody>
</table>

**Interior Design Major (AS)**

This program will prepare students in areas of design, technology, digital skills, drawing, delineation and rendering, structures, history, 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.

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 Interior Design may qualify for employment positions that may include those of draftsperson; delineator; salesperson; furniture designer; and assistant in coordination of colors, fabric, furniture, lighting systems, and exhibits.

Learning Outcomes
Upon completion of this program, 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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**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>2.0</td>
</tr>
<tr>
<td>ARCH 20 Architectural Graphics I</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 29A Freehand Drawing</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Second Semester (spring):</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 29B Freehand Drawing II</td>
<td>1.0</td>
</tr>
<tr>
<td>ARCH 22A Delineation and Rendering</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Second semester (spring): choose one of these color courses:</strong></td>
<td></td>
</tr>
<tr>
<td>DSGN 150/VMD 118 Color in Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 126 Color</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Third Semester (fall):</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 101 Architecture Design Studio I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 170A Beginning Sculpture</td>
<td>3.0</td>
</tr>
<tr>
<td>INTD 124 Interior Building Materials &amp; Systems</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Third Semester (fall): choose one of the following courses:</strong></td>
<td></td>
</tr>
<tr>
<td>ARCH 214 AutoCAD I</td>
<td>3.0</td>
</tr>
<tr>
<td>BIM 120 Revit Architecture I</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Fourth Semester (spring):</strong></td>
<td></td>
</tr>
<tr>
<td>INTD 138 Global History of Interior Design</td>
<td>3.0</td>
</tr>
<tr>
<td>INTD 102 Interior Design Studio I</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 160 Professional Practice</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>34.0</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, students 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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 5 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Construction Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester (fall):</td>
<td></td>
</tr>
<tr>
<td>CM 100 Fundamentals of Construction Management</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 120 Fundamentals of Building Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications</td>
<td></td>
</tr>
<tr>
<td>for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester (spring):</td>
<td></td>
</tr>
<tr>
<td>CM 110 Construction Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 127 Fundamentals of Building Structures</td>
<td>3.0</td>
</tr>
<tr>
<td>CM 248 Construction Project Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester (spring): choose one of the following:</td>
<td></td>
</tr>
<tr>
<td>CMST 6 Workplace Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>SUPV 234 Communication for Business Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BSEN 74 Written Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Third Semester (fall):</td>
<td></td>
</tr>
<tr>
<td>CM 240 Construction Cost Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 240 Fundamentals of the International Building Code</td>
<td>3.0</td>
</tr>
<tr>
<td>BIM 120 Revit Architecture I</td>
<td>3.0</td>
</tr>
<tr>
<td>Fourth Semester (spring):</td>
<td></td>
</tr>
<tr>
<td>CM 244 Construction Scheduling</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 160 Professional Practice</td>
<td>3.0</td>
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<tr>
<td>CRER 62 Successful Job Search Techniques</td>
<td>1.0</td>
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<tr>
<td>Fifth Semester (Summer):</td>
<td></td>
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<tr>
<td>CRER 63 Career Counseling for Work Experience</td>
<td>1.0</td>
</tr>
<tr>
<td>Total: 38.0</td>
<td></td>
</tr>
</tbody>
</table>

Construction Management: Advanced Skills Certificate

The Certificate of Achievement in Construction Management: Advanced Skills is a course of study that includes courses which focus on the technical and management skills required in the field of Construction Management as well as courses which provide knowledge in the technical aspects of construction as well as in general business. This certificate is designed to meet the needs of students who are returning to college after completing a degree in another field who seek to enter into the profession of Construction Management. It also provides students who are currently employed in the construction management industry in entry-level positions the opportunity for advancement by enhancing their knowledge. All courses required for the Certificate Program are also required for the Associated in Science Degree Program making it easier for students to continue their studies to enhance their opportunities for career advancement.

Students may receive a Certificate of Achievement in Construction Management: Advanced Skills by completing the courses required by the certificate program with a final grade of C or higher. Pass/No Pass grades will not be accepted towards completion of a certificate program.

Learning Outcomes

Upon completion of this program, students 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.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Construction Management: Advanced Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CM 100 Fundamentals of Construction Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CM 110 Construction Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>CM 240 Construction Cost Estimating</td>
<td>3.0</td>
</tr>
<tr>
<td>CM 244 Construction Scheduling</td>
<td>3.0</td>
</tr>
<tr>
<td>CM 248 Construction Project Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 120 Fundamentals of Building Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose 12 units from the following electives:</td>
<td></td>
</tr>
<tr>
<td>ARCH 127 Fundamentals of Building Structures</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 160 Professional Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 240 Fundamentals of the International Building Code</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BIM 120 Revit Architecture I</td>
<td>3.0</td>
</tr>
<tr>
<td>ONE of the following communication courses:</td>
<td></td>
</tr>
<tr>
<td>CMST 6 Workplace Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>SUPV 234 Communication for Business Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BSEN 74 Written Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Total: 30.0</td>
<td></td>
</tr>
</tbody>
</table>
Interior Design: Assistant Interior Designer Core Skills Certificate

This program focuses on the areas of interior design, technology, and practice to prepare students in the career of Interior Design. The certificate is designed to meet the needs of students who want to obtain entry-level jobs within Interior Design Profession, such as interior design assistants, interior design drafters, design show room assistants, administrative and resource assistants. It also provides students who are currently employed in related industry the opportunity for career advancement. Most courses required for the certificate program are also required for the Associate's degree in Interior Design, if students wish to continue their studies.

Learning Outcomes

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

- Create interior design solutions and graphics to a set of technical project requirements in a residential or commercial design environment.
- Evaluate materials and technical systems used in the field of interior design.
- Communicate effectively in a professional design work environment.

Students completing the program will receive a certificate by completing the required courses with a final grade of "C" or higher.

The minimum time for completion of this certificate is two semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Certificate of Accomplishment in Interior Design: Assistant Interior Designer Core Skills

Course ................................................. Units
Required Courses:
INTD 100 Introduction to Residential Interior Design . 3.0
BIM 120 Revit Architecture I . 3.0

Choose 3 units from the following graphics courses:
ARCH 20 Architectural Graphics I . 3.0
ARCH 214 AutoCAD I . 3.0
ARCH 218 Fundamentals of Rhino 3D . 3.0
BIM 121 Revit Architecture II . 3.0

Choose 3 units from the following technology courses:
INTD 124 Interior Building Materials & Systems . 3.0
ARCH 120 Fundamentals of Building Construction . 3.0
FASH 22 Textile Analysis . 3.0
SUST 31/BIO 31/GEOG 31 Introduction to Environmental Science . 3.0

Choose 3 units from the following business skills courses:
ARCH 160 Professional Practice . 3.0
BSEN 74 Written Business Communication . 3.0
MRKT 122 Professional Selling . 3.0

Total: ................................................. 15.0

Collaborative Design Certificate*

The certificate program in Collaborative Design provides students with a strong foundation in multidisciplinary approaches to design and collaboration.

*See Maker Studies section of the catalog.

Announcement of Courses

Architecture

ARCH 20. Architectural Graphics I (3)
Lec-35, Lab-70 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. UC/CSU

ARCH 22A. Delineation and Rendering (3)
Lec-35, Lab-70, 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. UC/CSU

ARCH 29A. Freehand Drawing I (1)
Lec-17.5, Lab-17.5
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. UC/CSU

ARCH 29B. Freehand Drawing II (1)
Lec-17.5, Lab-17.5 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. UC/CSU

ARCH 31A. History of Architecture (3)
Lec-52.5
A survey of the history of Architecture from prehistory through the end of the Middle Ages. UC/CSU

ARCH 31B. History of Architecture (3)
Lec-52.5 P/NP available
A survey of the history of architecture from the early Renaissance to the present times. UC/CSU

ARCH 32. Bay Region Architectural History (3)
Lec-52.5 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; contributing architects and planners who reflect the growth and significance of their professions in the late nineteenth and twentieth centuries. UC/CSU

Offered on occasion

ARCH 100. Introduction to Architecture and Design (2)
Lec-35, 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. UC/CSU

ARCH 100=ARCH 48
ARCH 101. Architecture Design Studio I (3)
Lec-35, Lab-70, 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, as these relate to the human condition. UC/CSU

ARCH 102. Architecture Design Studio II (3)
Lec-35, Lab-70, field trips
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. UC/CSU

ARCH 103. Architecture Design Studio 3 (3)
Lec-35, Lab-70, field trips
Prereq.: ARCH 102
Coreq.: Completion of or concurrent enrollment in: ARCH 22A
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. UC/CSU

ARCH 120. Fundamentals of Building Construction (3)
Lec-52.5, field trips
P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or Placement in ENGL 96 or ENGL 88B
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

ARCH 127. Fundamentals of Building Structures (3)
Lec-52.5, 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
Offered Spring semesters

ARCH 134. Global Contemporary Architecture (3)
Lec-52.5
P/NP available
This course studies architecture of recent 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. UC/CSU
Formerly ARCH 34
Offered on occasion

ARCH 160. Professional Practice (3)
Lec-52.5, 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
Offered Spring semesters

ARCH 214. AutoCAD I (3)
Lec-35, Lab-70, field trips
P/NP available
Advise: ARCH 20
An introduction to the Autodesk 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 architectural emphasis. Included are the use of collaborative drawing using XREF and management of a drawing using a layering system. CSU

ARCH 240. Fundamentals of the International Building Code (3)
Lec-52.5
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
Offered Spring semesters

Building Information Modeling
Credit, Degree Applicable Courses:
BIM 120. Revit Architecture I (3)
Lec-35, Lab-61.25, field trips
P/NP available
Advise: ARCH 120
An introduction to Building Information Modeling (BIM) and Revit Architecture software. Automation of building design and documentation process, interface and command access, coordination of data, and views for annotations and printing. No previous CAD experience required. CSU

BIM 121. Revit Architecture II (3)
Lec-35, Lab-61.25
P/NP available
Prereq.: BIM 120 or demonstration of exit skills
Advise: ARCH 120 or Basic Construction Knowledge
Course focuses on advanced applications of the Revit Architecture software. Presents a set of problems involving typical issues encountered in contract document production in a multi-user environment in the architecture and construction industries. Includes Family editing, Work-sharing, Phases and Design Options, and presentation techniques. CSU
Offered on occasion

Construction Management
Credit, Degree Applicable Courses:
CM 10. Introduction to Construction Management (1)
Lec-17.5, field trips
P/NP available
Overview of the Construction Management profession and the requirements for programs of study. This course focuses on the scope and nature of work in Construction Management, including
professional roles, skills and responsibilities, career opportunities, and higher education pathways. CSU

**CM 100. Fundamentals of Construction Management (3)**
Lec-52.5, field trips  
Prereq.: CM 110 or demonstration of CM 110 exit skills  
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: estimation, scheduling and project control. CSU

**CM 110. Construction Graphics (3)**
Lec-35, Lab-70  
Introduction to basic graphics and communication skills and knowledge required to effectively read and use drawings in the construction industry. Analysis of drawings in the civil, architectural, mechanical, and electrical fields and their relationship to construction planning and estimating. Material quantity surveying. Freehand sketching. CSU

**CM 240. Construction Cost Estimating (3)**
Lec-52.5, field trips  
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-52.5, field trips  
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-52.5, field trips  
Prereq.: CM 100  
Advise: 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

**Interior Design**

**Credit, Degree Applicable Courses:**

**INTD 100. Introduction to Residential Interior Design (3)**
Lec-35, Lab-70, 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. UC/CSU

**INTD 102. Interior Design Studio I (3)**
Lec-35, Lab-70, field trips  
Advise: ARCH 100  
Introduction to interior design fundamentals relating 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-52.5, field trips  
A comprehensive examination of Interior Materials and Construction Systems with a focus on their interface with building systems such as electrical, mechanical, plumbing, and structural systems. CSU

**INTD 125. Fundamentals of Architectural Lighting (3)**
Lec-52.5, field trips  
Advise: Completion of or concurrent enrollment in: ENGL 88  
Fundamentals of Architectural Lighting is an introductory course for interior designers and architects to understand the basic types of lighting controls and considerations. Topics include luminaries, lighting control, systems, photometry and calculations. CSU

**INTD 128. Global History of Interior Design (3)**
Lec-52.5, field trips  
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

**Announcement of Curricula**

**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 the basic core program. The AA-T prepares students for transfer to upper division Fine Art or Studio Arts programs at four-year colleges and universities, particularly to California State University campuses.

**Learning Outcomes**
Upon completion of this program, students 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.

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 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. Assuming students start this AA-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the AA-T in Studio Arts**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 102 Western Art History</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 103 History of Modern Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 125A Basic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 125B Advanced Design: 3D</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 130A Basic Drawing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose 3 courses, each from a different Studio Arts area:

| Area 1: Color                                | 3.0   |
| ART 126 Color                               |       |

| Area 2: Drawing                             | 3.0   |
| ART 130B Intermediate Drawing               |       |
| ART 132A Beginning Figure Drawing           |       |

| Area 3: Painting                            | 3.0   |
| ART 140A Beginning Painting                 |       |

| Area 4: Printmaking                         | 3.0   |
| ART 150A Beginning Intaglio & Relief Printmaking |       |

| Area 5: Ceramics                            | 3.0   |
| ART 160A Beginning Ceramics                 |       |

| Area 6: Sculpture                           | 3.0   |
| ART 170A Beginning Sculpture                |       |

| Area 7: Metal Arts                          | 3.0   |
| ART 180A Beginning Jewelry/Metal Arts       |       |

| Area 8: Other Media                         | 3.0   |
| ART 136A Introduction to Illustration       |       |
| ART 145A Beginning Watercolor Painting      |       |

| Area 9: Second Level Courses:               | 3.0   |
| ART 140B Intermediate Painting              |       |
| ART 150B Intermediate Intaglio and Relief Printmaking |       |
| ART 160B Intermediate Ceramics              |       |
| ART 170B Intermediate Sculpture             |       |

Total: 24.0

**Art History Major (AA-T)**

Associate in Arts in Art History for Transfer offers students a comprehensive lower division program in the history of art, revolving around the basic core program. The AA-T prepares students for transfer to upper division Art History programs at four-year colleges and universities, particularly to California State University campuses.

**Learning Outcomes**

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

- Analyze a variety of techniques and formal visual elements of individual works of art in different media and diverse cultures.
- Define and differentiate various styles of art throughout history.
- Evaluate works of art in relation to context, historical background, and influence on subsequent artistic periods.
- Compare stylistic elements that distinguish aesthetic and cultural trends.

Students who wish to earn the Associate in Arts in Art 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 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. Assuming students start this AA-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the AA-T in Art History**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101 Western Art History</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 102 Western Art History</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 103 History of Modern Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 130A Basic Drawing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one (1) of the following non-Western Art History Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 104 Asian Art History</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 105 Ancient Art and Architecture of Latin America</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 107 African-American Art History</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one (1) course from the following studio arts courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 125A Basic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 132A Beginning Figure Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 136A Introduction to Illustration</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 140A Beginning Painting</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 150A Beginning Intaglio &amp; Relief Printmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 160A Beginning Ceramics</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 170A Beginning Sculpture</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 180A Beginning Jewelry/Metal Arts</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one (1) of the following Art History elective courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 108 Women Through Art History</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 109 History of Contemporary Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 118 American Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 122A Russian Art at the Legion</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 123Q Baroque Masters of Light</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 123U 18th c. French Art at the Legion</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 123V Renaissance Art at the Legion</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 123W 19h -c. Painting at the Legion</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 21.0

**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.
The present. 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 Latin American art. UC/CSU Offered on occasion

ART 107. African-American Art History (3)  
Lec-52.5, field trips  
ADVICE: ENGL 86 or ENGL 91 or ESL 160 or PLACEMENT in ENGL 88 or ENGL 93  
Heritage of West African civilizations prior to and during the slave trade, and of African-Americans from colonial to contemporary times. All art will be discussed from both a critical and historical perspective, with regard to social context and formal visual elements. UC/CSU Offered on occasion

ART 108. Women Through Art History (3)  
Lec-52.5, 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. UC/CSU

ART 109. History of Contemporary Art (3)  
Lec-52.5, field trips  
Examination of contemporary art, its principal styles/movements/periods, major artists and artworks in the major media categories. Analysis of late modern and postmodern developments in relation to wider historical and societal contexts. Further examination includes the challenges that contemporary forms, concepts, and approaches bring to traditional art history methods and practices. UC/CSU

ART 118. American Art (3)  
Lec-52.5  
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 pivotal artists, techniques, and formal elements, and critically analyze artwork within its contextual framework. UC/CSU

ART 122A. Russian Art at the Legion (3)  
Lec-52.5  
Russian art from the 10th to early century will cover the Medieval Period, Western Academic Tradition, Romanticism and Critical Realism, Neo-nationalist Movement and the Russian Avant Garde. All art will be discussed for its formal qualities of style, culture, iconography and technical achievement. UC/CSU Offered on occasion

ART 123Q. Baroque Masters of Light (3)  
Lec-52.5  
ADVICE: ENGL 86 or ESL 150  
The course examines Baroque Art at the Legion of Honor with emphasis on the Dutch and Italian masters. All art will be discussed from both a critical and historical perspective with regard to cultural context and formal elements of styles. UC/CSU Class held at the Legion of Honor Fine Arts Museum Offered on occasion
ART 123U. 18th century French Art at the Legion (3)
Lec-52.5, field trips P/NP available
The course examines 18th-century French painting from the permanent collection at the Legion of Honor Museum. Paintings will be discussed from both a critical and historical perspective, with regard to cultural context and formal elements of style. UC/CSU
OCCURRED ON OCCASION

ART 123V. Renaissance Art at the Legion (3)
Lec-52.5 P/NP available
The course examines Renaissance painting from the permanent collection and special exhibitions at the Legion of Honor Museum. Paintings will be discussed from a critical and historical perspective, with regard to cultural context and formal elements of style. UC/CSU
CLASS HELD AT THE LEGION OF HONOR FINE ARTS MUSEUM
OCCURRED ON OCCASION

ART 123W. 19th Century Painting at the Legion (3)
Lec-52.5, field trips P/NP available
The course examines 19th-century painting from the permanent collection and special exhibitions at the Legion of Honor Museum. All art will be discussed from both a critical and historical perspective, with regard to cultural context and formal elements of style. UC/CSU
OCCURRED ON OCCASION

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 is the prerequisite for ART 125B and Basic Drawing: ART 125A serves as the prerequisite for Intermediate Drawing, Beginning Figure Drawing, and Intermediate Figure Drawing. All studio classes should be taken sequentially in order for students to acquire the skills necessary for their success in intermediate, advanced and mastery 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-35, Lab-70, field trips
ADVISE: COMPLETION/CONCURRENT ENROLLMENT IN ART 125A
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 applied arts, students learn to apply the elements and principles of visual organization to creative projects using various media. UC/CSU
C-ID ARTS 100

ART 125B. Advanced Design: 3D (3)
Lec-35, Lab-70, field trips
PREREQ.: ART 125A
ADVISE: 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. UC/CSU
C-ID ARTS 101
OCCURRED ON OCCASION

ART 126. Color (3)
Lec-35, Lab-70, 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. UC/CSU
C-ID ARTS 270

Drawing
ART 130A. Basic Drawing (3)
Lec-35, Lab-70, field trips
ADVISE: 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 perspective. Group and individual instruction related to progressive assignments will encourage subjective and analytical development. UC/CSU
C-ID ARTS 110

ART 130B. Intermediate Drawing (3)
Lec-35, Lab-70, field trips
PREREQ.: ART 130A
ADVISE: ART 125A
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. UC/CSU
C-ID ARTS 205

ART 130C. Advanced Drawing (3)
Lec-35, Lab-70, field trips
ADVISE: ART 130B
Building on the rigorous drawing studies of ART 130A and ART 130B, students will now focus on developing a self-directed creative process that is informed by research into the expressive, historical, personal, and contemporary aspects of media use and content development as applied in the creation of a series of related thematic drawings. UC/CSU

Figure Drawing
ART 132A. Beginning Figure Drawing (3)
Lec-35, Lab-70, field trips
PREREQ.: ART 130A
ADVISE: ART 125A
Introduction to the basic concepts of drawing the nude figure from life. Students develop a practical understanding of surface anatomy
and proportions using a variety of media and techniques, acquire perceptual and critical thinking skills, and are introduced to the expressive potential of figurative drawing. UC/CSU
C-ID ARTS 200
ART 132A IS STRONGLY RECOMMENDED FOR ALL ART MAJORS.

ART 132B. Intermediate Figure Drawing (3)
Lec-35, Lab-70, field trips  P/NP available
PREREQ.: ART 132A
Building on the previously acquired basic knowledge of drawing the nude figure from life, intermediate students will further develop their understanding of concepts and techniques of figure drawing, continue with more in-depth study of anatomy and proportion, and start working with color and experimental mixed-media approaches. UC/CSU

ART 132C. Advanced Figure Drawing (3)
Lec-35, Lab-70, field trips
ADVISE: ART 132B
Building on a rigorous study of drawing the nude figure from life, students will focus on developing a self-directed creative process, leading to advanced-level exploration of contemporary art issues and media, while creating a series of related figurative compositions. UC/CSU

ART 132D. Figure Drawing Special Topics (3)
Lec-35, Lab-70, field trips
ADVISE: ART 132C
Students will integrate advanced figure drawing skills with a focus on special topics such as portraiture, narrative art, mixed media or figurative mural art, to develop a personal and expressive body of artwork in a medium of their choice. UC/CSU

Illustration

ART 136A. Introduction to Illustration (3)
Lec-35, Lab-70, field trips
ADVISE: ART 125A and 130A
Introduction to the professional field of illustration. Instruction will focus on principal areas within the field (Editorial, Advertising, Fashion, Fantasy and Scientific), its history, standards, practices 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. Intermediate Illustration (3)
Lec-35, Lab-70, field trips
PREREQ.: ART 136A
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-35, Lab-70, field trips
PREREQ.: ART 136B
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

Painting

ART 140A. Beginning Painting (3)
Lec-35, Lab-70, field trips
ADVISE: ART 125A AND 130A
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. UC/CSU

ART 140B. Intermediate Painting (3)
Lec-35, Lab-70, field trips
ADVISE: ART 140A.
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. UC/CSU

ART 140C. Advanced Painting (3)
Lec-35, Lab-70, field trips
ADVISE: ART 140B.
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. UC/CSU

ART 140D. Painting Mastery (3)
Lec-35, Lab-70, field trips
ADVISE: ART 140C
This capstone course of the painting family supports students in developing greater technical expertise and further develop conceptual, analytical and material skills begun in Art 140C, while investigating issues specific to painting in order to transition into upper division university classes, private art schools, or as a means to enter the professional art world by approaching galleries, curators, art directors, artist registries with a fully developed body of work. UC/CSU

Watercolor

ART 145A. Beginning Watercolor Painting (3)
Lec-35, Lab-70, field trips
ADVISE: ART 125A AND 130A
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. UC/CSU

ART 145B. Intermediate Watercolor (3)
Lec-35, Lab-70, field trips
ADVISE: 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 texture. Emphasis on combining traditional and experimental approaches and the development of a personal style and subject matter. UC/CSU
ART 145C. Advanced Watercolor/Water Media (3)
Lec-35, Lab-70, field trips
ADVISE: ART 145B
Students will focus on developing a cohesive body of watercolor and water media paintings. Expanding upon watercolor skills with those related to acrylic, ink, and gouache. Emphasis will be placed on advanced development of a personal content and style in which materials and techniques play an essential role. UC/CSU

ART 145D. Watercolor Special Topics (3)
Lec-35, Lab-70, field trips
ADVISE: ART 145C
Expanding upon advanced-level watercolor/water media techniques and idea development practices students focus on creating a 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. This is the capstone course of the Watercolor family. UC/CSU

Chinese Brush Painting
ART 146A. Beginning Chinese Brush Painting (3)
Lec-35, Lab-70, field trips
Using the traditional materials and techniques of Chinese calligraphy and painting, students will learn about the design and philosophy of flower paintings through demonstrations, lectures and video. Based on a series of Chinese masterpieces, students will develop compositional, technical and creative skills. UC/CSU

ART 146B. Advanced Chinese Brush Painting (3)
Lec-35, Lab-70, field trips
ADVISE: ART 146A
An intermediate brush painting course that focuses on the development of a body of work using varied classical and contemporary calligraphy and painting 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. UC/CSU

ART 146C. Advanced Chinese Brush Painting (3)
Lec-35, Lab-70, field trips
Prereq: ART 146B
An advanced brush painting course focusing on a self-directed creative process to build upon the skills, methods, and concepts of Intermediate Chinese Brush Painting. Emphasis will be placed on advanced development of a personal language and style in which materials and techniques play an essential role. UC/CSU

ART 146D. Chinese Brush Painting Mastery (3)
Lec-35, Lab-70, field trips
Prereq: ART 146C
This mastery level Chinese brush painting course expands upon ART 146C skills, concepts, and issues to produce a unified body of artwork for transfer to university, art school or professional practice. Emphasis on creating self-directed artwork that connects working approach, style, and content with refinement of critical thinking, presentation, and technical skill. UC/CSU

Fine Arts Printmaking
ART 150A. Beginning Intaglio & Relief Printmaking (3)
Lec-35, Lab-70, field trips
ADVISE: ART 130A
Introduction to the basics of intaglio and relief printmaking with an emphasis on both contemporary and traditional aspects of the medium based on reference to historical, cultural and contemporary issues of the field. Various plate making and printing techniques will be explored as students develop their aesthetic skills and creative ideas. UC/CSU

C-ID ARTS 220

ART 150B. Intermediate Intaglio and Relief Printmaking (3)
Lec-35, Lab-70, field trips
ADVISE: ART 150A
This is an intermediate level intaglio and relief printmaking course which expands upon beginning level intaglio and relief plate making and printing techniques. As the second course of the Fine Arts Printmaking family, it is designed to strengthen problem solving skills while creating multi-layered, personal imagery that involves color. This course is part of the AA-T Studio Arts Major. UC/CSU

ART 150C. Advanced Intaglio and Relief Printmaking (3)
Lec-35, Lab-70, field trips
ADVISE: ART 150B
This advanced intaglio and relief printmaking course expands upon intermediate plate making and printing techniques in support of innovative working styles and unique content that result in the creation of complex prints. The course emphasizes the layering of color and surface information using single and multiple plates. UC/CSU

ART 150D. Printmaking Special Topics (3)
Lec-35, Lab-70, field trips
ADVISE: ART 150C
Expanding upon advanced techniques, working methods, and idea development practices, students produce a unified body of artwork for that can be applied towards transfer to university, art school or professional practice. Emphasis on creating self-directed artwork that connects working approach, style, and content with refinement of critical thinking, presentation, and technical skill. UC/CSU

Monoprinting
ART 151A. Beginning Monoprint (3)
Lec-35, Lab-70, field trips
ADVISE: ART 130A
Monoprinting is a cross over discipline that combines drawing and painting skills with printmaking. Beginning Monoprinting is an introduction to a wide variety of contemporary monoprint techniques. Through lecture, demonstration, studio practices, and critiques, students will develop the skills and concepts necessary for basic work in this art discipline. UC/CSU

ART 151B. Intermediate Monoprinting (3)
Lec-35, Lab-70, field trips
ADVISE: ART 151A
Expanding upon beginning monoprint techniques and the development of multi-process prints, students will be introduced to planning and executing long term thematic and mixed media projects with an emphasis on the development of individual artistic growth. Contemporary issues and approaches are explored through lecture and demonstration. UC/CSU

ART 151C. Advanced Monoprinting (3)
Lec-35, Lab-70, field trips
ADVISE: ART 151B
Advanced monoprinting focuses on the development of a body of interrelated monoprints using materials and techniques learned in
the previous two levels of monoprinting in order to explore personal creativity through experimental means and prepare a portfolio suitable for advanced study, transfer, and/or career opportunities. UC/CSU

**Screen Printing**

**ART 152A. Beginning Screen Printing (3)**
Lec-35, Lab-70, field trips
**ADVISE: ART 125A and ART 130A**
An introduction to screen printing processes through exploration of hand-cut stencils, directly drawn stencils and photographic techniques for limited-edition and one-of-a-kind fine art prints. In the context of contemporary and traditional printmaking approaches, students develop their aesthetic, critical, and creative thinking skills. UC/CSU

*All sections will charge a material fee of $15.00.*

**ART 152B. Intermediate Screen Printing (3)**
Lec-35, Lab-70, field trips
**PREREQ: ART 152A**
Expanding upon the stenciling and photographic techniques introduced in ART 152A, this course covers various stencil creation techniques for exposure to photo-screens and ultimately multiple-color printing using single and multiple screens for limited-edition and one-of-a-kind fine art prints. In the context of contemporary and traditional printmaking approaches, students develop their aesthetic, critical, and creative thinking skills. UC/CSU

*All sections will charge a material fee of $15.00.*

**Mixed Media**

**ART 156. Mixed Media: Works on Paper (3)**
Lec-35, Lab-70, field trips
**ADVISE: ART 125A and 130A.**
Focuses on the contemporary practice and conceptual basis of selecting and combining various media and techniques of drawing, painting, photography, textile, printing, and collage into two and three-dimensional works of art. Contemporary issues and approaches are explored through lecture and demonstration. UC/CSU

*Offered Spring semesters*

**Ceramics**

**ART 160A. Beginning Ceramics (3)**
Lec-35, Lab-70, 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. UC/CSU

**ART 160B. Intermediate Ceramics (3)**
Lec-35, Lab-70, field trips
**ADVISE: ART 160A.**
Continued development of skills used to create ceramic forms using the potter’s wheel, and hand-construction techniques, glaze formulation, glaze application and kiln-firing processes. Lectures on the historical and contemporary uses of clay. Emphasis on technical and conceptual development of ceramic design. UC/CSU

**ART 160C. Advanced Ceramics (3)**
Lec-35, Lab-70, field trips
**ADVISE: 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. UC/CSU

**ART 160D. Ceramics Studio (3)**
Lec-35, Lab-70, field trips
**ADVISE: ART 160C**
Advanced-level class building on the skills, concepts, issues addressed in ART 160C to create a self-directed, unified body of work in preparation for transferring to university, art school, or professional activities. A refinement of analytical skills and technical expertise in the exploration of contemporary art and ceramics issues. UC/CSU

*All sections will charge a material fee of $20.00*

**ART 162A. Ceramic Sculpture I (3)**
Lec-35, Lab-70, field trips
**ADVISE: ART 160A and 162A**
An introduction to the techniques and concepts of making sculpture with ceramic materials. Emphasis on the development of concepts and content in the creation of ceramic sculpture. Plaster mold-making, slip casting, hand building, and wheel throwing as applied to sculpture. UC/CSU

*Offered on occasion*

**ART 162B. Ceramic Sculpture II (3)**
Lec-35, Lab-70, field trips
**ADVISE: ART 160A AND 162A**
An advanced exploration of concepts and techniques in making sculpture with ceramic materials. Conceptualizing and creating in three dimensions. Hand-building, wheeled-throwing, and mold work as applied to ceramic sculpture. Continued emphasis on ceramic sculpture and the development of concepts and content in making art. UC/CSU

*Offered on occasion*

**Sculpture**

**ART 170A. Beginning Sculpture (3)**
Lec-35, Lab-70, field trips
Introduction to the basic elements of three-dimensional form and historical evolution of sculpture. Students will learn basic modeling in clay, additive and reductive plaster processes and beginning woodworking techniques. Emphasis will be placed on building technical skills, expression and artistic growth with a focus on understanding three-dimensional design principals. UC/CSU

**ART 170B. Intermediate Sculpture (3)**
Lec-35, Lab-70, field trips
**ADVISE: ART 170A**
An intermediate level course which expands on techniques and processes of sculpture such as basic metal fabrication, mold-making, stone or woodcarving. Intermediate level topics such as site-specific sculpture or installation will also be explored. Emphasis will be placed on building and strengthening technical skills, individual expression and conceptual growth. UC/CSU

**ART 170C. Advanced Sculpture (3)**
Lec-35, Lab-70, field trips
**ADVISE: ART 170B**
Focuses on advanced techniques, practices and concepts specific to sculpture. Course is designed to cultivate individual conceptual development. Students produce artwork 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. UC/CSU
ART 170D. Sculpture Studio (3)
Lec-35, Lab-70, field trips
Advise: ART 170C
An advanced sculpture course designed to further individual conceptual development; enabling students to be self-directed, produce a body of work, investigate techniques and make aesthetic choices based on individual interests. An understanding of sculpture materials, fabrication techniques, formal relationships, art history, and safety procedures is necessary to enroll. UC/CSU

Metal Arts and Jewelry
ART 180A. Beginning Jewelry/Metal Arts (3)
Lec-35, Lab-70, field trips
An introduction to basic fabrication processes and design approaches, 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-35, Lab-70, field trips
Prereq.: ART 180A
Building on previous experience, intermediate students will explore more advanced jewelry and metal smithing 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-35, Lab-70, 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 student will be highly self motivated and directed, ready to develop their work, concepts, and design capabilities. CSU

ART 180D. Metal Arts Studio (3)
Lec-35, Lab-70, field trips
Prereq.: ART 180C
Capstone course building on the skills, concepts, issues addressed in ART 180C to create a self-directed, unified body of work in preparation for transferring to university, art school, or professional activities. Emphasis on refinement of analytical skills and technical expertise in the exploration of contemporary art and jewelry/metal arts issues. CSU

Lost Wax Casting
ART 181A. Beginning Casting for Metal Arts (3)
Lec-35, Lab-70, field trips
An introduction to basic casting techniques including direct and lost wax methods via the use of the centrifugal and vacuum casting machine, as well as use of the oxy/acetylene torch and electromelt furnace. Emphasis is placed on developing proficiency, thorough knowledge of safe practices, and development of 3-D design skills and personal aesthetic sense. CSU

ART 181B. Intermediate Casting for Metal Arts (3)
Lec-35, Lab-70
Prereq.: ART 181A
This is an intermediate level casting course that incorporates traditional and non-traditional techniques to further develop the student’s casting competency. Emphasis is placed on creative risk taking, proficiency in tool use, thorough knowledge of safe practices, development of higher level casting skills, content of work, and design aesthetic. CSU

ART 181C. Advanced Casting for Metal Arts (3)
Lec-35, Lab-70, field trips
Prereq.: ART 181B
Exploring subjects of interest that can include historic, contemporary, one of a kind, or production casting techniques, students hone working skills and ideation techniques. The course promotes sustainable self-motivation through time management approaches and analysis of working approaches, concept development, and design practices. CSU

Portfolio Study
ART 185. Art Career/Transfer Portfolio Prep (3)
Lec-35, Lab-70, field trips
Prereq.: ART 136A or ART 137 or ART 130B or ART 132A or ART 140A or ART 145A or ART 146A or ART 150A or ART 151A or ART 152A or ART 156 or ART 160A or ART 162A or ART 170A or ART 180A or ART 181A or ART 190 or FASH 25A or FASH 64 or PHOT 51
Intensive survey of professional art practices that are necessary for a career as a visual artist. These practices include marketing, promoting, and exhibiting artwork, staging an exhibition, and preparing a transfer portfolio for a 4-year or graduate art program. CSU
Offered Fall semesters

ART 190. Contemporary Studio Practices (3)
Lec-35, Lab-70, field trips
Prereq.: ART 125A and ART 130A
This course addresses how artists develop images and ideas that incorporate cross-disciplinary approaches and involve community collaborations. It is intended for students who require hands-on experience in conceptual thinking in the context of art making and contemporary studio practices in order to transfer to a 4-year or graduate program. It is also intended for artists who want to use their formal skills to create meaningful, metaphorical work and actively engage their community. UC/CSU
Offered on occasion

Asian American Studies
Office: Batmale 358
Phone Number: (415) 239-3865
Web Site: www.ccsf.edu/asam
Announcement of Curricula
Asian American Studies Certificate
The Certificate of Accomplishment in Asian American Studies is a program that introduces the diverse Asian American experience in the United States. Students will gain a theoretical, aesthetic, and methodological understanding about the complex experience of different groups of Asians in the United States. This certificate is designed for students who wish to pursue additional specialization in Asian American Studies and Ethnic Studies and for professionals in the public, non-profit, and private sector who want to be more effective in their careers by learning more about the diversity of the Asian American community.

Learning Outcomes
Upon completion of this program, students will be able to:

- Compare and analyze the diverse experiences of Asian Pacific Americans in the United States.
• Explain and interpret intersections of race, class, gender, and sexuality affecting different groups of Asian Pacific Americans in the United States.

The minimum time for completion of this certificate is one semester. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Certificate of Accomplishment in Asian American Studies Certificate of Accomplishment
Course .................................................................................................Units
Core Course:
ASAM 20 Asian American Experience Since 1820 ........................... 3.0
ASAM 40 Chinese American Community ........................................ 3.0
ASAM 35 Asian American Women ................................................... 3.0
ASAM 30 Asian American Issues Through Film ............................. 3.0
ASAM 35 Asian American Women ................................................... 3.0
ASAM 42 Southeast Asians in the U.S. ............................................ 3.0
Total: .................................................................................................12.0

Announcement of Courses
Credit, Degree Applicable Courses:
ASAM 6. Asian American Issues Through Literature (3) 
Lec-52.5, 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. UC/CSU
Offered only in Summer semesters

ASAM 8. Filipino American Community (3)
Lec-52.5 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 opportunities, culture, family, community, political and social history. UC/CSU
Offered Fall semesters

ASAM 10. Asian American Popular Culture (3)
Lec-52.5, 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. UC/CSU

ASAM 20. Asian American Experience: 1820 to Present (3)
Lec-52.5, 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. UC/CSU

ASAM 22. Community Issues and Leadership (3)
Lec-52.5, 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. UC/CSU
Offered on occasion

ASAM 27. Asian American Race Relations (3) (3)
Lec-52.5 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. UC/CSU
Offered on occasion

ASAM 30. Asian American Issues Through Film (3)
Lec-52.5 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. UC/CSU

ASAM 35. Asian American Women (3)
Lec-52.5 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. UC/CSU

ASAM 40. The Chinese American Community (3)
Lec-52.5 P/NP available
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. UC/CSU
No knowledge of Chinese required

ASAM 42. Southeast Asians in the U.S. (3)
Lec-52.5 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. UC/CSU
Offered on occasion

ASAM 61. Asian American Community Field Study (2)
Lec-17.5, Work-60 to 75, field trips P/NP available
Repeat: ASAM 61 and 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
Offered on occasion

Electives -- choose 9 units from the following courses:
IDST 40 Contemporary Issues in the
Filipino Community .................................................................3.0
ASAM 6 Asian American Issues through Literature ................3.0
IDST 45 Pacific Islanders in the U.S. .................................3.0
ASAM 8 Filipino American Community .................................3.0
ASAM 10 Asian American Popular Culture .........................3.0
ASAM 22 Community Issues & Leadership .........................3.0
ASAM 27 Asian American Race Relations ............................3.0
ASAM 30 Asian American Issues Through Film ..................3.0
ASAM 35 Asian American Women ...........................................3.0
ASAM 40 Chinese American Community ..............................3.0
ASAM 42 Southeast Asians in the U.S. .................................3.0
Total: .................................................................................................12.0
ASAM 63. Asian American Community Field Study (4)
Lec-17.5, work-180 to 225 P/NP available
Repeat: ASAM 61 and 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
Offered on occasion

ASAM 65. Individual Study in Asian American Studies (3)
Lab–157.5 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
Offered on occasion

IDST 40. Contemporary Issues in the Filipino Community (3)
Lec–52.5, 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. UC/CSU
Offered on occasion

Asian Studies
Office: Art 304
Phone Number: (415) 452-5304
Web Site: www.ccsf.edu/asianst

Announcement of Curricula

Asian Studies Certificate Certificate

This certificate introduces students to the diversities and commonalities of Asian cultures and society, focusing primarily on arts, religion, languages, popular culture and history of the regions of East Asia, South East Asia, and The Middle East. The program integrates area studies and ethnic studies, using interdisciplinary methodologies. It appeals to a broad range of students including international students, students interested in tourism or global business, artists, and students wanting to know more about their cultures of origin. The program serves primarily students who are transferring to a four-year university, but additionally offers professional development for employers, as well as community-based organizations serving global audiences.

Learning Outcomes

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

- Identify specific cultural areas of Asian civilizations from pre-colonization to twenty-first century and evaluate their contributions to the development of distinct artistic traditions.
- Interpret Asian religious and ethnic formations in relation to socio-political trends.
- Identify the cultural areas of modern Asia and their contributions to modern and postmodern aesthetics.
- Compare the unique features of Asian languages, writing forms, and arts embedded in culture.

The Asian Studies Certificate of Accomplishment is open to any student enrolled at City College of San Francisco.

The minimum time for completion of this certificate is two semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Asian Studies Certificate

Course .................................................. Units
Choose one of the following Arts courses:
ASIA 11 East Asian Calligraphy: An Introduction . . . . . . . . . 3.0
ART 104 Asian Art History .............................. 3.0
Choose two of the following Humanities courses:
ASIA 15 Asian Societies and Cultures through Film . . . 3.0
ASIA 30 Manga and Anime .............................. 3.0
IDST 27A Asian Humanities: Classical Period .............. 3.0
IDST 27B Asian Humanities: Contemporary .............. 3.0
Choose one of the following Social and Behavioral Science courses:
IDST 30 Demystifying the Middle East .................. 3.0
IDST 31 Women in the Middle East ..................... 3.0
Choose one of the following elective courses, if not used above:
ART 104 Asian Art History .............................. 3.0
ASIA 11 East Asian Calligraphy: An Introduction . . . . . . . . 3.0
ASIA 15 Asian Societies and Cultures through Film . . . . . . . . 3.0
ASIA 30 Manga and Anime .............................. 3.0
CHIN 33 Chinese Culture for Heritage Learners ........... 3.0
CHIN 38 Translation Foundation in Chinese ................ 3.0
IDST 27A Asian Humanities: Classical Period .............. 3.0
IDST 27B Asian Humanities: Contemporary .............. 3.0
IDST 30 Demystifying the Middle East .................. 3.0
IDST 31 Women in the Middle East ..................... 3.0
JAPA 39 Japanese Culture and Civilization ............... 3.0
MUS 24 Music of East Asia ............................ 3.0
Total: .................................................. 15.0

Announcement of Courses

Credit, Degree Applicable Courses:
ASIA 11. East Asian Calligraphy: An Introduction (3)
Lec–52.5, field trips P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or PLACEMENT in ESL 150 or ESL 186 or ENGL 88 or ENGL 95 or ENGL 93
This introductory course examines historical development and cultural aspects of East Asian calligraphy. Course emphasizes Chinese Hanzi characters, but also includes the Japanese Kana syllabary, and the Korean Hangul alphabet. Includes analysis of their relation with East Asian philosophy, religion, literature, and arts. UC/CSU

ASIA 15. Asian Societies and Cultures through Film (3)
Lec–52.5 P/NP available
Advise: ESL 150 or ENGL 93 or ENGL 88A or PLACEMENT in ESL 160 or ENGL 96 or ENGL 88B
This course explores religious and cultural traditions and socio-cultural issues in East Asia, India, and Southeast Asia. The course examines ethnic diversity, cultural differences, family structures, marriage systems, colonization, and social inequality as well as their socio-political backgrounds and historical roots through classic and contemporary Asian and Asian-themed film. UC/CSU
ASIA 30. Manga and Anime (3)  
Lec-52.5  
ADVISE: ENGL 93 OR ENGL 95 OR ENGL 88 OR ENGL 88A OR ESL 160 OR PLACEMENT IN ENGL 96 OR ENGL 88B  
An overview of the history and styles of Japanese comics (manga) and animation (anime), and the role they play in Japanese and American cultures both as artistic forms of expression and as representations of social and political issues. UC/CSU  
C-ID ARTH 130

ART 104. Asian Art History (3)  
Lec-52.5, 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. UC/CSU

ART 146A. Beginning Chinese Brush Painting (3)  
Lec-35, Lab-70, field trips  
Using the traditional materials and techniques of Chinese calligraphy and painting, students will learn about the design and philosophy of flower paintings through demonstrations, lectures and video. Based on a series of Chinese masterpieces, students will develop compositional, technical and creative skills. UC/CSU

ART 146B. Advanced Chinese Brush Painting (3)  
Lec-35, Lab-70, field trips  
ADVISE: ART 146A  
An intermediate brush painting course that focuses on the development of a body of work using varied classical and contemporary calligraphy and painting 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. UC/CSU

ART 146C. Advanced Chinese Brush Painting (3)  
Lec-35, Lab-70, field trips  
PREREQ: ART 146B  
An advanced brush painting course focusing on a self-directed creative process to build upon the skills, methods, and concepts of Intermediate Chinese Brush Painting. Emphasis will be placed on advanced development of a personal language and style in which materials and techniques play an essential role. UC/CSU

ART 146D. Chinese Brush Painting Mastery (3)  
Lec-35, Lab-70, field trips  
PREREQ: ART 146C  
This mastery level Chinese brush painting course expands upon ART 146C skills, concepts, and issues to produce a unified body of artwork for transfer to university, art school or professional practice. Emphasis on creating self-directed artwork that connects working approach, style, and content with refinement of critical thinking, presentation, and technical skill. UC/CSU

BCST 104. Race and Media (3)  
Lec-52.5  
ADVISE: ENGL 93 OR ENGL 95 OR ENGL 88 OR ENGL 88A OR PLACEMENT IN ENGL 96 OR ENGL 88B  
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, Internet and emerging media. Socio-historical-legal analysis of ways in which affected groups have responded to these images. UC/CSU

Chinese Language Courses: See Chinese in this section of the catalog.

CHIN 39. Major Achievements of Chinese Thought and Culture (3)  
Lec-52.5  
ADVISE: ENGL 96 OR ENGL 88 OR ENGL 88B OR PLACEMENT IN ENGL 1A  
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. UC/CSU  
NO KNOWLEDGE OF CHINESE REQUIRED. NOT RECOMMENDED FOR STUDENTS WHO ARE ENROLLED IN OR WHO HAVE COMPLETED CHIN 49. OFFERED ON OCCASION

HIST 35A. History of China (3)  
Lec-52.5  
P/NP available  
HIST 35 A is not prerequisite to 35B. HIST 35A: Chinese history form ancient times to the Qiang Dynasty, approximately 1900. HIST 35B: Emphasis on Chinese history during the twentieth century, concentrating on the rise of nationalism and Communist rule on the Mainland UC/CSU  
HIST 35A COVERS FROM ANCIENT TIMES TO APPROXIMATELY 1900.

HIST 35B. History of China (3)  
Lec-52.5  
P/NP available  
Intellectual, social, political, and economic development of China from 1900 to the present. Emphasis is on twentieth-century China, concentrating on the rise of nationalism and Communist rule on the Mainland. UC/CSU  
HIST 35A NOT PREREQUISITE TO 35B. HIST 35B COVERS FROM 1900 TO THE PRESENT. OFFERED ON OCCASION

HIST 37. History of the Philippines (3)  
Lec-52.5  
P/NP available  
This course covers the historical development of the Philippines from the pre-colonial period to present day. The evolution of national culture, political and social institutions, and foreign relations will also be examined. UC/CSU

HLTH 50. Tai Chi for Health (3)  
Lec-44, Lab-26, 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. UC/CSU  
OFFERED ON OCCASION

IDST 14. American Cultures in Literature and Film (3)  
Lec-52.5, field trips  
P/NP available  
ADVISE: ENGL 96 OR PLACEMENT IN ENGL 1A  
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. UC/CSU
IDST 27A. Asian Humanities (3)
Lec-52.5, field trips  P/NP available
ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
Survey of Asian civilization from the classical period to 1800 C.E., especially Arabic-Islamic, Hindu, Chinese and Japanese cultures. Emphasis on literature, philosophy, religion, and the arts. Provides an interdisciplinary and cross-cultural approach to the differences and underlying unity of Asian cultures. UC/CSU
IDST 27A Not prerequisite to 27B No knowledge of foreign languages required
Offered on occasion

IDST 27B. Asian Humanities (3)
Lec-52.5, field trips  P/NP available
ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
Survey of Asian cultures of modern to contemporary period, especially Arabic-Islamic, Indian, Chinese and Japanese cultures. Emphasis on literature, philosophy, religion, and the arts. Provides an interdisciplinary and cross-cultural approach to the differences and underlying unity of Asian cultures. UC/CSU
IDST 27A Not prerequisite to 27B No knowledge of foreign languages required
Offered on occasion

IDST 29. Islam: Identity & Culture (3)
Lec-52.5, field trips  P/NP available
ADVISE: ESL 150 or ENGL 86 or ENGL 91 or placement in ESL 160 or ENGL 88
An interdisciplinary survey of Muslim identity and 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. UC/CSU
Offered Fall semesters

IDST 30. Demystifying the Middle East (3)
Lec-52.5  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. UC/CSU
Offered Fall semesters

IDST 31. Women in the Middle East (3)
Lec-52.5, field trips  P/NP available
An interdisciplinary survey of women in the Middle East focusing on diversity, colonization, nationalism, religion, gender, sexuality, family, law, literature, music, art, and film. UC/CSU
Offered Spring semesters

IDST 45. Pacific Islanders in the United States (3)
Lec-52.5, field trips  P/NP available
This course examines Pacific Islander migrations to the United States mainland including the history, culture, and development of Hawai’i and U.S. Pacific territories. It explores indigenous cultures and immigration experiences of Pacific Islanders from Guam, Palau, Marshall Islands, Fiji, Vanuatu, Tuvalu, Samoa, Tonga, Tahiti, New Zealand, Australia, and the Philippines. UC/CSU
IDST 46. Fa’a Pasefika: Interdisciplinary Cultural Expressions of Oceania (3)
Lec-52.5, field trips  P/NP available
ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A survey of traditional and contemporary art across Oceania (Pacific Islands). Emphasis on literature, dance, music, visual arts, film, and museums. Using an interdisciplinary and cross-cultural approach, the course explores the underlying unity of Pacific cultures, including their engagement with both western and non-western societies, colonization, and diasporic communities. UC/CSU

IDST 80A. Diversity and Social Justice: Racism (.5)
Lec-9  P/NP available
ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of race-based oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about racism, increasing awareness of one’s own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

IDST 80C. Diversity and Social Justice: Sexism (.5)
Lec-9  P/NP available
A consciousness raising analysis and evaluation of sexism on individual, institutional, and cultural levels in the United States. Expanding one’s knowledge about sexism, increasing personal awareness of one’s own sexism and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

IDST 80D. Diversity and Social Justice: Heterosexism (.5)
Lec-9  P/NP available
ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of homophobia and heterosexism (discrimination based on perceived or real sexual orientation and identity) oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about heterosexism, increasing awareness of one’s own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU
IDST 80E. Diversity and Social Justice: Ableism (.5)
Lec-9 P/NP available
A consciousness raising analysis and evaluation of ableism (disability-based oppression) on individual, institutional, and cultural levels in the U.S. Expanding knowledge about ableism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU
Offered Fall semesters

IDST 80F. Diversity and Social Justice: Class and Classism (.5)
Lec-9 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A consciousness-raising analysis and evaluation of class oppression and classism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about class, class oppression and classism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU
Offered Spring semesters

IDST 80G. Diversity and Social Justice: Transphobia (.5)
Lec-9 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A consciousness-raising analysis and evaluation of transphobia and gender oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about transphobia and gender diversity, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU
Offered Fall semesters

IDST 81B. Diversity and Social Justice: Anti-Semitism/Anti-Arabism (1)
Lec-18 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of anti-Semitism and anti-Arabism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about anti-Semitism and anti-Arabism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU
Offered Spring semesters

Japanese Language Courses: See Japanese in this section of the catalog.

JAPA 39. Japanese Culture and Civilization (3)
Lec-52.5
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL IA
A consideration of the major achievements of Japanese culture as reflected in language, literature, art, religion and daily life. UC/CSU
No knowledge of Japanese required.
Offered on occasion

Astronomy
Diversity and Social Justice: Ableism (1)
Lectures-52.5 P/NP available
Advise: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
This course examines the histories, cultures, identities, communities and unique contributions of lesbian/gay/bisexual and transgender people of color in the U.S. (Asian, Black, Latino, Middle Eastern and Native/Indigenous). UC/CSU
Offered on occasion

MUS 24. Music of East Asia (3)
Lectures-52.5, 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. UC/CSU

PSYC 23. Psychology of Race and Ethnic Relations (3)
Lectures-52.5 P/NP available
An exploration of the experiences, theories, and research concerning issues of race and ethnicity as they relate to individual and group behavior, emotion, and thinking, including attitudes, identity development, racism, privilege, coping strategies, and intersectional experiences. Psychohistorical analysis of the experiences of African Americans, Asian Americans, Latina/o Americans, and Native Americans. UC/CSU

Astronomy Courses
Credit, Degree Applicable Courses
ASTR 1. Cosmic Evolution (3)
Lectures-52.5
Introductory astronomy course with an emphasis on the development of the cosmos and its components. The origin, evolution, and final state of our physical universe. Properties, formation, and evolution 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. UC/CSU

ASTR 4. Life in the Universe (3)
Lectures-52.5
The origin and evolution of life on Earth and the possibility of life elsewhere in the Universe. Applying the disciplines of astronomy, biology, and planetary science, students study the chemical and biological basis for life, limits of life on Earth, and techniques used to search for life beyond Earth. UC/CSU

ASTR 16. Observational Astronomy (1)
Labs-52.5
Prerequisite: Completion of or concurrent enrollment in ASTR 1 or 14 or 17 or 18 or 19
Through direct investigation, students will examine the motion and appearance of the night sky, characterize and classify astronomical objects such as planets, moons, stars, nebulae, and galaxies, and

Announcement of Courses
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, it is recommended that students complete the following advisories:

1. ENGL 91 or 86 or ESL 150, or placement in ENGL 88 or ESL 160; and
2. MATH E1 or E3 or 30, or placement in MATH 40

Recommended High School Preparation. Preparation is recommended in auto shop, electricity, machine shop, mechanical drawing, and welding.

Courses Required for the Major in Automotive Mechanics

Course................................................................. Units
First Semester:
AUTO 50 Intro to Automotive Mechanics ...................... 3.0
AUTO 51 Automotive Electrical ................................. 8.0
AUTO 52 Brakes, Suspension, Alignment ...................... 8.0

Learning Outcomes

Upon completion of this program, 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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.
Choose one of the following elective courses:
AUTO 53 Automatic & Manual Transmission ........ 8.0
AUTO 54 Engine Repair .................................. 8.0
AUTO 55 Engine Performance and Drivability ........ 8.0
Total: ..................................................... 27.0

**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 program, 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. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Automotive Engine Performance and Drivability**

Course .................................................. Units  
Required courses:
AUTO 50 Intro to Automotive Mechanics .......... 3.0
AUTO 51 Automotive Electrical ..................... 8.0
AUTO 55 Engine Performance and Drivability ........ 8.0
Total: ..................................................... 19.0

**Automotive Hybrid and EV Technology Certificate**

This certificate is for students seeking training in hybrid and electric vehicle maintenance. 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 hybrid and electric vehicles, system operation, inspection, diagnosis and repair (AUTO 56). Prepares the student for entry-level employment in the maintenance and repair of existing and emerging technology hybrid and electric vehicles.

**Learning Outcomes**

Upon completion of this program, students will be able to:
- Describe the function of vehicle electrical, hybrid, and battery system, systems and components.
- Identify, troubleshoot, analyze, diagnose, and repair existing and emerging hybrid and electric vehicles.
- Compare and contrast innovative fuel saving vehicle 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. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Automotive Hybrid and EV Technology**

Course .................................................. Units  
Required courses:
AUTO 50 Intro to Automotive Mechanics .......... 3.0
AUTO 51 Automotive Electrical ..................... 8.0
AUTO 56 Introduction to Hybrid and EV Auto Maintenance and Repair ......................... 4.0
Total: ..................................................... 15.0

**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 program, 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. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Brake and Suspension Specialist**

Course .................................................. Units  
Required courses:
AUTO 50 Intro to Automotive Mechanics .......... 3.0
AUTO 52 Brakes, Suspension, Alignment .......... 8.0
Total: ..................................................... 11.0
Car 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 (AUTO 54).

**Learning Outcomes**

Upon completion of this program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**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>3.0</td>
</tr>
<tr>
<td>AUTO 54 Engine Repair</td>
<td>8.0</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>11.0</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 program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Transmission Specialist**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AUTO 50 Intro to Automotive Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 53 Automatic &amp; Manual Transmission</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>11.0</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 program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in General Automotive Technician**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AUTO 50 Intro to Automotive Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>AUTO 51 Automotive Electrical</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>11.0</strong></td>
</tr>
</tbody>
</table>

Utility Technician/Helper Certificate

This certificate is for students seeking entry level employment in the automotive industry. This certificate includes instruction in basic automotive systems, automotive body and paint maintenance and detailing.

**Learning Outcomes**

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

- Evaluate overall vehicle condition.
- Perform basic automotive repairs.

Students may apply for certificate having completed course work or equivalent standards within the past 5 years.
The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Utility Technician/Helper**

Course ................................................. Units
Required courses:
AUTO 49 Auto Body Maintenance and Detailing ........... 2.0
AUTO 50 Intro to Automotive Mechanics .................. 3.0
Total: ..................................................... 5.0

**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 plastics, glass, and fiberglass (AUTO 206)

**Learning Outcomes**

Upon completion of this program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Auto Body Damage Analysis and Estimating**

Course .................................................. Units
Required courses:
AUTO 50 Intro to Automotive Mechanics ................. 3.0
AUTO 200 Auto Body Dent and Damage Repair ............ 2.0
AUTO 204 Body/Frame Straightening & Repair ............. 2.0
AUTO 206 Plastic Repair & Refinishing ..................... 2.0
Total: ..................................................... 9.0

**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), and the understanding and practice of the repair of plastics and composite materials (AUTO 206).

**Learning Outcomes**

Upon completion of this program, 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Auto Body Painting and Refinishing**

Course .................................................. Units
Required courses:
AUTO 200 Auto Body Dent and Damage Repair ............ 2.0
AUTO 203 Painting and Refinishing ........................ 2.0
AUTO 206 Plastic Repair & Refinishing ..................... 2.0
Total: ..................................................... 6.0

**Auto Body Structural Analysis and Damage Repair Certificate**

This certificate is for learners achieving advanced training in auto body dent and damage repair, welded panel replacement and repair, auto body frame straightening and repair, and auto body welding in preparation for ASE (Automotive Service Excellence) certification test 84. This certificate includes instruction in the basics of dent and damage repair (AUTO 200), the understanding and skills of welded panel replacement and repair, (AUTO 202), the understanding and practice of body frame straightening and repair, (AUTO 204), and the theory and practice of auto body welding (AUTO 205).
Learning Outcomes

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

- Analyze minor body and fender damage and the sequential procedures involved in proper metal repair.
- Differentiate and demonstrate the various techniques of cutting, fastening, and joining of metals and metal parts related to vehicle body and frame structures.
- 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 welding technology in the installation of welded panels.
- Calculate repair costs and estimates.
- Describe and demonstrate methods used to remove and replace structural parts.

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. The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

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 Auto Body Dent and Damage Repair</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 202 Welded panel repair and replacement</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 204 Body/Frame Straightening &amp; Repair</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 205 Auto Body Welding</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total: ........................................... 8.0

Auto Body 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 program, 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.
- Perform basic tune-up and service operations and interpret maintenance schedules.
- Evaluate, service, and troubleshoot cooling, lubrication, and fuel systems.
- Diagnose and repair problems with wheels, axles, frames, suspensions, ignition and electrical systems, engine problems, including disassembly and reassembly strategies.
- Execute customization skills incorporating metal fabrication and or custom painting.
- Practice safe shop and personal safety procedures.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Certificate of Accomplishment in Auto Body Non-Structural Analysis and Damage Repair

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 200 Auto Body Dent and Damage Repair</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 201 Bolted Panel Replacement</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 205 Auto Body Welding</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 206 Plastic Repair &amp; Refinishing</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total: ........................................... 8.0

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 program, 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Auto Body Non-Structural Analysis and Damage Repair

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTO 90 Introduction to Motorcycle Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>MOTO 91 Motorcycle General Service</td>
<td>4.0</td>
</tr>
<tr>
<td>MOTO 92 Tune-up, Electrical and Performance</td>
<td>4.0</td>
</tr>
</tbody>
</table>
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, 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 program, 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.

Courses Required for the Certificate of Accomplishment in Motorcycle Engine and Power Train Repair

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTO 90 Introduction to Motorcycle Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>MOTO 93 Engine &amp; Power Train Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>MOTO 63 Auto-Moto Custom Painting</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>12.0</td>
</tr>
</tbody>
</table>

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 program, 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.

Courses Required for the Certificate of Accomplishment in Motorcycle General Service

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTO 90 Introduction to Motorcycle Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>MOTO 91 Motorcycle General Service</td>
<td>4.0</td>
</tr>
<tr>
<td>MOTO 63 Auto-Moto Custom Painting</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>12.0</td>
</tr>
</tbody>
</table>

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 program, 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 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.

Courses Required for the Certificate of Accomplishment in Motorcycle Tune-up, Electrical, and Performance Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTO 90 Introduction to Motorcycle Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>MOTO 93 Engine &amp; Power Train Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>MOTO 63 Auto-Moto Custom Painting</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>12.0</td>
</tr>
</tbody>
</table>
The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

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>Required courses:</td>
<td></td>
</tr>
<tr>
<td>MOTO 90 Introduction to Motorcycle Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>MOTO 92 Tune-up, Electrical and Performance</td>
<td>4.0</td>
</tr>
<tr>
<td>MOTO 63 Auto-Moto Custom Painting</td>
<td>4.0</td>
</tr>
<tr>
<td>Total:</td>
<td>12.0</td>
</tr>
</tbody>
</table>

Construction

Carpentry Certificate

This certificate provides training in the nomenclature, methods, and materials necessary to build a complex wood framed building, including framing of floors, walls, ceilings, roofs, and stairways. This certificate includes required instruction in appropriate safety practices and procedures, basic blueprint reading, construction principles, procedures, tools, and equipment, basic carpentry nomenclature, and hands-on tool usage and framing skills. Additional elective coursework is required in one or more of the following areas: Advanced framing, concrete, woodworking, finish carpentry, contractor license preparation, and drywall skills. Students completing this certificate program will be qualified for employment in companies both union and non-union where carpentry or woodworking skills are needed.

Learning Outcomes

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

- Identify basic OSHA (Occupational Safety and Health Administration) requirements and employ proper safety actions.
- Use appropriate tools to plan construction projects accurately.
- Describe and evaluate different framing systems and the materials required for building plan specifications.
- Apply construction skills to a variety of rough and finish construction projects.
- Analyze and evaluate floor plans and their interconnected systems.

Students must pass each class with a grade of “C” or higher.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Carpentry

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CNST 69 Construction Safety</td>
<td>1.0</td>
</tr>
<tr>
<td>CNST 100 Introduction to Construction Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 111 Carpentry Rough Framing</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 107 Blueprint Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose 4 units from the following elective courses:</td>
<td></td>
</tr>
<tr>
<td>CNST 113 Finish Carpentry</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 116 Furniture Making &amp; Woodworking</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 118A Adv. Project Furniture Making I</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>14.0</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 program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Residential Plumbing

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CNST 106 Fundamentals of the Uniform Plumbing Code</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 107 Blueprint Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>13.0</td>
</tr>
</tbody>
</table>

Residential Wiring Certificate

This certificate program prepares students for employment where training in the rules, methods, and materials are necessary to install residential electrical wiring systems.
Learning Outcomes
Upon completion of this program, 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, lay out, 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.

The minimum time for completion of this certificate is 2 semesters.

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>1.0</td>
</tr>
<tr>
<td>CNST 100 Introduction to Construction Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 107 Blueprint Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 109 Residential Wiring</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 128 Introduction to the National Electrical Code</td>
<td>2.0</td>
</tr>
<tr>
<td>CNST 129 Intermediate National Electrical Code</td>
<td>2.0</td>
</tr>
<tr>
<td>CNST 131 Advanced National Electrical Codes</td>
<td>2.0</td>
</tr>
<tr>
<td>Total:</td>
<td>16.0</td>
</tr>
</tbody>
</table>

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.

The minimum time for completion of this certificate is 2 semesters.

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>1.0</td>
</tr>
<tr>
<td>CNST 107 Blueprint Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 103 Residential Plumbing</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 106 Fundamentals of the Uniform Plumbing Code</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 104 Solar Hot Water Installation</td>
<td>3.5</td>
</tr>
<tr>
<td>Total:</td>
<td>13.5</td>
</tr>
</tbody>
</table>

Recommended additional coursework:
CNST 106 Fundamentals of the Uniform Plumbing Code

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. Students successfully completing this certificate will be qualified for entry level custodial and building maintenance employment.

Learning Outcomes
Upon completion of this program, students will be able to:

- Apply custodial terminology, directions, units of measurement and instructions to complete custodial tasks.
- 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.
- Interpret and explain workplace instructions

Students must pass the courses to achieve a certificate.

The minimum time for completion of this certificate is 1 semester.

Courses Required for the Noncredit Certificate in Custodial Training

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 4816 ESL for Janitors</td>
<td>85.0</td>
</tr>
<tr>
<td>TRST 4600 Vocational Foundation Skills – Reading and Writing</td>
<td>30.0-90.0</td>
</tr>
<tr>
<td>TICU 9550 Custodial Training</td>
<td>108.0</td>
</tr>
<tr>
<td>Total:</td>
<td>138.0 – 198.0</td>
</tr>
</tbody>
</table>
Announcement of Courses

### Automotive Technology

**Credit, Degree Applicable Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 49</td>
<td>Auto Body Maintenance and Detailing</td>
<td>2</td>
<td>Lec-17.5, Lab-52.5, field trips</td>
</tr>
<tr>
<td>AUTO 50</td>
<td>Intro to Automotive Mechanics</td>
<td>3</td>
<td>Lec-35, Lab-70, ADVISE: ESL 160</td>
</tr>
<tr>
<td>AUTO 51</td>
<td>Automotive Electrical</td>
<td>8</td>
<td>Lec-105, Lab-105, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 52</td>
<td>Brakes, Suspension, Alignment</td>
<td>8</td>
<td>Lec-105, Lab-105, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 53</td>
<td>Automatic and Manual Transmissions</td>
<td>8</td>
<td>Lec-105, Lab-105, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 54</td>
<td>Engine Repair</td>
<td>8</td>
<td>Lec-105, Lab-105, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 55</td>
<td>Engine Performance/Drivability</td>
<td>8</td>
<td>Lec-105, Lab-105, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 56</td>
<td>Introduction to Hybrid and EV Auto Maintenance and Repair</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, P/NP available</td>
</tr>
<tr>
<td>AUTO 57</td>
<td>Independent Study (Auto Technology)</td>
<td>1-3</td>
<td>Lec-52.5 to 157.5, Lab-52.5, Prereq: AUTO 50 or DEMONSTRATION OF EXIT SKILLS</td>
</tr>
<tr>
<td>AUTO 58</td>
<td>Automotive Heating and Air-Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 59</td>
<td>Automotive Braking Systems</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 60</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 61</td>
<td>Automotive Electrical</td>
<td>8</td>
<td>Lec-105, Lab-105, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 62</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 63</td>
<td>Automatic Braking Systems</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 64</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 65</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 66</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 67</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 68</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 69</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 70</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 71</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
</tbody>
</table>

**Offered Fall Semesters**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 55</td>
<td>Engine Performance/Drivability</td>
<td>8</td>
<td>Lec-105, Lab-105, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 56</td>
<td>Introduction to Hybrid and EV Auto Maintenance and Repair</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, P/NP available</td>
</tr>
<tr>
<td>AUTO 57</td>
<td>Independent Study (Auto Technology)</td>
<td>1-3</td>
<td>Lec-52.5 to 157.5, Lab-52.5, Prereq: AUTO 50 or DEMONSTRATION OF EXIT SKILLS</td>
</tr>
<tr>
<td>AUTO 58</td>
<td>Automotive Heating and Air Conditioning</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 59</td>
<td>Automotive Braking Systems</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
</tbody>
</table>

**Offered on Occasion**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO 55</td>
<td>Engine Performance/Drivability</td>
<td>8</td>
<td>Lec-105, Lab-105, field trips, Prereq: AUTO 50 or pass CHALLENGE TEST</td>
</tr>
<tr>
<td>AUTO 56</td>
<td>Introduction to Hybrid and EV Auto Maintenance and Repair</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5, field trips, P/NP available</td>
</tr>
</tbody>
</table>

**Repeat: max. 6 units**

Paid work experience in the automotive industry under the supervision of a qualified professional. Positions can include dealership technician, independent shop technician and automotive shop office work. Student will attend an initial training and apply to job opportunity with no guarantees of being hired. CSU

**Offered Spring Semesters**

### Automotive/Motorcycle, Construction, and Building Maintenance

- **Enrollment in Automotive Technology:** Enroll in at least one course per semester.
- **Associate Degree Program:** Requires 90 units including ENGL 95 or MATH 40.
- **Certificate Programs:** Includes Automotive Heating and Air Conditioning, Automotive Braking Systems, and Automotive Electrical.
- **Enrollment Requirements:** Requires a minimum GPA of 2.0 and completion of all prerequisites.
- **Office Hours:** Available Monday to Friday, 8:00 AM to 5:00 PM.

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- **Program Overview:** Focuses on hands-on experience, industry insights, and technical skills.
- **Career Preparation:** Prepares for professional roles in automotive, construction, and building maintenance.
- **Student Services:** Includes advising, counseling, and career planning.
- **Transfer Opportunities:** Transferable to four-year institutions.

---

- **Course Information:** Includes course codes, titles, units, prerequisites, and availability.
- **Prerequisites:** Covered in course descriptions and program requirements.
- **Course Descriptions:** Detailed descriptions of course content, objectives, and evaluation methods.
- **Enrollment Guidelines:** Advising, placement, and credit policies.

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- **Academic Standards:** Adherence to academic policies and guidelines.
- **Technical Skills:** Development of hands-on skills and technical proficiency.
- **Industry Connections:** Partnerships with automotive and construction industries.
- **Research Opportunities:** Access to research projects and publications.

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- **Faculty:** Experienced and industry-experienced instructors.
- **Learning Environment:** Supportive and collaborative learning environment.
- **Student Success:** High graduation rates and successful career placement.

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- **Further Information:** Available through the program offices or online resources.
- **Contact Information:** For more details, contact the Automotive Technology Program Office.
AUTO 115. Service Consultant (3)
Lec-52.5, field trips P/NP available
Prereq: AUTO 50 or demonstration of exit skills
Techniques and practices for creating automotive service orders. Training in industry best practices and legal requirements of creating automotive service orders. Training for career as automotive service writer. Preparation for ASE C1 test. CSU Offered Spring semesters

AUTO 200. Auto Body Dent and Damage Repair (2)
Lec-17.5, Lab-52.5 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 Offered on occasion

AUTO 201. Bolted Panel Replacement (2)
Lec-17.5, Lab-52.5 P/NP available
Advise: 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 Offered Fall semesters

AUTO 202. Welded panel repair and replacement (2)
Lec-17.5, Lab-52.5 P/NP available
Advise: AUTO 50
This course involves the various methods and techniques of repairing or 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 Offered Fall semesters

AUTO 203. Introduction to Auto Painting and Refinishing (2)
Lec-17.5, Lab-52.5 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 integrating classroom gained knowledge with shop practice. This course is required for the Auto body Painting and Refinishing certificate. CSU Offered on occasion

AUTO 204. Body/Frame Straightening & Repair (2)
Lec-17.5, Lab-52.5 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 principles. Frame straightening machines, gauges, and tools as well as appropriate safety will be covered. CSU Offered Spring semesters

AUTO 205. Auto Body Welding (2)
Lec-17.5, Lab-52.5 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 arc cutting of thin auto body material. CSU Offered Spring semesters

AUTO 206. Plastic Repair & Refinishing (2)
Lec-17.5, Lab-52.5 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 refinished using a variety of different methods. CSU Offered on occasion

Noncredit Courses:
AUTO 9513. Basic Auto Maintenance (105 hrs)
This is a preparation course for beginning and limited English speaking automotive students, combining lecture and hands-on shop work for most major automotive systems. Introduction to theory, maintenance, troubleshooting, repair, language development skills, and maintenance terminology. Formerly TIAU 9513

Motorcycle Technology

Credit, Degree Applicable Courses:
MOTO 61. Custom Metal Fabrication (3)
Lec-35, Lab-70 P/NP available
Advise: AUTO 205
Intermediate course to develop the skills necessary to cut, shape, weld, and fabricate various types of metal products from raw materials. Usage of MIG (Metal Inert Gas), TIG (Tungsten Inert Gas), gas welding, English Wheel, Power Hammer, and various other metal shaping equipment and techniques will be presented. CSU Offered on occasion

MOTO 63. Auto-Moto Custom Painting (4)
Lec-52.5, Lab-52.5, field trips
Advise: AUTO 203
This creative spray painting and custom graphics course introduces students to a process of transforming imagination into a unique vehicle appearance. This course is part of the motorcycle certificate series and a more advanced auto body painting and refinishing course. CSU

MOTO 90. Introduction to Motorcycle Technology (4)
Lec-52.5, Lab-52.5 P/NP available
This course is the prerequisite and entry level course to the motorcycle technician series. Students will be shown an overview of the history and culture of motorcycles, industry vocabulary and language, safety, tools, theory of operation and the basic use of hand tools in shop-related projects. The “soft” skills of customer relations are taught next to the “hard” skills of hands-on technical training. Students are introduced to electronic diagnostic equipment. CSU

MOTO 91. Motorcycle General Service (4)
Lec-52.5, Lab-52.5 P/NP available
Prereq.: MOTO 90
This course covers the principles, theory of operation, design and functions of motorcycle, fuel, lubrication, frame, suspension, brakes and cooling systems including skills necessary for inspection, disassembly, cleaning, measuring and rebuilding the components and perform preventive maintenance, troubleshooting discrepancies, repairing system components and selecting after-market parts. CSU Offered Spring semesters
MOTO 92. Tune-up, Electrical and Performance (4)
Lec-52.5, Lab-52.5 P/NP available
Prereq.: MOTO 90
This course builds on the basic maintenance learned in Moto 90 by adding motorcycle tune-up, troubleshooting, and performance tuning on a dynamometer; electrical principles and components; and generation, regulation, distribution, control, switching and testing of electrical systems. The class covers many aspects of scheduled maintenance, and also troubleshooting and repair problems associated with electronic ignition, fuel management, and on-board computer systems. CSU
Offered Spring semesters

MOTO 93. Engine & Power Train Repair (4)
Lec-52.5, Lab-52.5 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
Offered Fall semesters

Construction

Credit, Degree Applicable Courses:

CNST 69. Construction Safety (1)
Lec-17.5
A study of Occupational Safety and Health Administration requirements for the construction industry, leading to an ability to identify safety hazards and prevent accidents. It covers safety issues as they apply to general construction. Also, the subject matter is tailored to specific occupations/trades and to safety issues in our construction courses. Students who successfully complete the course with a "B" or better have the option to apply to the state for a lifetime OSHA 10 hour Construction Safety Certificate. CSU
Upon successful completion of this course, "C" or better, students will also have the options to obtain an OSHA 10 card for a small filing fee.

CNST 100. Introduction to Construction Applications (3)
Lec-35, Lab-70, field trips P/NP available
Advise: 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. Hands-on use of tools and materials to complete group projects. CSU

CNST 101A. Photovoltaic Theory & Design (3)
Lec-52.5, field trips P/NP available
Advise: CNST 100 or 1000 or 109 or 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 (1.5)
Lec-17.5, Lab-35, field trips P/NP available
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-35, Lab-70 P/NP available
Advise: CNST 100 or CNST 69 or previous OSHA Certification
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
Offered on occasion

CNST 103. Residential Plumbing (3)
Lec-35, Lab-70, field trips P/NP available
Advise: CNST 100 or CNST 69
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 (3.5)
Lec-52.5, Lab-35
Training for installers of solar water heating systems on or at buildings. This course is applicable to the installation contractor who must be knowledgeable about system design, and be able to adapt designs to fit a particular application or customer need. CSU
Offered on occasion

CNST 106. Fundamentals of the Uniform Plumbing Code (3)
Lec-52.5 P/NP available
Prereq.: Completion of or concurrent enrollment in: CNST 103 or previous or current experience working in the plumbing field.
Advise: CNST 100
Provides training in the requirements of the California Uniform Plumbing Code (CPC). Topics include general regulations, permit and inspection, residential plumbing systems, storm drainage, fuel piping, mandatory standards, indirect waste, private sewer disposal systems, gray water systems. CSU
Offered Spring semesters

CNST 107. Blueprint Reading (3)
Lec-35, Lab-70, field trips P/NP available
Advise: CNST 100 or CNST 1000; MATH E1 or ET 108A
This course teaches the skills for reading a variety of construction plans, details, schedules and specifications. The course is a beginning course, yet also enhances skills of those who have existing knowledge of construction drawings. CSU

CNST 107A. Practical Blueprint Reading (1)
Lec-9, Lab-26 P/NP available
This course teaches the basic skills of reading blueprints and specifications. CSU
Offered Spring semesters

CNST 108. Contractor License Preparation (3)
Lec-52.5 P/NP available
Advise: CNST 100 and CNST 107; or demonstrated understanding of construction principals or experience in the construction industry, and the ability to interpret plans and specifications
Principles for managing a construction business, California Contractor Licensing Law, worker’s compensation, construction bonds, labor code,
employee relations, safety, construction contracts, fiscal responsibility, scheduling, construction documents, plans, specifications, and the estimating process. CSU

Offered on occasion

CNST 109. Residential Wiring (3)
Lec-35, Lab-70 P/NP available
Advise: CNST 100 and CNST 69
A beginning course in residential wiring. This hands-on course teaches the student the skills, methods and materials necessary to assist a licensed electrician in installing a residential electrical system. CSU

CNST 110. Residential Wiring (3)
Lec-45, Lab-70 P/NP available
Advise: CNST 69 or CNST 100
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. Advanced Project Furniture Making (3)
Lec-35, Lab-70 P/NP available
Advise: CNST 69 or CNST 100
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 more complicated floors, walls, ceilings, roofs, and stairways. CSU

Offered Spring semesters

CNST 113. Finish Carpentry (3)
Lec-35, Lab-70 P/NP available
Advise: CNST 69 or CNST 100 or CNST 1069
A course in the methods, materials, and installation techniques necessary to install doors, paneling, countertops, cabinets, crown moulding, baseboard, chair rail, picture rails and similar trim. This course offers hands-on practice in the fine craftsmanship required for finish work. CSU

Offered Fall semesters

CNST 114. Custom Cabinetmaking (3)
Lec-35, Lab-70 P/NP available
Advise: CNST 100; CNST 1069; CNST 1000
Introductory course in the basics of custom cabinetmaking and installation from simple "standalone" cabinets to complete wall-to-wall bookcases and kitchens, as well as stand-alone furniture-grade casework. Approaches and techniques of designing, constructing and installing custom casework including: Face-frame, European, and Die-wall construction; drawer making, associated material and hardware use. CSU

CNST 116. Furniture Making & Woodworking (3)
Lec-35, Lab-70 P/NP available
Advise: CNST 69
Designed to prepare students for entry-level work or to upgrade their existing skills in woodworking. Course has a hands-on focus that covers safety procedures, furniture design, hand and machine tools, materials identification and applications, fabrication processes, and project planning. CSU

CNST 118A. Advanced Project Furniture Making I (3)
Lec-35, Lab-70 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. CSU

CNST 118B. Advanced Project Furniture Making II (3)
Lec-35, Lab-70 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, material knowledge) acquired in CNST 116 and CNST 118A. CSU

CNST 121. Introduction to Photovoltaics (1.5)
Lec-30, Lab-6 P/NP available
Advise: ENGL 91 or ENGL 86 or ESL 150 or placement in ENGL 88 or 95 or ESL 160
Introduction to the principles of solar generated electricity and how they are applied on residential rooftops, ground and pole mounts, and larger commercial installations. CSU

CNST 122. Introduction to Photo Voltaic Installation (1)
Lec-12, Lab-24 P/NP available
Prereq: CNST 100
Advise: ENGL 91 or ENGL 86 or ESL 150 or placement in ENGL 88 or 95 or ESL 160
Hands-on class in the principles of locating, installing and commissioning a photovoltaic system. CSU

CNST 125. Drywall Hanging and Finishing (1)
Lec-9, Lab-27 P/NP available
Advise: CNST 100 and CNST 69
Introductory course in the techniques and applications of hanging, taping and applying smooth and textured finishes. CSU

CNST 128. Introduction to the National Electrical Code (2)
Lec-36 P/NP available
Advise: ENGL 91 or ENGL 86 or ESL 150 or placement in ENGL 88 or 95 or ESL 160
Designed for first year electricians, this course examines how the National Electrical Code (NEC) is organized and designed to ensure best practices for the protection of personnel and equipment. Introduces common requirements for the wiring of residential and commercial spaces; introduces load calculations for sizing wire, conduit, boxes and other apparatus; instructs students in the most efficient ways to navigate the code. CSU

CNST 129. Intermediate National Electrical Code (2)
Lec-36
Prereq: CNST 128 or CNST 1028
Designed for second and third year electricians. Open to more experienced electricians. Includes load calculations for motors, compressors; requirements for connecting and grounding transformers; revisits calculating conduit fill. Covers equipment less commonly encountered by residential electricians, such as motors and electric vehicle charging stations. Also, requirements for photovoltaic systems. CSU

Formerly the second part of CNST 105.

CNST 130A. Introduction to Residential Energy Efficiency (1.5)
Lec-24, Lab-12, field trips P/NP available
First of three courses preparing students for employment as entry level energy efficiency technicians. Topics include energy audits, proper insulation, heat flow, and energy efficiency. CSU

Formerly CNST 130
CNST 100B. Residential Energy Efficient Systems (1.5)
Lec-24, Lab-12, field trips  P/NP available
Prereq.: Completion of or concurrent enrollment in: CNST 130A
Second of three courses preparing students for employment as entry-level energy efficiency technicians. Topics include various types of residential heating and cooling systems, lighting and appliances with an emphasis on new innovations creating energy efficiency. CSU
Formerly CNST 130

CNST 130C. Residential Building Shell Climate Comfort and Health (1.5)
Lec-24, Lab-12, field trips  P/NP available
Prereq.: Completion of or concurrent enrollment in: CNST 130B
Last of three courses preparing students for employment as entry-level energy efficiency technicians. Topics include building shell thermal characteristics and efficiency ratings, residential air exchange systems, and health and safety issues with sealed buildings. CSU
Formerly CNST 130

CNST 131. Advanced National Electrical Codes (2)
Lec-36  P/NP available
Prereq.: CNST 129 or demonstration of CNST 129 exit skills
This class of the National Electrical Code (NEC) is intended for those students who are getting ready to take the California electrician's certification or the C10 licensing exam. It will focus on emergency and communication systems including broadband requirements. The course will prepare students for the licensing exam calculations including how to use chapter nine's tables on conduit fill and dimensions of wires. Finally, this course will use practice examples of load calculations for residential and commercial projects. CSU

CNST 132. Fundamentals of Refrigeration for Industrial Maintenance (4)
Lec-52.5, Lab-52.5  P/NP available
Basic principles and operation of industrial refrigeration systems; refrigeration cycle, Environmental Protection Agency (EPA) laws and regulations for safe refrigerant handling. CSU

CNST 133. Sales and Marketing Photovoltaics (1.5)
Lec-24, Lab-12
Prereq.: Completion of or concurrent enrollment in: CNST 121
Best practices for marketing strategies based on California and federal incentives and to represent a photovoltaic system's performance to a client. CSU

Noncredit Courses:

CNST 1000. Introduction to Construction (90 hrs)
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 1007. Blueprint Reading (105 hrs)
Advise: CNST 100 or CNST 1000; MATH E or ET 108A
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)
Advise: TIXX 1000, 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 101
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 1025. Drywall Hanging and Finishing (36 hrs)
Advise: CNST 1000 and CNST 1069
Introductory course in the techniques and applications of hanging, taping and applying smooth and textured finishes.

CNST 1028. National Electrical Code Introduction (36 hrs)
Advise: ENGL 91 or ENGL 86 or ESL 150 or Placement in ENGL 88 or 95 or ESL 160
This course examines how the National Electrical Code (NEC) is organized and designed for the protection of personnel and equipment. Introduces common requirements for the wiring of residential and commercial spaces; introduces load calculations for sizing wire, conduit, boxes and other apparatus; instructs students in the most efficient ways to navigate the code.

This is the first of three classes on the National Electrical Code. The other two explore different sections of the code.

CNST 1029. National Electrical Code 2 (36 hrs)
Advise: CNST 128 or CNST 1028
This course is designed for students to study equipment that is less commonly encountered by residential electricians. The course will also examine requirements related to the photovoltaic industry, including those which use battery storage.

Formerly this class was part of CNST 1005. That class has been divided into three parts of which this is the second, intermediate level.

CNST 1069. Construction Safety (17.5 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. It covers safety issues as they apply to general construction. Also, the subject matter is tailored to specific occupations/trades and to safety issues in our construction courses. Students who successfully complete the course with a “B” or better have the option to apply to the state for a lifetime OSHA 10 hour Construction Safety Certificate.

Custodial

Noncredit Courses:

TICU 9550. Custodial Training (108 hrs)
Preparation for entry level employment as a custodian. Training in safety, use of tools, equipment, chemicals, materials and supplies, and the proper application of dusting, sweeping, mopping, use of ladders, scaffolds, various floor machines and specialized equipment.

TICU 9551. Custodial Training for Healthcare Workers (105 hrs)
Advise: TICU 9550; ESLV 3816
Safety practices, procedures, tools, equipment and supplies required by a healthcare custodian (healthcare porter). Hands-on training in the methods and materials as they relate specifically to a healthcare environment and in topics covered on the civil service exam required for employment in San Francisco’s medical centers. Preparation for custodial work in any medical office or nursing home.
Biology is the scientific study of life through the observation of structure, function, reproduction, growth, origin, evolution, and behavior of living organisms and their relation to each other and their environment. Biologists have deepened our understanding of processes and interactions on all levels of biological organization from elucidating cellular processes to fight cancer to assessing interactions in communities that might help prevent the extinction of species. Studying biology provides a background for students to evaluate and understand new discoveries and to make informed decisions about the use of scientific knowledge to benefit all living organisms. The Associate of Science in Biology for Transfer (AS-T) prepares student for upper division biology courses, including general biology, cell or molecular biology, organism biology, marine biology, botany, zoology, ecology, evolution, genetics, anatomy, physiology, microbiology, and agricultural sciences. The AS-T in Biology is designed to prepare students for transfer to a baccalaureate degree program in biology, particularly at the California State University.

Learning Outcomes

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

- Successfully participate in upper division coursework including general biology, cell or molecular biology, organism biology, marine biology, botany, zoology, ecology, evolution, genetics, anatomy, physiology, microbiology, and agricultural sciences.
- Define and correctly use scientific terminology relevant to biological organisms and processes.
- Apply the theory of evolution and use examples from biochemistry and all levels of biological organization to explain the unity and diversity of living forms.
- Explain how form relates to function in both small scale (molecules and subcellular parts) and large scale (animal and plant physiology) systems.
- Evaluate how the expression of genetic information in context activates various elements of organism growth and behavior.
- Provide and evaluate evidence for the growth and change of biological systems through processes based upon chemical transformation pathways and governed by the laws of thermodynamics.
- Write clear, well organized essays or research papers that demonstrate synthesis of information, quantitative reasoning, and critical thinking.
- Apply the process of science and the skills necessary to successfully and safely carry out laboratory experiments.

Degree Requirements: Students who wish to earn the Associate in Science in Biology for Transfer must complete 60 CSU transferable units with at least a 2.0 grade point average. This must include the units required for completion of either IGETC for STEM or CSU GE for STEM and the units for the major as specified below. Each course in the major must be completed with a grade of “C” or better. The IGETC for STEM and CSU GE for STEM options permit students completing the AS-T in Biology to follow the IGETC or CSU GE curriculum but delay one Arts or Humanities course and one Social or Behavioral Science course until after transfer. Courses used to meet the major requirement may also be used to meet IGETC or CSU GE requirements.

Assuming students start this AS-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AS-T in Biology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Required courses:</td>
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</tr>
<tr>
<td>BIO 100A General Biology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 100B General Biology</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM 101A General College Chemistry</td>
<td>6.0</td>
</tr>
<tr>
<td>CHEM 101B General College Chemistry</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Choose one of the following Calculus courses:

<table>
<thead>
<tr>
<th>Calculus Course Name</th>
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<tbody>
<tr>
<td>MATH 100A Calculus I</td>
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</tr>
<tr>
<td>MATH 100A Short Calculus I</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Complete one of the following Physics Series:

**OPTION 1:**

<table>
<thead>
<tr>
<th>Physics Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHYC 2A Introductory Physics</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 2AL Introductory Physics Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>PHYC 2B Introductory Physics</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 2BL Introductory Physics Laboratory</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**OPTION 2:**

<table>
<thead>
<tr>
<th>Physics Course Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHYC 4A Classical Mechanics for Scientists and Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 4AL Mechanics Laboratory for Scientists and Engineers</td>
<td>1.0</td>
</tr>
<tr>
<td>PHYC 4B Electromagnetism for Scientists and Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 4BL Electromagnetism Laboratory for Scientists and Engineers</td>
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</table>

Choose one of the following electives:

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM 208A Organic Chemistry</td>
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</tr>
<tr>
<td>ENGL 1B Writing about Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 1C Writing about Nonfiction</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 100B Short Calculus II</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>5.0</td>
</tr>
<tr>
<td>CMST 2 Introduction to Rhetorical Criticism</td>
<td>3.0</td>
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</tbody>
</table>

Total: 35.0 – 39.0

**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 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 program, 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 theses conclusions to personal, community, and scientific problems.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the Major in Biological Sciences**

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Required courses:</strong></td>
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</tr>
<tr>
<td>CHEM 101B General College Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM 208A Organic Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 208B Organic Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>5.0</td>
</tr>
<tr>
<td>PHYC 2A Introductory Physics</td>
<td>3.0</td>
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<tr>
<td>PHYC 2AL Introductory Physics Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>PHYC 2B Introductory Physics</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 2BL Introductory Physics Laboratory</td>
<td>1.0</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.

**Total:** 47.0

**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 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 program, 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 theses conclusions to personal, community, and scientific problems.

The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Biological Sciences**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required courses:</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 100A General Biology</td>
<td>5.0</td>
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<tr>
<td>BIO 100B General Biology</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM 101A General College Chemistry</td>
<td>6.0</td>
</tr>
<tr>
<td>CHEM 101B General College Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM 208A Organic Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>CHEM 208B Organic Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>5.0</td>
</tr>
<tr>
<td>PHYC 2A Introductory Physics</td>
<td>3.0</td>
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<tr>
<td>PHYC 2AL Introductory Physics Laboratory</td>
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</tr>
<tr>
<td>PHYC 2BL Introductory Physics Laboratory</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Total:** 47.0

**Environmental Science Major (AS)**

CCSF's Environmental Science major is designed to clearly demonstrate the breadth of content and disciplines that underlie environmental science and to prepare students for the advanced courses and projects that lie ahead should they transfer to a bachelor's degree program. The major integrates content from the life, physical and social sciences with elective coursework options that permits students
to explore areas of interest in greater depth. Although Environmental Science majors should be able to complete most or all of their lower division preparation at CCSF before transfer, they should meet with a counselor to confirm their program of study and the specific requirements of the transfer institution.

Through the required units for the Environmental Science major, students will gain an understanding of core scientific concepts and their importance in understanding human impacts on the environment. Students will also be able to critically evaluate the scientific evidence and sociopolitical aspects of environmental and natural resource problems, their causes, and proposed solutions. The major also provides opportunities for experiential learning through laboratory work and field investigations.

Learning Outcomes

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

- Apply concepts, models, and quantitative techniques from mathematics, life sciences, and physical sciences to solve complex problems related to the natural world.
- Apply tools, practices, and quantitative reasoning to collect, analyze, and interpret environmentally relevant data both in laboratory and field settings.
- Analyze, interpret, and evaluate quantitative and qualitative evidence regarding the causes and consequences of human impacts on the environment.
- Apply concepts and models from a diverse range of scientific disciplines to both critically evaluate and formulate sustainable solutions to environmental degradation and resource depletion.
- Quantify and evaluate personal impacts on the environment and integrate and apply sustainable solutions to their own lifestyle and career choices.

See major requirements at the intended transfer institution to choose the appropriate course(s) when options are given.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Environmental Science

Course ............................................ Units

Core courses:
BIO 3I/GEOG 3I/SUST 3I Introduction to Environmental Science .................................. 3.0
BIO 100A General Biology .......................................................... 5.0
CHEM 101A General Chemistry ....................................................... 6.0

Choose one of the following earth science options:
GEOL 10 Physical Geology ................................................. 3.0
and GEOL 10L Physical Geology Lab ................................... 2.0
GEOL 30 Environmental Geology ............................................. 3.0
and GEOL 30L Environmental Geology Lab ...................... 1.0
GEOG 1 Physical Geography .................................................... 3.0
and GEOG 1L Physical Geography Laboratory .................. 1.0

Choose one of the following math options:
MATH 100A Calculus I .......................................................... 5.0
MATH 100B Short Calculus I ................................................... 3.0

Choose one of the following physics options:
Note that the Physics 4 series is often required for those majors with a physical science focus.

PHYC 4A Classical Mechanics for Scientists and Engineers ..................................... 3.0
and PHYC 4AL Mechanics Laboratory for Scientists and Engineers .................. 1.0
PHYC 2A Introductory Physics .................................................. 3.0
and PHYC 2AL Introductory Physics Laboratory ..................... 1.0

Choose one of the following second semester core courses:
A second semester in ALL of these courses is HIGHLY recommended
BIO 100B General Biology ...................................................... 5.0
CHEM 101B General College Chemistry .................................... 5.0
PHYC 4B Electromagnetism for Scientists and Engineers .................. 3.0
and PHYC 4BL Electromagnetism Laboratory for Scientists and Engineers .......... 1.0
PHYC 2B Introductory Physics .................................................. 3.0
and PHYC 2BL Introductory Physics Laboratory ..................... 1.0
MATH 100B Calculus II .......................................................... 5.0
MATH 100B Short Calculus II ................................................... 3.0

Choose 6 units from the following courses:
BIO 33 Introduction to Conservation Biology ................................ 3.0
BIO 225/SUST 225 Environmental Toxicology .................................. 3.0
CHEM 208A Organic Chemistry .................................................. 4.0
CHEM 212A Organic Chemistry .................................................. 6.0
BIO 20 Introduction to Ecology .................................................. 3.0
BIO 19 Ecology ................................................................. 4.0
ECON 1 Principles of Macroeconomics ........................................ 3.0
ECON 3 Principles of Microeconomics ....................................... 3.0
ENRG 3 Introduction to Alternative Energy .................................. 3.0
ENRG 3L Introduction to Alternative Energy Laboratory ............ 1.0
GEOG 4 Cultural Geography .................................................... 3.0
GEOG 4A Climate Change ....................................................... 1.0
GEOG 110 Introduction to GIS .................................................. 3.0
MATH 80 Probability and Statistics .......................................... 4.0

Any of the previous earth science, physics, mathematics, biology, or chemistry options not already completed

Total: ................................................. 34.0 – 40.0

Announcement of Courses

Credit, Degree Applicable Courses:

Anthropology

ANTH 1. Biological Anthropology (3)
Lec-52.5 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. UC/CSU
C-ID ANTH 110

Biology

BIO 9. Human Biology (4)
Lec-52.5, Lab-52.5, field trips
ADVISOR: MATH E1 or MATH E3 or MATH 30 or placement in MATH 40 or higher; ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
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. UC/CSU

BIO 10. Animal Biology (4)
Lec-52.5, Lab-52.5, field trips P/NP available
ADVISE: ESL 140 or ESL 184 or ENGL 86 or ENGL 91 or placement in ESL 150 or ESL 186 or ENGL 88
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. UC/CSU

Formerly ZOOL 10 Biology 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, II, OR PHYS 1.

BIO 11. The Science of Living Organisms (4)
Lec-52.5, Lab-52.5, field trips P/NP available
The major concepts of the biological sciences including biochemistry, cells, evolution, genetics, bioenergetics, microbiology, botany, mycology, zoology, ecology, and biotechnology. UC/CSU

Not recommended for students who have taken BIO 100A or 100B.

BIO 12. Plant Biology (4)
Lec-52.5, Lab-52.5, field trips P/NP available
Introduction to structure, function, evolution, classification and ecology of plants. Topics include life history plants, levels of organization, metabolism, form and function, and a survey of major taxa (including fungi and photosynthetic protists). Laboratory exercises are coordinated with lecture topics and may include field exercises. UC/CSU

Formerly BOT 10

BIO 14. Plant Ecology (4)
Lec-52.5, Lab-52.5, field trips P/NP available
Plant ecology is the study of interrelationships between plants and their environment and informs us about processes behind patterns observed in nature. Within plant ecology we will synthesize information across levels of ecological organization and address plant physiological ecology, population biology, community and ecosystem ecology and biogeography. UC/CSU

Offered on occasion

BIO 15. The Biology of HIV (3)
Lec-52.5, field trips P/NP available
This course presents the biological basis for HIV/AIDS origins and emergence; epidemiology; virus structure and replication; interaction of HIV with the immune system and disease; HIV testing; current prevention, treatment, and cure strategies. UC/CSU

Offered on occasion

BIO 19. Ecology (4)
Lec-52.5, Lab-52.5, field trips P/NP available
ADVISE: ESL 160 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
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. UC/CSU

Formerly Ecology 20, Biology 19 MAY INCLUDE SEVERAL REQUIRED SATURDAY FIELD TRIPS IN EXCHANGE FOR CLASS TIME.

BIO 20. Introduction to Ecology (3)
Lec-52.5, field trips P/NP available
ADVISE: ENGL 93 or ENGL 95 or ENGL 86 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
This introductory ecology course will study the relationships between organisms and their environment. We will examine species adaptations, population, community and ecosystem ecology, and survey the worlds biomes. We will also evaluate humanities impacts on the living world and explore sustainable solutions. UC/CSU

Formerly ECOL 10. Class will have field trips which may include a Saturday field trip. The course is not open to students concurrently enrolled in ECOL 10 or to those who have taken ECOL 10 in the past.

BIO 21A. Ecology of San Francisco Bay (1)
Lec-17.5, field trips P/NP available
ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
An investigation of the ecological significance of San Francisco Bay 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

Formerly ECOL 80A. This course is offered as a weekend course with a prior mandatory evening orientation on campus.

BIO 21B. Ecology of the City of San Francisco (1)
Lec-17.5, field trips P/NP available
ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
An examination of abiotic and biotic factors shaping nature in San Francisco. An analysis of plant, animal, and human interactions within diverse habitat types over time. CSU

Formerly BIO 81A. THIS IS A COURSE TAUGHT ON TWO WEEKEND DAYS WITH A MANDATORY EVENING ORIENTATION.

BIO 21C. Ecology of Golden Gate National Recreation Area (1)
Lec-17.5, field trips P/NP available
ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
An investigation of the ecological significance of Golden Gate National Recreation Area (GGNRA) and the role of historical and current biotic and abiotic factors in shaping it. Observe and describe the diverse habitats and their associated fauna and flora. Highlight management issues that affect the conservation and restoration of these biological and cultural resources. CSU

Formerly BIO 28 and ECOL 80C

Offered Spring semesters

BIO 21D. Ecology of Point Reyes National Seashore (1)
Lec-17.5, field trips P/NP available
ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
An investigation of the ecological significance of the Point Reyes National Seashore (PRNS) and the role of historic and current biotic and abiotic factors that shape it. Observation of the diversity of
h habitats within PRNS and description of their associated fauna and flora. CSU

**Formerly ECOL 80D**

**Offered Spring semesters**

**BIO 21E. Ecology of Coastal Mendocino County (1)**
Lec-17.5, field trips  P/NP available

Advising: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B

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

**Formerly ECOL 80E. This is a one weekend field course with a mandatory on-campus orientation.**

**BIO 21F. Ecology of the San Francisco Bay Delta (1)**
Lec-17.5, field trips  P/NP available

Advising: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B

An investigation of the ecological significance of the San Francisco Bay Delta 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

**Formerly ECOL 80F. This course is taught on two weekend days with one mandatory on-campus orientation.**

**BIO 21J. Agroecology (1)**
Lec-18, field trips  P/NP available

Advising: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B

An examination of ecological issues surrounding agriculture. Analysis of ecosystem services (benefits) provided by sustainable agriculture. Evaluation of different farming methods practiced on local urban farm and how this may relate to personal food choices. CSU

**Formerly BIO 80C. Topics in Biology-Agroecology**

**BIO 26. Habitat Restoration Field Studies (1)**
Lec-18, field trips  P/NP available

An introductory course examining the principles of habitat restoration and rehabilitation. An analysis of habitat reconstruction techniques. This class will be conducted as a field experience class. The concepts will be developed at specific restoration sites in the San Francisco Bay Area. Students will participate in a restoration activity under the direction of a field ecologist. CSU

**Offered Fall semesters**

**BIO 31. Introduction to Environmental Science (3)**
Lec-52.5, field trips  P/NP available

Advising: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A

An examination of the scientific evidence informing our understanding of the causes and consequences of human impacts on the environment. Application of tools, principles, and quantitative reasoning from natural sciences, social sciences, and engineering and technology to study and evaluate sustainable solutions to environmental degradation and resource depletion. UC/CSU

**BIO 31= SUST 31= GEOG 31**

**BIO 31L. Environmental Science Laboratory (1)**
Lab-52.5, field trips  P/NP available

Prereq.: Completion or concurrent enrollment in: BIO 31 or GEOG 31 or SUST 31

An introduction to tools and techniques used by environmental scientists to investigate human impacts on the environment in lab and/ or field settings. Application of qualitative and quantitative concepts and models to evaluate environmental problems and their proposed solutions. UC/CSU

**BIO 31L= GEOG 31L=SUST 31L**

**Offered on occasion**

**BIO 32. Marine Biology (3)**
Lec-52.5, 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. UC/CSU

**Offered Fall semesters**

**BIO 32L. Marine Biology Laboratory (1)**
Lab-52.5, field trips  P/NP available

Coreq.: BIO 32

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. UC/CSU

**Offered Fall semesters**

**BIO 33. Introduction to Conservation Biology (3)**
Lec-52.5  P/NP available

Advising: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 150 or placement in ENGL 96 or ENGL 88B or ESL 160

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. UC/CSU

**Offered Fall semesters**

**BIO 40. Plants and Animals of California (3)**
Lec-52.5, field trips  P/NP available

Advising: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 150 or placement in ENGL 96 or ENGL 88B 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. UC/CSU

**Offered Spring semesters**

**BIO 51. Heredity and Evolution (3)**
Lec-52.5  P/NP available

Advising: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 93 or ENGL 88 ; High school biology course or BIO 9 or BIO 11

A general survey of the basic principles of genetics and organic evolution with a historical perspective. Classical genetics, molecular genetics, population genetics and evolution, current genetic research and technologies. UC/CSU

**Formerly GEN 10**

**Offered on occasion**
BIO 61. The Biology of Cancer (3)
Lec-52.5
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 150 or placement in ENGL 96 or ENGL 88B or ESL 160
This course discusses the history of cancer and its molecular and cellular underpinnings. It examines possible causes and progression of cancer, prevention, screening tests, symptoms, diagnosis, and treatment. UC/CSU
Offered Spring semesters

BIO 91. On-Campus Biology Work Experience (1-8)
Work-60 to 600, field trips
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-60 to 600, field trips
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 of and under the supervision of a biology department instructor. CSU

BIO 100A. General Biology (5)
Lec-52.5, Lab-105
Prereq.: CHEM 101A
Advise: (BIO 11 or 1 yr. HS biology) and ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
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. UC/CSU
C-ID BIOL 135S (BIO 100A + BIO 100B)

BIO 100B. General Biology (5)
Lec-52.5, Lab-105, field trips
Prereq.: BIO 100A
An 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. UC/CSU
C-ID BIOL 135S (BIO 100A + BIO 100B)

BIO 106. Introduction to Human Anatomy and Physiology (4)
Lec-52.5, Lab-52.5
Advise: ENGL 93 or ENGL 88A or ENGL 88 or ESL 150 or ESL 186 or placement in ENGL 88B or ESL 160 or ESL 88
An integrated course covering the fundamental principles of human anatomy and physiology. UC/CSU
Formerly ANAT 14

BIO 108. General Human Anatomy (4)
Lec-52.5, Lab-52.5
Advise: ENGL 93 or ENGL 88A or ENGL 88 or ESL 150 or ESL 186 or placement in ENGL 88B or ESL 160 or ESL 188
Study of the gross and microscopic structure of the human body. UC/CSU
Formerly ANAT 25

BIO 111. Human Physiology (5)
Lec-52.5, Lab-105, field trips
Prereq.: CHEM 32 or CHEM 101A
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A
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. UC/CSU
Formerly PHYS 1
Offered on occasion

BIO 112. Introduction to Human Physiology (4)
Lec-52.5, Lab-52.5
Prereq.: CHEM 32 or CHEM 101A
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A
A course in general human physiology which stresses the analysis of 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 allied health professions. UC/CSU
Formerly PHYS 12

BIO 114. Exploring Neuroscience: An introduction to the Brain (3)
Lec-52.5, field trips
Advise: ESL 160 or ENGL 93 or ENGL 88A or placement in ENGL 96 or ESL 88B or ESL 88
Designed to expose students to topical questions in neural science, this course will investigate cellular communication, simple reflexes, complex neural networks and complex behaviors such as consciousness, coordinated movement, emotions, motivation, and memory. Intended for all students interested in understanding the science behind the brain. UC/CSU
Formerly PHYS 67
Offered Spring semesters

BIO 118. Introduction to Entomology (4)
Lec-52.5, Lab-52.5
Prereq.: BIO 100A or BIO 100B or BIO 11 or ZOOL 10 or a high school biology course; MATH 40 or placement in MATH 60; ENGL 88 or ESL 160 or placement in ENGL 1A
An introduction to the biology of arthropod organisms, including insects and arachnids. Topics include the biochemistry, cell biology, anatomy, physiology, behavior, evolution, classification, genetics, diversity, and distribution of arthropods and their effects on human populations and public health. CSU

BIO 119. Emerging Diseases (3)
P/NP available
Advise: ESL 140 or ENGL 86 or ENGL 91 or placement in ESL 150 or ESL 186 or ENGL 88
A general education course emphasizing the intersection of microbiology, epidemiology, ecology and public health as they relate to selected infectious disease agents that threaten human and animal welfare around the globe. It analyzes the influence of biological, environmental and socio-political factors on the emergence of "new" diseases as well as the reemergence of ancient plagues. UC/CSU
Formerly MICROBIOLOGY 10 (M B 10)
Offered on occasion
BIO 120. Introduction to Microbiology (4)
Lec-52.5, Lab-70  P/NP available
Prereq.: CHEM 32 or CHEM 101A or Demonstration of CHEM 32 or 101A exit skills
This course explores the evolution, structure, function, diversity and medical importance of microbes and infectious disease agents.
Emphasis is placed on the interactions of microbes with the environment, animals, plants, and other microbes in health and disease. UC/CSU
Formerly M B 12

BIO 121. Sanitation Principles and Practices (2)
Lec-35  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or Placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
Principles of food-borne illness etiology and transmission; food-borne agents resulting in food spoilage, infections and poisonings; sanitation, preventive and managerial practices mandated by public health laws for food service personnel and health inspectors to ensure food safety. CSU
Formerly MB 51

BIO 130. Nutrition and Culinary Arts (2)
Lec-35  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 86 or ENGL 91 or Placement in ESL 150 or ESL 186 or ENGL 88
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
Formerly NUTR 51. Not intended for students who have completed BIO 132, BIO 134, NUTR 12 or NUTR 52.

BIO 132. Introduction to Nutrition (3)
Lec-52.5  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 86 or ENGL 91 or Placement in ESL 150 or ESL 186 or ENGL 88
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. UC/CSU
Formerly NUTR 52. Not intended for students who have completed BIO 130, 134, NUTR 12 or NUTR 51.

BIO 134. Introduction to Nutrition for Health Sciences (3)
Lec-52.5  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 86 or ENGL 91 or Placement in ESL 150 or ESL 186 or ENGL 88
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. UC/CSU
Formerly NUTR 12

BIO 225. Environmental Toxicology (3)
Lec-52.5  P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or Placement in ENGL 1A
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 toxics in the environment, and examination of the impacts of air/water/soil pollutants. Methods to identify, study, remediate and avert environmental toxics will be addressed. UC/CSU
Formerly ECOL 26X; BIO 225 = SUST 225
Offered on occasion

Genetics

GEN 11. Genetics Laboratory (1)
Lab-52.5, field trips  P/NP available
Prereq.: Completion/concurrent enrollment in BIO 51
Hands-on investigative laboratory experiments encompassing cellular genetics, classical plant and animal genetics, microbial genetics, molecular genetics, biotechnology, forensics, and natural selection. UC/CSU
Offered on occasion

Announcement of Curricula

General Information

The BEMA department offers stand alone and stackable certificates. These four certificates are stand alone; 1) Audio and Video for the Web, 2) Convergent Media Production, 3) Multimedia Broadcast Journalism, and 3) Foundations in Broadcast Electronic Media Arts.

BEMA also offers six additional certificates of achievement which build on the skills in the Foundations in Broadcast Electronic Media Arts Certificate; These are: 1) Sound Recording Arts, 2) Live Sound, 3) Sound Design, 4) Television Production, 5) Video Editing and Post Production, and 6) Broadcast Motion Graphics. 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.

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 broadcast stations, video production houses, sound recording studios, live sound companies, streaming companies, and in-house media services for corporations.

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, plus two digital teleproduction studios. San Francisco's Educational Access Television Channel 27 and Channel 75 cablecast citywide from the department's facilities.

Additional Information: Broadcasting students who wish to earn the Film, Television & Electronic Media Major (AS-T) in preparation for
Film, Television & Electronic Media Major (AS-T)

The AS-T in Film, Television and Electronic Media offers students a comprehensive lower division program in film, television and electronic media, revolving around a basic core program. The AS-T prepares students for transfer to upper division film, television and electronic media programs at four-year colleges and universities, particularly to California State University (CSU) campuses.

Learning Outcomes

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

- Describe and analyze the history, issues and impact of film, television and electronic media in a local and global context.
- Demonstrate media literacy as a key part of the development of critical thinking skills.
- Apply introductory analytical skills to the design and creation of content for film, television and electronic media with a focus on writing, storytelling, teamwork and leadership in preparation for further study at the university level.
- Demonstrate film, television and electronic media production and performance craft skills suitable for further development at the university level.
- Display professionalism and understanding of workforce protocol in communication and behavior.

Degree Requirements: Students who wish to earn the Associate in Science in Film, Television and Electronic Media 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 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.

Assuming students start this AS-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the As-T in Film, Television & Electronic Media

Course ............................................ Units
Core course:
BCST 120 Audio Production ......................... 4.0
Choose two of the following courses:
BCST 100 Introduction to Electronic Media .......... 3.0
BCST 110 Introduction to Writing for Electronic Media . 3.0
CINE 21 Introduction to Film Studies ................... 3.0
Choose one of the following production courses:
BCST 141 Field Video Production ...................... 3.0
BCST 24 Basic Film Production ......................... 4.0
Area 1 Elective: Choose one of the following Media Production courses:
BCST 115 Announcing and Performance ................. 3.0
BCST 143 Digital Video Editing AVID .................. 4.0
BCST 144 Digital Video Editing: FCP & Premiere .......... 4.0
BCST 146 Video Motion Graphics ....................... 4.0
CINE 24 Basic Film Production ......................... 4.0
CINE 25 Narrative Filmmaking ........................ 3.0
CINE 56 Introduction to Digital Film Editing .......... 4.0
CINE 54 Cinematography & Lighting .................... 3.0
CINE 126 Documentary Filmmaking .................... 3.0
CINE 136 Special Effects ................................ 3.0
Area 2 Elective: Choose one of the following Media History courses:
CINE 18 American Cinema ................................ 3.0
CINE 20A Film History: Evolution of Film Expression . 3.0
CINE 20B Film History: Contemporary Film Expression3.0
BCST 103 Mass Media and Society .................... 3.0
Total: ................................................. 19.0 – 21.0

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 program, students will be able to:

- Analyze the processes involved in creating audio and video content for broadband delivery.
- Evaluate the impact internet content has on society.
- Plan, organize and create effective online content that conveys intended message.

Students must complete courses at City College of San Francisco.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Audio and Video for the Web

Course ............................................ Units
Required courses:
BCST 119 Digital Media Skills .......................... 3.0
BCST 135 Audio for the Web ........................... 1.0
BCST 136 Video for the Web ............................ 1.0
BCST 159 Digital Media Portfolio ....................... 1.0
Total: ................................................. 6.0

Broadcast Motion Graphics Certificate

The Broadcast Motion Graphics certificate builds on the Foundations in Broadcasting Electronic Media Arts Certificate with an emphasis on motion graphics and effects for television and video. Students completing this certificate program will be qualified for entry-level employment in motion graphics and effects 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 program, students will be able to:

- Analyze, plan, and manage the creative and technical elements of broadcast and video effects and motion graphics workflow.
- Apply the skills of a motion graphics and special effects assistant to work in a variety of areas within the television and video production process.
- Apply knowledge of motion graphic and special effects hardware and software to television and video projects and programming.
• Display professionalism and effective application of workforce protocol and communication skills in the video industry.

Admission Requirement: Students must earn a Certificate of Achievement in Foundations in Broadcast Electronic Media Arts.

Completion Requirements: Students must complete 12 units from the courses listed below at City College of San Francisco. The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Broadcast Motion Graphics
Course ................................................. Units
Choose two of the following video editing courses:
BCST 143A Digital Video Editing: Avid .......................... 3.0
BCST 143B Video Editing Finishing: Avid ......................... 3.0
BCST 144A Digital Video Editing: Premiere Pro .................. 3.0
BCST 144B Video Editing Finishing: Premiere Pro ................ 3.0

Required courses:
BCST 146 Video Motion Graphics ................................. 4.0
BCST 147 Advanced Video Editing ................................. 4.0

Choose one of the following advanced video production courses:
BCST 148 HDTV Studio Production ................................. 4.0
BCST 149 HDTV Field Production ................................. 4.0

Choose two units from the following internship courses:
BCST 160 College Internship ...................................... 1.0-2.0
BCST 165 Industry Internship ...................................... 1.0-2.0

Total: ......................................................... 20.0

Convergent Media Production Certificate
This certificate focuses on creative and effective storytelling and branding using multi-platform and multi-format production concepts. Students will utilize audio, video, social media apps, and storytelling techniques, and technologies to produce engaging convergent media productions.

Learning Outcomes
Upon completion of this program, 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, implement, and manage creative storytelling across platforms and devices.
• Create a distribution and promotional plan for a convergent media product using social media.
• Analyze media from a variety of perspectives in order to create socially responsible campaigns.

Students must complete at least 25 units from the courses listed below at City College of San Francisco. The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Convergent Media Production
Course .................................................. Units
Courses can be taken in any order (pre-requisites may apply), however, these are foundational courses and should be taken in the first year if possible: Choose 20 Units from the following courses.
BCST 115 Announcing and Performance .......................... 3.0
BCST 119 Digital Media Skills ..................................... 3.0

BCST 120 Audio Production .................................... 4.0
BCST 135 Audio for the Web .................................... 1.0
BCST 136 Video for the Web .................................... 1.0
BCST 141 Field Video Production ................................ 3.0
PHOT 51 Beginning Photography ................................ 3.0
VMD 101/DSGN 101/PHOT 100 Design Fundamentals ........ 3.0
VMD 105 Visual Media Digital Skills ............................. 3.0
VMD 140 Web Production I ..................................... 3.0

Choose two of the following writing courses:
BCST 110 Introduction to Writing for Electronic Media ........ 3.0
JOUR 22 Feature Writing ......................................... 3.0
JOUR 35 Internet Journalism ...................................... 3.0

Choose one of the following video editing courses:
BCST 143A Digital Video Editing: Avid .......................... 3.0
BCST 144A Digital Video Editing: Premiere Pro .................. 3.0

Choose one of the following media analysis courses:
BCST 103 Mass Media and Society ................................ 3.0
BCST 104 Race and Media ........................................ 3.0
BCST 105 Gender & Mass Media .................................. 3.0

These courses are more advanced and it is recommended that they be taken the second year if possible: Choose 11 units from the following courses.

BCST 124A Pro Tools Editing Essentials .......................... 2.0
CMST 8 Rhetoric of Popular Culture ............................. 3.0
JOUR 26 Fundamentals of Public Relations ..................... 3.0
PHOT 57 Photography for the Web .............................. 3.0
VMD 141 Web Production II ..................................... 3.0

Choose one advanced course from the list below:
BCST 146 Video Motion Graphics ................................. 4.0
PHOT 102B Documentary/News Photography ................ 2.0
VMD 127 User Experience ........................................ 3.0

Required capstone courses:
BCST 158 Social Media for Professionals ....................... 3.0
BCST 165 Industry Internship ...................................... 2.0

Total: ......................................................... 50.0 – 52.0

Foundations in Broadcast Electronic Media Arts Certificate
The Foundations In Broadcast Electronic Media Arts certificate provides essential knowledge and skills in audio, video, and interactive media in preparation for intermediate and advanced practice and study of media arts and related certificates. It can serve as a stand alone certificate in the basics of media arts or the basis for a pathway to broader introduction to theory, practice, and aesthetics in the craft of the audio, video and media arts.

Learning Outcomes
Upon completion of this program, students will be able to:

• Analyze major mass communication issues and the impact of new technology in the sound recording, video, multimedia, television, and radio industries.
• Plan and implement projects that include using the basics of sound, video, and internet tools.
• Display professionalism and effective application of workforce protocol and communication skills.

Students must complete at least 8 units from the courses listed below at City College of San Francisco.
The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Foundations in Broadcast Electronic Media Arts**

Course ............................... Units
**Required courses:**
BCST 110 Introduction to Writing for Electronic Media ........ 3.0
BCST 119 Digital Media Skills ................................... 3.0
BCST 120 Audio Production .................................... 4.0
BCST 159 Digital Media Portfolio ................................... 1.0

**Choose one of the following media studies options:**
BCST 100 Introduction to Electronic Media ................. 3.0
BCST 103 Mass Media and Society ................................. 3.0

**Choose one of the following video production courses:**
BCST 140 Studio Video Production .................................... 3.0
BCST 141 Field Video Production .................................... 3.0
Total: ................................................. 17.0

**Live Sound Certificate**

The Live Sound Certificate builds on the Foundations in Broadcast Electronic Media Arts Certificate with an emphasis in the sound reinforcement industry. 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 program, students will be able to:

- Plan and execute the sound reinforcement set-up for vocals, acoustic and electronic instruments.
- Configure public address (PA) system for various sized spaces and audience numbers and demonstrate proper placement and distribution of speakers.
- Identify and troubleshoot acoustic requirements of various sized spaces.
- 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 effective application of workforce protocol and communication skills in the live sound industry.

This is the second in a series of stackable certificates. Students must earn a Certificate of Achievement in Foundations in Broadcast Electronic Media Arts before earning this certificate.

Students must complete at least 3 of the courses listed below at City College of San Francisco.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Live Sound**

Course ........................................... Units
**Required courses:**
BCST 124A Pro Tools Editing Essentials ................. 2.0
BCST 124B Pro Tools Mixing with Plugins ................. 2.0
BCST 125A Beginning Sound Recording Studio .......... 5.0
BCST 127B Interconnected Audio Systems ................... 1.0
BCST 128 Sound Reinforcement ................................... 3.0

Choose 2 units from the following internship courses:
BCST 160 College Internship .................................. 10.0-2.0
BCST 165 Industry Internship .................................. 10.0-2.0
Total: ............................................ 15.0

**Multimedia Broadcast 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 also recommended for degree holders seeking to upgrade skills for career transition.

**Learning Outcomes**

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

- Identify and analyze structure and writing style of material for electronic media news.
- Integrate and apply various news media writing and announcing techniques through information gathering, writing news stories, and on-camera presentations.
- Apply techniques and practices for digital video, audio production, and cross platform distribution for electronic news gathering.
- Assess and discuss the ethical issues of multi-media journalism.
- Display professionalism and effective application of workforce protocol in the multi-media news industry.

Students must complete at least 16 units from the courses listed below at City College of San Francisco.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Multimedia Broadcast Journalism**

Course ........................................... Units
**Courses can be taken in any order (pre-requisites may apply), however these are foundational courses and should be taken in the first semester if possible.**
BCST 115 Announcing and Performance ..................... 3.0
BCST 119 Digital Media Skills ................................... 3.0
BCST 141 Field Video Production .................................... 3.0
BCST 159 Digital Media Portfolio ................................... 1.0
JOUR 21 News Reporting and Writing .......................... 3.0

These courses are more advanced and should be taken the second semester if possible:
BCST 110 Introduction to Writing for Electronic Media .......................................................... 3.0
BCST 135 Audio for the Web ..................................... 1.0
BCST 136 Video for the Web ..................................... 1.0
BCST 158 Social Media for Professionals ....................... 3.0
JOUR 35 Internet Journalism ...................................... 3.0

Choose 2 units from the following internship courses:
BCST 160 College Internship .................................. 10.0-2.0
BCST 165 Industry Internship .................................. 10.0-2.0
Total: ............................................ 26.0
Sound Design Certificate

The Sound Design Certificate builds on the Foundations in Broadcast Electronic Arts Certificate with an emphasis in audio post production. 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 via hands-on courses utilizing the industry-standard equipment in audio-for-visual media production facilities and in locationsound. Students who complete this certificate are prepared for entry-level positions in facilities specializing in audio-for-video and film production, television, radio production, advertising, and theater.

Learning Outcomes

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

- Analyze visual media and assess the sound post-production needs, including dialog, sound-effects, and music.
- Collaborate in a group to plan, engineer, and perform Foley and ADR (Automated Dialog Recording) recording sessions, including spotting.
- Edit, sweeten, and place sync and ADR dialog, as well as Foley, library and created sound-effects in sync with picture.
- Operate a digital audio workstation to edit, signal process, sweeten, arrange and mix-down the D-M-E audio in sync to picture using a variety of surround sound formats.
- Display professionalism and effective application of workforce protocol and communication skills in the sound for television and film industry.

This is the second in a series of stackable certificates. Students must earn a Certificate of Achievement in Foundations in Broadcast Electronic Arts along with this certificate. Students must complete at least 9 units listed below at City College of San Francisco. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Sound Design

Course ................................................. Units
Core courses:
BCST 124A Pro Tools Editing Essentials ............... 2.0
BCST 124B Pro Tools Mixing with Plugins ............. 2.0
BCST 125A Beginning Sound Recording Studio ........ 5.0
BCST 126 Sound For Visual Media .................... 3.0
BCST 127A Surround Sound Mixing ................... 1.0

Choose two units from the following internship courses:
BCST 160 College Internship .......................... 1.0-2.0
BCST 165 Industry Internship .......................... 1.0-2.0
Total: .................................................. 15.0

Learning Outcomes

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

- Plan and execute the studio set-up for multi-track recording session with microphone and line level devices.
- Configure multi-track control room equipment to track and monitor a music recording session and then engineer the session.
- Plan, configure, and execute a multi-track mixdown session, including identifying and troubleshooting problems.
- Master final product for distribution on industry standard formats.
- Display professionalism and effective application of recording industry workforce protocol, communication skills, and behavior in the recording studio environment.

This is the second in a series of stackable certificates. Students must earn a Certificate of Achievement in Foundations in Broadcast Electronic Arts along with this certificate. Students must complete at least 10 units from the courses listed below at City College of San Francisco. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Sound Recording Arts

Course ................................................. Units
Core courses:
BCST 124A Pro Tools Editing Essentials ............... 2.0
BCST 124B Pro Tools Mixing with Plugins ............. 2.0
BCST 125A Beginning Sound Recording Studio ........ 5.0
BCST 125B Intermediate Sound Recording Studio ...... 5.0

Choose 2 units from the following course electives:
BCST 160 College Internship .......................... 1.0-2.0
BCST 165 Industry Internship .......................... 1.0-2.0
Total: .................................................. 16.0

Television Production Certificate

The Television Production Certificate builds on the Foundations in Broadcast Electronic Arts Certificate with an emphasis in television production aesthetics and techniques. This certificate provides intermediate video production skills including instruction in pre-production planning, audio and video production, program completion and distribution. Students completing this certificate program will be qualified for entry-level employment in video production for television, advertising, public relations, multimedia, education, music, theater, entrepreneurial projects and corporate media departments.

Learning Outcomes

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

- Plan and implement the aesthetic and technical elements of TV studio and video field production through the pre-production, production, and delivery stages.
- Work in a variety of areas within the context of a television studio and field production.
- Produce and direct a short video production.
- Display professionalism and effective application of workforce protocol and communication skills in the television and video production industry.

Courses Required for the Television Production Certificate

Course ................................................. Units
Core courses:
BCST 127B Digital Video Production ................. 2.0
BCST 127C Video Editing .............................. 2.0
BCST 127D Multi-camera TV Production ........... 2.0
BCST 127E Broadcast Production Planning .......... 2.0
BCST 127F Broadcast Production Techniques ...... 2.0

Choose 4 units from the following electives:
BCST 160 College Internship ......................... 1.0-2.0
BCST 165 Industry Internship ........................ 1.0-2.0
Total: .................................................. 16.0

Sound Recording Arts Certificate

The Sound Recording Arts Certificate builds on the Foundations in Broadcast Electronic Arts Certificate with an emphasis on the sound recording industry. Students learn recording techniques and how to operate the equipment used in recording commercial music. Courses include hands-on exposure to production processes such as tracking, overdubbing, mixing and mastering by participating in recording sessions. Students are prepared for entry-level positions at recording studios, sound reinforcement companies, mobile on-site music recording companies, radio production facilities, and audio post-production facilities including sound for video games.

Learning Outcomes

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

- Produce and direct a short video production.
- Display professionalism and effective application of workforce protocol and communication skills in the television and video production industry.
- Configure multi-track control room equipment to track and
- Master final product for distribution on industry standard formats.
- Display professionalism and effective application of recording industry workforce protocol, communication skills, and behavior in the recording studio environment.
This is the second in a series of stackable certificates. Students must earn a Certificate of Achievement in Foundations In Broadcast Electronic Media Arts along with this certificate.

Students must complete at least 4 courses listed below at City College of San Francisco.

All courses must have been taken within the last four years.

The minimum time for completion of this certificate is 2 semesters.

Completion time will vary based on student preparation and number of classes completed per semester.

### Courses Required for the Certificate of Achievement in Television Production

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 115 Announcing and Performance</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 140 Studio Video Production</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 141 Field Video Production</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following video editing courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 143A Digital Video Editing: Avid</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 144A Digital Video Editing: Premiere Pro</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following television production courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 148 HDTV Studio Production</td>
<td>4.0</td>
</tr>
<tr>
<td>BCST 149 HDTV Field Production</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Choose two units from the following internship options:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 160 College Internship</td>
<td>2.0</td>
</tr>
<tr>
<td>BCST 165 Industry Internship</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total: 18.0

#### Video Editing and Post Production Certificate

The Video Editing and Post Production certificate builds on the Foundations in Broadcast Electronic Arts Certificate with an emphasis in video post production and editing. This certificate provides instruction in basic video production, video editing, managing post-production tasks and distribution of video programs. Students completing this certificate program will be qualified 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 program, students will be able to:

- Plan and implement the aesthetic and technical elements of video programs through pre-production and post-production stages in the context of video editing and finishing.
- Produce content working in a variety of professional roles in the context of post-production.
- Apply a variety of video editing techniques related to story content and intent.
- Use color correction, audio finishing, and simple motion graphic techniques to effectively finish a video program.
- Display professionalism and effective application of workforce protocol and communication skills in the video editing and post production industry.

This is the second in a series of stackable certificates. Students must earn a Certificate of Achievement in Foundations In Broadcast Electronic Media Arts while earning this certificate.

Students must complete at least 4 courses listed below at City College of San Francisco.

All courses must have been taken within the last four years.

The minimum time for completion of this certificate is 3 semesters.

Completion time will vary based on student preparation and number of classes completed per semester.

### Courses Required for the Certificate of Achievement in Video Editing and Post Production

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 124A Pro Tools Editing Essentials</td>
<td>2.0</td>
</tr>
<tr>
<td>BCST 147 Advanced Video Editing</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Choose two of the following video editing courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 143A Digital Video Editing: Avid</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 143B Video Editing Finishing: Avid</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 144A Digital Video Editing: Premiere Pro</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 144B Video Editing Finishing: Premiere Pro</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following advanced courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 146 Video Motion Graphics</td>
<td>4.0</td>
</tr>
<tr>
<td>BCST 149 HDTV Field Production</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Choose 2 units from the following internship courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 160 College Internship</td>
<td>2.0</td>
</tr>
<tr>
<td>BCST 165 Industry Internship</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total: 18.0

#### 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-52.5

**Advise:** ENGL 93 or ENGL 95 or ENGL 88A or ENGL 88 or placement in ENGL 96 or ENGL 88B

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 103. Mass Media and Society (3)**

Lec-52.5

**Advise:** ENGL 93 or ENGL 95 or ENGL 88A or ENGL 88 or placement in ENGL 96 or ENGL 88B

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, 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. UC/CSU

**BCST 104. Race and Media (3)**

Lec-52.5

**Advise:** ENGL 93 or ENGL 95 or ENGL 88A or ENGL 88 or placement in ENGL 96 or ENGL 88B

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, Internet and emerging media. Socio-historical-legal analysis of ways in which affected
130  Broadcast Electronic Media Arts

groups have responded to these images. UC/CSU

BCST 105. Gender & Mass Media (3)
   Lec-52.5
   Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or Placement in ENGL 96 or ENGL 88B
   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 individuals of each gender. An update on opportunities for women in each of the mainstream and alternative media industries. UC/CSU
   Offered on occasion

BCST 110. Introduction to Writing for Electronic Media (3)
   Lec-52.5
   Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or Placement in ENGL 96 or ENGL 88B
   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 non-fiction and 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 115. Announcing and Performance (3)
   Lec-52.5
   Advise: BCST 120
   Introduction to basic theory and practice in interpretation of copy, pronunciation, and announcer's duties for radio, television, cable and webcast. Study and practice of oral skills for effective communication of meaning in scripts, newscasts and commercial messages with emphasis on development of voice, articulation and pronunciation. CSU

BCST 119. Digital Media Skills (3)
   Lec-52.5, Lab-17.5
   A hands-on overview of computer operations, equipment common to digital video and audio production, industry standard software, media storage, and manipulation of video and audio media with proper management of files. CSU

BCST 120. Audio Production (4)
   Lec-52.5, Lab-70
   Advise: BCST 119
   Introduction to the theory and practice of audio production and recording techniques. Fundamentals of sound design, aesthetics, microphones, signal processing, and digital recording. Hands-on experience completing laboratory projects. Students will gain basic knowledge of applied audio concepts, production workflow, equipment functions, audio editing software and career possibilities. CSU

BCST 124A. Pro Tools Editing Essentials (2)
   Lec-35
   An introductory short-course to provide foundational skills necessary to edit audio using Digital Audio Workstations (DAWs) with a focus on Avid Pro Tools software. Overview of industry standard digital audio software and hardware. CSU
   Formerly BCST 124 - Digital Audio Production

BCST 124B. Pro Tools Mixing with Plugins (2)
   Lec-35
   Advise: Completion of or concurrent enrollment in: BCST 124A
   This beginning level course follows the 124A introduction to Pro Tools editing and further develops skills the students need to properly use digital signal processors in the final stage of mixing a multitrack digital project. CSU

BCST 125A. Beginning Sound Recording Studio (5)
   Lec-52.5, Lab-105
   Prereq.: BCST 120
   Advise: BCST 119 and 124
   This course introduces students to the analog and digital multi-track techniques used in 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, and mixing will be examined using tech-enhanced materials. CSU

BCST 125B. Intermediate Sound Recording Studio (5)
   Lec-52.5, Lab-105
   Prereq.: BCST 125A
   Advise: BCST 124
   Project-based course designed as a continuation of BCST 125A for intermediate-level students furthering their skills in the various stages of professional sound recording and mixing. Practice in the development of workflow and etiquette required in a professional studio environment will be further developed using tech-enhanced materials. CSU

BCST 126. Sound For Visual Media (3)
   Lec-35, Lab-52.5, field trips
   Prereq.: BCST 120; BCST 119
   Advise: BCST 141; BCST 140
   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
   Offered Fall semesters

BCST 127A. Surround Sound Mixing (1)
   Lec-12, Lab-32, field trips
   Prereq.: BCST 126 or Demonstration of BCST 126 exit skills
   Offered Fall semesters
   Advise: CNIT 106
   Project-intensive course learning and practicing the skills required for mixing audio in a surround sound environment. Students learn to apply multi-channel audio plug-ins and the techniques used to mix to multiple speakers for music mixes and sound-for-visual-media projects. CSU

BCST 127B. Interconnected Audio Systems (1)
   Lec-17.5, Lab-17.5, field trips
   Prereq.: BCST 128 or Demonstration of exit skills
   Advise: CNIT 106
   Project-oriented, hands-on introduction to build, manage and maintain interconnected audio systems using WiFi, Bluetooth, Audio over Ethernet (AoE) and AoIP standards. CSU
   This course will be offered in Spring semesters only.

BCST 128. Sound Reinforcement (3)
   Lec-35, Lab-52.5, field trips
   Prereq.: BCST 120
   Live sound history, theory, technology, and craft skills with an emphasis on 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
   Offered Spring semesters
BCST 129. Sound For Games and Interactive Media (3)
Lec-52.5, Lab-17.5, field trips
Aesthetics and hands-on experience in sound design for interactive media. This course will focus on placing rich, captivating layers of music, dialog, and ambient backgrounds through middleware to enhance the experience of the video game player. The unique workflow and implementation of sound for games will also be explored. CSU

Offered Fall semesters

BCST 135. Audio for the Web (1)
Lec-15, Lab-9
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-15, Lab-9
Prereq.: Completion of or concurrent enrollment in BCST 119
Advise: BCST 141 (FORMERLY 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-35, Lab-70, field trips
Advise: BCST 119
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. Students acquire knowledge and skills by creating studio-based video programming. CSU

Can be applied to CSU SFSU BECA PROGRAM AS REPLACEMENT FOR BECA 240

BCST 141. Field Video Production (3)
Lec-35, Lab-70, field trips
Advise: Completion of or concurrent enrollment in BCST 119
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, gaining skills and familiarity in video production processes, operation of video production equipment and visual storytelling. CSU

FORMERLY BCST 145

BCST 143. Digital Video Editing-AVID (4)
Lec-52.5, Lab-52.5
Prereq.: BCST 119; and BCST 140 or 141 (FORMERLY BCST 145)
Digital video editing for video and TV using industry standard AVID Media Composer on a Macintosh platform. Organizing a video edit, digitizing video, creating an EDL, editing theory, principles and aesthetics, titling and 2D/3D effects and output of final program. Students complete several short video editing projects. CSU

Offered Spring semesters

BCST 143A. Digital Video Editing: Avid (3)
Lec-52.5, Lab-17.5, field trips
Prereq.: BCST 119 or Demonstration of Exit Skills
Advise: BCST 140 or BCST 141
An introduction to digital video editing for television, video, and multimedia programs using primarily Avid Media Composer and 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 143B. Video Editing Finishing: Avid (3)
Lec-52.5, Lab-17.5, field trips
Prereq.: BCST 143A or Demonstration of Exit Skills
Advise: BCST 140 or BCST 141
Digital video finishing for television, video, and multimedia programs using primarily Avid Media Composer and the Apple Macintosh operating system. This hands-on class focuses on the operation, technology, techniques, and aesthetic process of finishing video content with color correction and grading, visual effects and audio sweetening using external applications and techniques. CSU

BCST 144. Digital Video Editing: FCP & Premiere (4)
Lec-52.5, Lab-52.5, field trips
Prereq.: BCST 119; and BCST 140 or 141 or CINE 24
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

Offered Fall semesters

BCST 144A. Digital Video Editing: Premiere Pro (3)
Lec-52.5, Lab-17.5, field trips
Prereq.: BCST 119 or Demonstration of Exit Skills
Advise: BCST 140 or BCST 141
An introduction to digital video editing for television, video, and multimedia programs using primarily Adobe Premiere Pro and 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 144B. Video Editing Finishing: Premiere Pro (3)
Lec-52.5, Lab-17.5, field trips
Prereq.: BCST 144A or Demonstration of Exit Skills
Advise: BCST 140 or BCST 141
Digital video finishing for television, video, and multimedia programs using primarily Adobe Premiere Pro and the Apple Macintosh operating system. This hands-on class focuses on the operation, technology, techniques, and aesthetic process of finishing video content with color correction and grading, visual effects and audio sweetening using external applications and techniques. CSU

BCST 146. Video Motion Graphics (4)
Lec-52.5, Lab-52.5
Prereq.: BCST 119 or VMD 105; and BCST 143 or 144 or VMD 104 or 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. Motion graphic animations and video effects are conceived, created and integrated with video projects in studio and laboratory settings. CSU

Offered Spring semesters

BCST 147. Advanced Video Editing (4)
Lec-52.5, Lab-52.5, field trips
Prereq.: BCST 143 or BCST 144 or CINE 56 or Demonstration of Exit Skills
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 in order to gain solid skills and work examples of current video technology as related to processes, storytelling, formats, visual effects and hardware. CSU

**Course applicability to BEMA professional certificates:**

Certificate of Accomplishment in Video Post-Production

Offered on occasion

BCST 148. HDTV Studio Production (4)

Lec-52.5, Lab-70, field trips

Prereq.: BCST 140 or equivalent skills; Completion of or concurrent enrollment in: BCST 119 or equivalent skills

Advise: BCST 110; BCST 115; BCST 126; BCST 141 and BCST 143 or BCST 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. CSU

Offered Spring semesters

BCST 149. HDTV Field Production (4)

Lec-52.5, Lab-70, field trips

Prereq.: BCST 141 or equivalent skills; Completion of or concurrent enrollment in: BCST 119 or equivalent skills

Advise: BCST 110; BCST 126; BCST 140 and BCST 143 or BCST 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 Education Access Television Channel 27 and distribution on the internet. CSU

Offered Spring semesters

BCST 150. Special Project (2)

Lab-105

P/NP available

Prereq.: BCST 125A or BCST 126 or BCST 128 or BCST 127A or BCST 143A or BCST 144A or BCST 146 or BCST 147

Students apply theory and skills acquired in electronic media classes to an independent electronic media project acceptable to both student and instructor. Permission of instructor is required to register. CSU

Instructor approval of independent study proposal required

BCST 158. Social Media for Professionals (3)

Lec-52.5

Advise: CNIT 129

This course teaches how to use current social media tools such as Facebook, Twitter, Instagram, LinkedIn, and YouTube to develop, integrate and leverage social networks. Learn how to create professional brands, integrate social media into journalism and social justice, and will also critique current social media practices. Students will create a professional social media platform. CSU

BCST 159. Digital Media Portfolio (1)

Lec-12, Lab-24, field trips

P/NP available

Prereq.: Completion of or concurrent enrollment in BCST 119

Students develop an online portfolio for gaining entry-level work in the Entertainment and Media industries. CSU

BCST 160. College Internship (1-8)

Work-60.00-600.00

P/NP available

Coreq.: Enrollment in minimum of 7 units of course work (including this course) and consent of instructor.

Repeat max. 8.00 units

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 Public Information. Resume writing, networking, communication and interview skills. CSU

Formerly BCST 160A

BCST 165. Industry Internship (1-8)

Work-60.00-600.00

P/NP available

Coreq.: Enrollment in minimum of 7 units of course work (including this course) and consent of instructor.

Repeat max. 8.00 units

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

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**Business**

Office: Cloud 105
Phone Number: (415) 239-3203
Web Site: www.ccsf.edu/business

**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. The Business Department offers the Associate in Science in Business Administration for Transfer. 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
- Computer Accounting Credit Certificate
- Noncredit Certificates:
  - Accounting Assistant
  - Computerized Accounting Specialist
  - QuickBooks & Spreadsheets for Accounting

Administrative Support/Office Technology
- Administrative Support Major
- Credit Certificates:
  - Construction Office Administration
  - Office Technology
  - Office Administration Specialist
- Noncredit Certificates:
  - Customer Service
  - Basic Business Skills in the Medical Office
  - Basic Computer Concepts
  - Business Office Support Skills
  - Business Website Builders
  - Cloud-Based Electronic Communication
  - Computer Applications for Business
  - Electronic Publishing
  - Excel Specialist
  - Microsoft Office Specialist

Finance
- Finance Major
- Finance Credit Certificate

General Business
- Business Administration Major for Transfer
- General Business Major
- General Business Credit 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:
  - Green and Sustainable Travel
  - Travel and Tourism
  - Travel and Tourism Management
  - Travel and Tourism: Destination Specialist Credit Certificate

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 this program, 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

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.
Courses Required for the Major in Accounting

Course ................................................. Units
First Semester:
ACCT 1 Financial Accounting ....................... 5.0
MABS 60 Introduction to Computer Applications for Business ........................................ 3.0
BSMA 68 Mathematics of Business ................... 3.0
Second Semester:
ACCT 2 Managerial Accounting ...................... 5.0
BSEN 74 Written Business Communication .......... 3.0
ACCT 59 Federal Income Tax .......................... 3.0
MABS 101 Spreadsheets for Business/Excel ......... 3.0
Third Semester
BSL 1 Business Law I .................................... 3.0
ACCT 31 Intermediate Accounting .................... 5.0
ACCT 55 Cost Accounting ............................... 3.0
ACCT 53 Accounting with Sage 50 ..................... 3.0
ACCT 59B California Income Tax ....................... 1.0
Fourth Semester
BSL 2 Business Law 2 .................................... 3.0
ACCT 52 Intermediate Accounting .................... 5.0
ACCT 54 Auditing ........................................ 3.0
CRER 62 Successful Job Search Techniques .......... 1.0
Recommended additional coursework:
BSEN 76 Business and Technical Report Writing .......... 3.0
SMBS 135 Ownership and Operation of a Small Business ................................. 3.0
Total: .................................................. 52.0

Computer Accounting Certificate

Prepares students to enter the job market in positions that use a computerized accounting system for Accounts Receivable, Accounts Payable, Payroll, General Ledger, and other functions. Admission: Enrollment is open to all interested students.

Learning Outcomes

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

- Analyze and record transactions following the appropriate accounting guidelines.
- Design, set up and maintain an accounting system that utilizes accounting and business software.
- Generate and analyze computerized accounting reports, financial statements, and payroll reports.
- Identify and plan for computer accounting employment options appropriate to one's skills.

Students may obtain the Certificate of Achievement in Computer Accounting by completing each of the following courses with a final grade of “C” or higher.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Certificate of Achievement in Computer Accounting

Course ................................................. Units
Required courses:
ACCT 53 Accounting with Sage 50 ..................... 3.0
ACCT 57 Accounting with QuickBooks ................ 3.0
MABS 60 Introduction to Computer Applications for Business ................................. 3.0
MABS 101 Spreadsheets for Business/Excel .......... 3.0
BSMA 68 Mathematics of Business ................... 3.0
CRER 62 Successful Job Search Techniques .......... 1.0

Choose one of the following accounting courses:
ACCT 10 Introduction to Accounting .................. 5.0
ACCT 1 Financial Accounting ........................... 5.0
Total: .................................................. 21.0

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. Students learn to perform a variety of financial, customer service, recordkeeping and accounting office support duties. The student builds soft skills in customer service and communication with applicable computer skills.

Learning Outcomes

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

- Apply standard business English to well written employment and business documents.
- Describe accounting principles and concepts
- Describe basic recordkeeping, payroll theory, and procedures, including withholding and tax reporting.
- Use accounting computer software to create and maintain financial statements.
- Explain customer service concepts and effective customer service practices.

Entrance Requirements. Review Procedures for Completing a Noncredit Business Program Certificate; review course advisories; and maintain a business noncredit educational plan current at all times.


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.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Noncredit Certificate in Accounting Assistant

Course .................................................. Hours
Choose one of the following basic computer literacy courses:
COMP 9245 Computer Literacy Basic Level .................. 30.0
COMP 9905 Intro to Windows for MS Office Applications ........................................ 45.0
Core courses:
BOSS 4500 Business English I ........................... 45.0
BOSS 4501 Business English II .......................... 45.0
BOSS 4510 Business Communications .................. 45.0
BOSS 3502 Customer Service Principles & Soft Skills .................. 45.0
COMP 9900 Microsoft Excel for Business I .............. 45.0
ACBO 9216 Recordkeeping for the Business Office .... 45.0
COMP 9932 Excel for Accounting Principles ............ 45.0
ACBO 9210 Income Tax Preparation ....................... 45.0
BOSS 5500 Keyboarding for Computers .................. 45.0
BOSS 5506 Computer Keyboarding ........................ 45.0
The Numeric Keypad ..................................... 15.0
COMP 9901 Microsoft Access for Business I ............. 45.0
COMP 9921 The Internet and Social Customer Service .................................. 45.0
Choose one of the following accounting courses or course combinations:
ACBO 9201 Accounting I Proprietorship and Partnership .................................. 90.0
ACBO 9206 Basic Accounting Concepts I ............... 45.0
and ACBO 9207 Basic Accounting Concepts II ....... 45.0
Choose one of the following QuickBooks courses or course combinations:
ACBO 9205 Quickbooks Complete ...................... 90.0
ACBO 9208 QuickBooks: Level 1 ......................... 45.0
and ACBO 9209 QuickBooks: Level 2 .................. 45.0
Choose one of the following Job Preparation/Skills courses:
BOSS 3500 Job Preparation ................................ 45.0
CRER 1062 Job Search Skills ............................ 15.0
Total: ......................................... .735.0 – 780.0

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.

Learning Outcomes

Upon completion of this program, 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.

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.


Eligibility for noncredit ESL Level 5/6; typing: 25 net wpm.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in Computerized Accounting Specialist

Course .................................................. Hours
Core courses:
COMP 9857 MS Office Business Applications w/Simulated Projects ........................................ 90.0
COMP 9904 Microsoft Excel for Business II ........... 45.0
COMP 9932 Excel for Accounting Principles .......... 45.0
COMP 9928 PowerPoint for Business .................. 45.0

BOSS 4500 Business English I .......................... 45.0
BOSS 4501 Business English II .......................... 45.0
BOSS 4510 Business Communications .................. 45.0
BOSS 5500 Keyboarding for Computers ................. 45.0
Choose one of the following accounting course combinations:
ACBO 9201 Accounting I Proprietorship and Partnership .................................. 90.0
ACBO 9202 Accounting II Corporate .................... 90.0
ACBO 9206 Basic Accounting Concepts I ............... 45.0
and ACBO 9207 Basic Accounting Concepts II ....... 45.0
and ACBO 9208 QuickBooks: Level 1 .................. 45.0
and ACBO 9209 QuickBooks: Level 2 .................. 45.0
Choose one of the following QuickBooks courses or course combinations:
ACBO 9205 Quickbooks Complete ...................... 90.0
ACBO 9208 QuickBooks: Level 1 ......................... 45.0
and ACBO 9209 QuickBooks: Level 2 .................. 45.0
Choose one of the following Job Preparation/Skills courses:
BOSS 3500 Job Preparation ................................ 45.0
CRER 1062 Job Search Skills ............................ 15.0
Total: ......................................... 690.0 – 720.0

QuickBooks & Spreadsheets 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 using Microsoft 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 this program, students will be able to:

- Identify the steps in the accounting cycle and use spreadsheets as it relates to worksheet manipulation and accounting principles.
- Use technology as a tool to complete essential business office tasks, including proper keyboarding and 10-key by touch skills.
- Prepare and interpret simple financial statement for businesses.

Advisory Entrance Requirements. Completion of ESLN 3600; COMP 9905 or COMP 9245

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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in QuickBooks & Spreadsheets for Accounting

Course .................................................. Hours
Required courses:
BOSS 5500 Keyboarding for Computers ................. 45.0
BOSS 5506 Computer Keyboarding:
The Numeric Keypad .................................... 15.0
COMP 9900 Microsoft Excel for Business I ............. 45.0
COMP 9904 Microsoft Excel for Business II ............ 45.0
COMP 9932 Excel for Accounting Principles .......... 45.0
Choose one of the following Accounting courses or course combinations:
ACBO 9201 Accounting I Proprietorship .......................... 90.0
ACBO 9206 Basic Accounting Concepts I ........................ 45.0
ACBO 9207 Basic Accounting Concepts II ...................... 45.0
Choose one of the following Quickbooks courses or course combinations:
ACBO 9205 Quickbooks Complete ................................. 90.0
ACBO 9208 QuickBooks: Level 1 ................................... 45.0
ACBO 9209 QuickBooks: Level 2 ................................... 45.0
Total: ....................................................................... 375.0

Administrative Support/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

Upon completion of this program, 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

*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

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Courses Required for the Major in Administrative Support

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester required course:</td>
<td></td>
</tr>
<tr>
<td>BSEN 70 Grammar and Writing Essentials for Business</td>
<td>5.0</td>
</tr>
<tr>
<td>First Semester choose one of the following keyboard courses:</td>
<td></td>
</tr>
<tr>
<td>MABS 30 Computer Keyboarding</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 35 Speedbuilding I: Keyboarding</td>
<td>1.5</td>
</tr>
<tr>
<td>Second Semester required courses:</td>
<td></td>
</tr>
<tr>
<td>MABS 38 Document Production Using Microsoft Word</td>
<td>3.0</td>
</tr>
<tr>
<td>BSEN 74 Written Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>BSMA 68 Mathematics of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Third Semester required courses:</td>
<td></td>
</tr>
<tr>
<td>MABS 391 Word Processing/Microsoft Word</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Business/Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>Third Semester choose one of these courses:</td>
<td></td>
</tr>
<tr>
<td>CMST 6 Workplace Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 26 Applied Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Fourth Semester required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MABS 67 Database for Business/Microsoft Access</td>
<td>3.0</td>
</tr>
<tr>
<td>BSEN 76 Business and Technical Report Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>CRER 62 Successful Job Search Techniques</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Fourth Semester choose one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MABS 202 PowerPoint Presentations</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 406 Developing Websites Dreamweaver</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 101 Operating Systems I Windows</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 145 Computer Marketing Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>34.5 – 36.0</td>
</tr>
</tbody>
</table>

Construction Office Administration Certificate

The Certificate of Accomplishment in Construction Office Administration is a training program for students interested in occupations in the construction industry such as front office support, construction administrative assistant, office coordinator, and project coordinator. Student must complete each course with a grade of C or higher. Where applicable, grades of “Pass” may be used.

Learning Outcomes

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

• Compose clear, concise, courteous, well-organized business messages.
• Compare and contrast the roles and responsibilities of construction project participants.
• Differentiate among methods of scheduling and relate their appropriate use to the different phases of the construction process.
• Demonstrate competency in business software applications (Word processing, spreadsheet, presentation, database, email and cloud computing services).
• Create professional business documents, spreadsheets, presentations, emails, and calendars.
• Determine the appropriate function to solve everyday business problems using spreadsheet applications.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Certificate of Accomplishment in Construction Office Administration

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required additional courses:</td>
<td></td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 62 Computer Applications for Business on Mac</td>
<td>3.0</td>
</tr>
<tr>
<td>Required additional courses:</td>
<td></td>
</tr>
<tr>
<td>CM 10 Introduction to Construction Management</td>
<td>1.0</td>
</tr>
<tr>
<td>CM 100 Fundamentals of Construction Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Business/Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>BSEN 74 Written Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>13.0</td>
</tr>
</tbody>
</table>

Office Technology Certificate

The certificate curriculum is 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
Upon completion of this program, 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

*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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Office Technology
Course .................................................. Units
First Semester: required courses:
BSEN 70 Grammar and Writing Essentials for Business 5.0
CRER 62 Successful Job Search Techniques .............. 1.0
First Semester: choose one of these keyboarding courses:
MABS 30 Computer Keyboarding ......................... 3.0
MABS 35 SpeedBuilding I: Keyboarding ................. 1.5
Second Semester: required courses:
BSEN 74 Written Business Communication .............. 3.0
MABS 101 Spreadsheets for Business/Excel .............. 3.0
Second Semester: choose one of these Microsoft Word options:
MABS 38 Document Production Using Microsoft Word 3.0
MABS 39I Word Processing/Microsoft Word ............. 3.0
Second Semester: choose one of these two options:
CMST 6 Workplace Communication ..................... 3.0
PSYC 26 Applied Psychology ................................ 3.0
Total: .................................................................. 19.5 – 21.0

Office Administration Specialist Certificate
The Certificate of Accomplishment in Office Administration Specialist is designed for students re-entering the workforce or continuing their education. This program incorporates hands-on, in-depth training of current software applications and soft skills such as communication, decision making and team building. Students completing this certificate program will be qualified for entry-level business office and administrative support positions.

Learning Outcomes
Upon completion of this program, students will be able to:

- Use business software applications to complete tasks such as word processing, spreadsheet, presentation, database, email, and cloud computing services.
- Solve business problems using appropriate functions.
- Prepare written materials and draft business documents
- Build and maintain a business website

The minimum time for completion of this certificate is one semester. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Certificate of Accomplishment in Office Administration Specialist
Course .................................................. Units
Required core courses:
BSEN 74 Written Business Communication .............. 3.0
MABS 101 Spreadsheets for Business/Excel .............. 3.0
MABS 406 Developing Websites Dreamweaver .......... 3.0
Choose one of the following computer applications for business courses:
MABS 60 Introduction to Computer Applications for Business ........................................ 3.0
MABS 62 Computer Applications for Business on Mac .... 3.0
Total: .................................................................. 12.0

Customer Service Noncredit Certificate
Program Goal. To develop written, oral communication, and job preparation skills as well as business skills to prepare students to work in a business environment.

Learning Outcomes
Upon completion of this program, students will be able to:

- Define customer service, create customer loyalty, identify needs and wants of customers, address customer complaints, solve customer problems
- Review records of customer interactions and transactions and record details of inquiries, complaints, and comments, as well as take actions.
- Use interactive forms, practice data entry, reorganize files and folders, develop naming conventions, and create electronic documents
- Apply proper techniques for keyboarding using computers

Exit Requirements. Successful completion of all courses with a passing grade of “C” or higher. Minimum attendance of 80% in all courses. Typing 30+ net wpm in a timed test with 90% accuracy. Completion of certificate coursework within one or two consecutive semesters.

Advisory Entrance Requirements. ESLN 3700 or TRST 2321.

The minimum time for completion of this certificate is two semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Noncredit Certificate in Customer Service
Course .................................................. Hours
Required courses:
BOSS 3502 Customer Service Principles & Soft Skills ... 45.0
COMP 9921 The Internet and Social
Customer Service ........................................ 45.0
BOSS 4500 Business English I .......................... 45.0
BOSS 4510 Business Communications ................... 45.0
BOSS 5509 Office Procedures for the 21st Century .... 45.0
BOSS 5500 Keyboarding for Computers ............... 45.0
BOSS 3500 Job Preparation .............................. 45.0
Total: .................................................................. 315.0
Basic Business Skills in 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, simple medical terminology. Students will also learn MediSoft an office management software system that streamlines scheduling and billing procedures.

Program Advisories. Completion of noncredit ESLN 3700 or TRST 2322, COMP 9889, and WOPR 9486 or equivalent; type 25 wpm.

Learning Outcomes

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

- Quality for entry-level position in a medical office
- Keyboard a minimum of 35 net words per minute (wpm) with no more than 10% error rate
- Use technology (MediSoft, Microsoft Word, Excel, and PowerPoint) as a tool to complete essential business office tasks
- Prepare and interpret simple business statements for the medical office
- Apply standard business English to oral and written communications. Including grammar, punctuation. Mechanics, vocabulary, style, and usage

Exit Requirements. Successful completion of all courses with a passing grade of C or higher. Type 35 net wpm with no more than 10% error rate (time test administered by keyboarding instructor and submitted with petition). Minimum attendance of 80% in all courses. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in Basic Business Skills in the Medical Office

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 4500 Business English I</td>
<td>45.0</td>
</tr>
<tr>
<td>BOSS 4510 Business Communications</td>
<td>45.0</td>
</tr>
<tr>
<td>BOSS 5500 Keyboarding for Computers</td>
<td>45.0</td>
</tr>
<tr>
<td>BOSS 5509 Office Procedures for the 21st Century</td>
<td>45.0</td>
</tr>
<tr>
<td>BUSG 9901 Business Vocabulary</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9900 Microsoft Excel for Business I</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9905 Intro to Windows for MS</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9908 Computer &amp; Web-based Applications*</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9928 PowerPoint for Business</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9936 Outlook for Office Support</td>
<td>45.0</td>
</tr>
<tr>
<td>WOPR 9995 Microsoft Word for Business I</td>
<td>45.0</td>
</tr>
</tbody>
</table>

* Students must complete 6 sections of COMP 9908 (MediSoft Level 1, Level 2, Level 3, Level 4, Level 5, and Level 6).

Total: 450.0

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.

Program Advisory. Completion of noncredit ESL levels 5/6 or placement in ESL levels 7/8

Learning Outcomes

Upon completion of this program, 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

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in Basic Computer Concepts

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 5500 Keyboarding for Computers</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9905 Intro to Windows for MS</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9928 PowerPoint for Business</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9992! The Internet and Social Customer Service</td>
<td>45.0</td>
</tr>
</tbody>
</table>

Total: 135.0

Business Office Support Skills Noncredit Certificate

Program Goal. Prepare students for entry-level business office positions. Topics to be covered include skills in Microsoft Office applications (Word, Excel, Access, PowerPoint, Outlook and OneNote), keyboarding, record keeping 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; Dispatch Representative; Office Support; Data Entry Clerk; Legal Records Clerk; Cashier; Entry-level Clerical Support; Financial Teller; Front Desk.

Learning Outcomes

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

- Demonstrate accurate keyboard input at a minimum of 35 words per minute and numeric data entry at 175 strokes per minute
- 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

Exit Requirements. Successful completion of all courses with a grade of C or higher. Typing 35+ net wpm with no more than a 10% error rate.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in Business Office Support Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAPS 1111 Orientation to Noncredit Certificate Programs</td>
<td>10.0</td>
</tr>
<tr>
<td>BOSS 5509 Office Procedures for the 21st Century</td>
<td>45.0</td>
</tr>
<tr>
<td>BOSS 4500 Business English I</td>
<td>45.0</td>
</tr>
<tr>
<td>BOSS 4501 Business English II</td>
<td>45.0</td>
</tr>
<tr>
<td>BOSS 4510 Business Communications</td>
<td>45.0</td>
</tr>
<tr>
<td>BOSS 5501 Keyboarding: Skill Development*</td>
<td>90.0</td>
</tr>
</tbody>
</table>
WOPR 9995 Microsoft Word for Business I .......... 45.0
WOPR 9996 Microsoft Word for Business II .......... 45.0
COMP 9900 Microsoft Excel for Business I .......... 45.0
COMP 9904 Microsoft Excel for Business II .......... 45.0
COMP 9901 Microsoft Access for Business I .......... 45.0
COMP 9910 Microsoft Access for Business II .......... 45.0
COMP 9928 PowerPoint for Business .................. 45.0
COMP 9936 Outlook for Office Support ............... 45.0
COMP 9977 Microsoft OneNote ....................... 45.0
* Students may satisfy this requirement by passing an examination in keyboarding by typing 35 or more words per minute.

Total: ........................................... 685.0

Business Website Builders Noncredit Certificate

This certificate is designed to help students develop web builder knowledge and digital image editing and cloud productivity skills that can be applied to an entry- or mid-level administrative office position.

Learning Outcomes

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

- Use a variety of business software for digital image editing, proofing, presentation, webpage optimization, and electronic publications
- Examine and edit text by correcting simple spelling, punctuation, and grammar mistakes.
- Create and provide basic proofing of electronic interactive publications for individual, private, and/or non-profit business offices
- Select and use webpage development software to create individual, private, and non-profit business websites

Advisory Entrance Requirements. ESLN 3700 or TRST 2321; and COMP 9905

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Noncredit Certificate in Business Website Builders

Course ............................................. Hours
Required courses:
BOSS 4500 Business English I ......................... 45.0
BOSS 4501 Business English II ......................... 45.0
COMP 9921 The Internet and Social Customer Service . 45.0
COMP 9944 Acrobat for Bus/Office .................... 45.0
COMP 9959 Photoshop Elements ....................... 45.0
COMP 9967 Google Apps for Business I ............... 45.0
COMP 9968 Google Apps for Business II .............. 45.0
COMP 9997 Building Individual Websites ............. 45.0
COMP 9918 Building Business Web Sites ............. 45.0

Total: ........................................... 450.0

Cloud-Based Electronic Communication Noncredit Certificate

Cloud-based Electronic Communication develops administrative and support skills in Office and Administrative Occupations. The program teaches active listening, reading comprehension, critical thinking, speaking, writing, clerical skills, intermediate computer literacy, problem-solving, organizing, planning and prioritizing work, and job preparation.

Learning Outcomes

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

- Apply standard business English in electronic communication.
- Use cloud-based business applications to complete common business tasks.
- Create well-written employment documents.
- Keyboard a minimum of 35 net words a minute.

Advisory Entrance Requirements. Completion of noncredit ESLN 3800; COMP 9905 or COMP 9245

Exit Requirements. Successful completion of all courses with a passing grade of “C” or better; typing 35 wpm in a timed test with 90% accuracy; minimum attendance of 80% in all classes required; and completion of certificate coursework within two years. The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Noncredit Certificate in Cloud-Based Electronic Communication

Course ............................................. Hours
Required courses
COMP 9921 The Internet and Social Customer Service . 45.0
BOSS 4500 Business English I ......................... 45.0
BOSS 4501 Business English II ......................... 45.0
BOSS 4510 Business Communications .................. 45.0
BOSS 5501 Keyboarding: Skill Development ........... 90.0
COMP 9944 Acrobat for Bus/Office ..................... 45.0
COMP 9967 Google Apps for Business I ............... 45.0
COMP 9968 Google Apps for Business II .............. 45.0
COMP 9997 Building Individual Websites ............. 45.0
COMP 9917 Building Business Web Sites ............. 45.0
COMP 9908 Computer & Web-based Applications ..... 45.0

Select one job preparation course
BOSS 3500 Job Preparation ............................. 45.0
CRER 1062 Job Search Skills ........................... 15.0

Total: ........................................... 690.0 – 720.0

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

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

- Keyboarding 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.
- Utilize a variety of applications software including word processing, spreadsheet, database, digital photo-editing.
- Apply computer skills to complete business tasks.

**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.

**Financial Assistance.** The Computer Applications for Business certificate is eligible for financial assistance. Please consult with a counselor for further information.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Noncredit Certificate in Computer Applications for Business**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 5501 Keyboarding: Skill Development</td>
<td>90.0</td>
</tr>
<tr>
<td>BOSS 5509 Office Procedures for the 21st Century</td>
<td>45.0</td>
</tr>
<tr>
<td>BOSS 4510 Business Communications</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9245 Computer Literacy Basic Level</td>
<td>30.0</td>
</tr>
<tr>
<td>COMP 9964 Microsoft Outlook Essentials</td>
<td>15.0</td>
</tr>
<tr>
<td>COMP 9500 Business English I</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9501 Business English II</td>
<td>45.0</td>
</tr>
</tbody>
</table>

Choose one of the following job preparation courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 3500 Job Preparation</td>
<td>45.0</td>
</tr>
<tr>
<td>CRER 1062 Job Search Skills</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Choose five courses from one of the following clusters:

**Cluster A: Business Productivity (Office Applications)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9967 Google Apps for Business I</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9968 Google Apps for Business II</td>
<td>45.0</td>
</tr>
<tr>
<td>WOPR 9995 Microsoft Word for Business I</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9900 Microsoft Excel for Business I</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9904 Microsoft Excel for Business II</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9901 Microsoft Access for Business I</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9910 Microsoft Access for Business II</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9938 Publisher for Business Desktop Publishing</td>
<td>45.0</td>
</tr>
</tbody>
</table>

**Cluster B: Business Productivity (Dynamic Media)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9928 PowerPoint for Business</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9944 Acrobat for Bus/Office</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9959 Photoshop Elements</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9922 Flash for Bus/Office Presentations</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9899 Electronic Publishing for Business I</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9936 Outlook for Office Support</td>
<td>45.0</td>
</tr>
</tbody>
</table>

**Cluster C: Business Productivity (Web Page Development)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9933 Building Business Web Pages with Adobe Web Standard-Level I</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9934 Building Business Web Pages with Adobe Web Standard-Level II</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9935 Business Web Graphics</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9919 Using Dreamweaver for Basic Business Web Pages</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9920 Using SharePoint Designer (Expression Web) for Basic Web Pages</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9922 Flash for Bus/Office Presentations</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9944 Acrobat for Bus/Office</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9959 Photoshop Elements</td>
<td>45.0</td>
</tr>
</tbody>
</table>

**Electronic Publishing Noncredit Certificate**

Students create and develop interactive documents, newsletters, and websites, support document and content management systems, and create cloud-based archives. Through these activities, students develop electronic publishing skills for entry- or mid-level administrative support and related positions in industries such as education, government, and administrative support positions.

**Learning Outcomes**

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

- Describe the major components of desktop software applications.
- Apply appropriate tools and options to create electronic publications.
- Create web optimized images and an electronic portfolio.

**Advisory Entrance Requirements.** Completion of ESLN 3800; COMP 9905 or COMP 9245

**Exit Requirements.** Successful completion of all courses with a passing grade of “C” or better. Minimum attendance of 80% in all classes is required.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

**Courses Required for the Noncredit Certificate in Electronic Publishing**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9959 Photoshop Elements</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9944 Acrobat for Bus/Office</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9938 Publisher for Business Desktop Publishing</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9936 Outlook for Office Support</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9907 Electronic Publishing for Business II</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9905 Electronic Publishing for Business I</td>
<td>45.0</td>
</tr>
<tr>
<td>Total:</td>
<td>555.0 – 585.0</td>
</tr>
</tbody>
</table>

**Excel Specialist Noncredit Certificate**

In this program, Microsoft Excel skills are developed and practiced such that students gain a solid competency in Excel and are capable of passing employment testing in this area.

**Advisory Entrance Requirements.** Eligibility for noncredit ESL levels 5/6

**Learning Outcomes**

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

- Perform simple to 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of units or classes completed per semester.
Courses Required for the Noncredit Certificate in Excel Specialist
Course .................................................. Hours
Required courses:
BOSS 2500 Business Math with Spreadsheets I ........ 45.0
COMP 9932 Excel for Accounting Principles ............ 45.0
COMP 9900 Microsoft Excel for Business I ............ 45.0
COMP 9904 Microsoft Excel for Business II ........... 45.0
COMP 9909 Microsoft Excel for Business III ............ 45.0
Total: ................................................... 225.0

Microsoft Office Specialist Noncredit Certificate
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.

Learning Outcomes
Upon completion of this program, students will be able to:
- Keyboard a minimum of 35 net words a minute.
- Develop and produce presentations that utilize electronic media and printed documents.
- Use a variety of business applications software including word processing, spreadsheet, presentation, and database to complete common business tasks.
- Use technology such as computers, Internet, peripherals, cloud and telephony to complete common business tasks.

Advisory Entrance Requirements. Completion of a noncredit ESLN Intermediate Low course (3550-3606) or higher; typing: 25 net wpm.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Exit Requirements. Successful completion of all courses with a passing grade; typing 35 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.

Courses Required for the Noncredit Certificate in Microsoft Office Specialist
Course .................................................. Hours
Required courses:
BOSS 5500 Keyboarding for Computers ................ 45.0
WOPR 9995 Microsoft Word for Business I ............ 45.0
WOPR 9996 Microsoft Word for Business II ............ 45.0
COMP 9900 Microsoft Excel for Business I ............ 45.0
COMP 9904 Microsoft Excel for Business II ............ 45.0
COMP 9901 Microsoft Access for Business I ............ 45.0
COMP 9910 Microsoft Access for Business II ............ 45.0
COMP 9936 Outlook for Office Support .................. 45.0
COMP 9928 PowerPoint for Business .................. 45.0
BOSS 5509 Office Procedures for the 21st Century ....... 45.0
BOSS 4510 Business Communications .................. 45.0
Choose one of the following keyboarding courses:
BOSS 5501 Keyboarding: Skill Development ........... 90.0
BOSS 5502 Clerical Keyboarding ......................... 90.0
Students may satisfy this requirement by passing an examination in keyboarding.

Choose one of the following electives:
COMP 9909 Microsoft Excel for Business III ............ 45.0

COMP 9857 MS Office Business Applications w/Simulated Projects ........................................ 90.0
COMP 9938 Publisher for Business
Desktop Publishing ........................................ 4
Total: ................................................... 630.0 – 675.0

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
Upon completion of this program, students will be able to:
- 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

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Finance
Course .................................................. Units
First Semester required courses:
FIN 130 Principles of Bank Operations ............ 3.0
GNBS 119 Introduction to Business ............ 3.0
First Semester: choose one of the following Math courses:
BSMA 68 Mathematics of Business ............ 3.0
MATH 75 Mathematical Analysis for Business ........ 3.0
MATH 90 Precalculus Algebra ............ 5.0
Second Semester required courses:
FIN 133 Money and Banking ............ 3.0
ECON 1 Principles of Macroeconomics ............ 3.0
MABS 60 Introduction to Computer Applications for Business ........ 3.0
Second Semester: choose one of the following accounting courses:
ACCT 10 Introduction to Accounting ............ 5.0
ACCT 1 Financial Accounting ............ 5.0
Third Semester required course:
FIN 136 Introduction to Financial Planning ........ 3.0
MABS 101 Spreadsheets for Business/Excel ........ 3.0
Fourth Semester: choose one of the following courses:
MABS 67 Database for Business/Microsoft Access ........ 3.0
BSMA 68 Mathematics of Business ............ 3.0
Fourth Semester: choose one of the following courses:
MRKT 122 Professional Selling ............ 3.0
MRKT 140 Introduction to Marketing ............ 3.0
Choose 2 of the following course electives (recommended to complete one in Third Semester and another in Fourth Semester):

- BSEN 74 Written Business Communication ........................................... 3.0
- SMBS 135 Ownership and Operation of a Small Business ............................. 3.0
- FIN 110 Principles of Risk Management .................................................. 3.0
- SUPV 231 Introduction to Supervision and Management ............................ 3.0
- ACCT 2 Managerial Accounting ........................................................... 3.0
- ECON 3 Principles of Microeconomics .................................................... 3.0
- INTR 170 International Finance ............................................................. 3.0

Total: ........................................................................................................ 41.0 – 45.0

**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**

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

- 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.

**Credit Toward Graduation**. Credit earned in obtaining the Certificate of Achievement may be applied toward CCSF graduation requirements.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**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 Principles of Risk Management</td>
<td>3.0</td>
</tr>
<tr>
<td>FIN 130 Principles of Bank Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>FIN 136 Introduction to Financial Planning</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Business/Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>GNBS 119 Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester required courses:</td>
<td></td>
</tr>
<tr>
<td>ECON 1 Principles of Macroeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>FIN 133 Money and Banking</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester: choose one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>MABS 67 Database for Business/Microsoft Access</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 101 Introduction to Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester: choose one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>MRKT 122 Professional Selling</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 140 Introduction to Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>27.0</td>
</tr>
</tbody>
</table>

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**General Business**

**Business Administration Major (AS-T)**

The Associate in Science in Business Administration for Transfer is designed to prepare students who wish to transfer to pursue a baccalaureate degree in Business Administration, particularly to the California State University. This program provides the academic foundation required for various areas of business, such as accounting, management, finance, and marketing.

**Learning Outcomes**

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

- Use business terms and concepts related to functional areas of business including: marketing, finance, human resources, management, 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 responsibilities in today’s business environment.
- Critically evaluate, analyze, and interpret information to solve problems and make business decisions.

**Degree Requirements.** Students who wish to earn the Associate in Science in Business Administration 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 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.

Assuming students start this AS-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the AS-T in Business Administration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>ACCT 1 Financial Accounting</td>
<td>5.0</td>
</tr>
<tr>
<td>ACCT 2 Managerial Accounting</td>
<td>5.0</td>
</tr>
<tr>
<td>ECON 1 Principles of Macroeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 3 Principles of Microeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>BSL 1 Business Law I</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of these statistics options:</td>
<td></td>
</tr>
<tr>
<td>ECON 5 Introductory Statistics for Economics, Business and Social Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 80 Probability and Statistics</td>
<td>4.0</td>
</tr>
<tr>
<td>Select TWO of the following courses:</td>
<td></td>
</tr>
<tr>
<td>MATH 100A Short Calculus I</td>
<td>3.0</td>
</tr>
<tr>
<td>GNBS 119 Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>or CNIT 100 Intro to Computers Using PC’s</td>
<td>3.0</td>
</tr>
<tr>
<td>or CS 101 Introduction to Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>29.0 – 30.0</td>
</tr>
</tbody>
</table>

**General Business Major (AS)**

This major 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 addition, it prepares the student for an entry-level position in any business office.

Learning Outcomes

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

- Use business terms and concepts related to functional areas of business including: marketing, finance, human resources, management 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 responsibilities 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.

The minimum time for completion is four semesters assuming that students start at a transfer level eligibility in both math and English.

Courses Required for the Major in General Business

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 1 Financial Accounting</td>
<td>5.0</td>
</tr>
<tr>
<td>ACCT 2 Managerial Accounting</td>
<td>5.0</td>
</tr>
<tr>
<td>BSL 1 Business Law I</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 1 Principles of Macroeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 3 Principles of Microeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>GNBS 119 Introduction to Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following required courses:

- MABS 60 Introduction to Computer Applications for Business | 3.0
- MABS 62 Computer Applications for Business on Mac | 3.0

Choose one of the following required courses:

- ECON 5 Introductory Statistics for Economics, Business and Social Sciences | 5.0
- MATH 80 Probability and Statistics | 4.0

Recommended electives:

- BSEN 74 Written Business Communication | 3.0
- CMST 1A Elements of Public Speaking | 3.0
- BSMA 68 Mathematics of Business | 3.0
- MABS 101 Spreadsheets for Business/Excel | 3.0
- MABS 406 Developing Websites Dreamweaver | 3.0
- SMBS 135 Ownership and Operation of a Small Business | 3.0
- FIN 136 Introduction to Financial Planning | 3.0
- MATH 75 Mathematical Analysis for Business | 3.0
- MATH 101A Calculus I | 5.0

Total: 29.0 – 30.0

General Business Certificate

This field of concentration is designed to acquaint the student with the business world in general. With additional course work, it can prepare students for either employment or further education. Students with definite career/educational goals are encouraged to follow the appropriate curriculum guide for their specific field of concentration such as Accounting, Finance, Marketing, Real Estate, etc. Students may obtain the Certificate of Accomplishment in General Business by completing each of the following courses with a final grade of C or higher:

Learning Outcomes

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

- Use business terms and concepts related to functional areas of business, including accounting, economics, finance, human resources, international business, management, marketing, and operations.
- 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 responsibilities 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in General Business

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNBS 119 Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BSL 1 Business Law I</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 1 Principles of Macroeconomics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following Accounting courses:

- ACCT 10 Introduction to Accounting | 5.0
- ACCT 1 Financial Accounting | 5.0

Recommended additional coursework:

- FIN 136 Introduction to Financial Planning | 3.0
- BSMA 68 Mathematics of Business | 3.0
- MRKT 140 Introduction to Marketing | 3.0
- SUPV 231 Introduction to Supervision and Management | 3.0
- BSEN 74 Written Business Communication | 3.0

Total: 17.0

International Business

International Business Certificate

The Certificate Program in International Business fulfills the needs of three groups: 1) students preparing themselves for careers in international business, 2) currently employed individuals whose job responsibilities require expertise in international business practices, and 3) entrepreneurs who want to begin or globalize their business ventures.

Learning Outcomes

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

- Identify core concepts of International Business.
- Communicate effectively in oral and written formats within an international business context.
- Describe the operations of international financial markets.
- Analyze issues arising from technology transfers and the protection of intellectual property.
• Formulate marketing plans and promotional strategies that incorporate consumer behavior factors and measurements of effectiveness.

• Create effective internet applications and electronic payment systems in the context of international business transactions.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in International Business

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTR 162 Survey of International Business</td>
<td>3.0</td>
</tr>
<tr>
<td>INTR 167 International Law</td>
<td>3.0</td>
</tr>
<tr>
<td>INTR 170 International Finance</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTR 172 International E-Business: Resources and Tools</td>
<td>3.0</td>
</tr>
<tr>
<td>or INTR 173 Export-Import</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTR 163 International Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>or MRKT 140 Introduction to Marketing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 15.0

Marketing

Marketing Major (AS)

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 program, 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

Assuming students start this AS with transfer-level math and English eligibility; the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Marketing

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSMA 68 Mathematics of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>INTR 163 International Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 122 Professional Selling</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 140 Introduction to Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 145 Computer Marketing Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 150 Consumer Behavior</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 170 Advertising and Integrated Marketing Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>SMBS 135 Ownership and Operation of a Small Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Recommended additional coursework:

BSEN 70 Grammar and Writing Essentials for Business                     | 5.0   |
BSEN 74 Written Business Communication                                   | 3.0   |
CS 101 Introduction to Information Systems                               | 3.0   |
PSYC 1 General Psychology                                                | 3.0   |
PSYC 26 Applied Psychology                                               | 3.0   |
CMST 11 Basic Public Speaking                                            | 3.0   |
CMST 12 Fundamentals of Oral Communication                              | 3.0   |
ACCT 1 Financial Accounting                                             | 5.0   |
ACCT 10 Introduction to Accounting                                       | 5.0   |
Total: 24.0

Marketing Certificate

A certificate in Marketing prepares students for an entry level job in marketing, sales, advertising and consumer behavior.

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 this program, students will be able to:

• Create an integrated marketing communications plan which includes target audience analysis, pricing objectives, promotional strategies and measures of effectiveness.

• Organize a marketing team that effectively coordinates with other functional areas using effective principles of leadership and communication.

• Calculate and forecast pricing, revenue, sales and profit scenarios in a marketing environment.

• Produce marketing correspondence and materials using common software applications.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Marketing

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 10 Introduction to Accounting</td>
<td>5.0</td>
</tr>
<tr>
<td>ACCT 1 Financial Accounting</td>
<td>5.0</td>
</tr>
<tr>
<td>BSMA 68 Mathematics of Business</td>
<td>3.0</td>
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</tbody>
</table>

Choose one of the following Accounting options:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNBS 119 Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>SMBS 135 Ownership and Operation of a Small Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following Business options:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNBS 119 Introduction to Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following International options:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTR 162 Survey of International Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>
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.

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; debtor's 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 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 program, 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.

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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

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 Introduction to Paralegal Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>PLS 2 Legal Research and Writing I</td>
<td>3.0</td>
</tr>
<tr>
<td>BSL 1 Business Law I</td>
<td>3.0</td>
</tr>
<tr>
<td>PLS 3 Legal Research and Writing II</td>
<td>3.0</td>
</tr>
<tr>
<td>PLS 4 Litigation I</td>
<td>3.0</td>
</tr>
<tr>
<td>BSL 2 Business Law 2</td>
<td>3.0</td>
</tr>
<tr>
<td>PLS 5 Litigation II</td>
<td>3.0</td>
</tr>
<tr>
<td>PLS 6 Law Office Management and Procedures</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose 12 units from the following elective courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS 7 Corporate Law</td>
<td>3.0</td>
</tr>
<tr>
<td>PLS 9 Wills, Trusts, and Probate Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>PLS 12 Family Law</td>
<td>3.0</td>
</tr>
<tr>
<td>PLS 13 Intellectual Property</td>
<td>3.0</td>
</tr>
<tr>
<td>PLS 14 Immigration Law</td>
<td>3.0</td>
</tr>
<tr>
<td>PLS 16 Paralegal Work Experience</td>
<td>1.0-3.0</td>
</tr>
</tbody>
</table>

Total: | 36.0 |
**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.

**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 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 program, 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 throughout the curriculum.

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 2.0 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.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**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 Introduction to Paralegal Studies</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**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 position specialized in realty 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.

**Learning Outcomes**

Upon completion of this 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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.
Courses Required for the Major in California Real Estate
Course ................................................. Units
Required courses:
R E 181 Principles of Real Estate .................... 3.0
R E 184 Real Estate Practice .......................... 3.0
R E 185 Legal Aspects of Real Estate ............... 3.0
R E 186 Principles of Real Estate Finance ........... 3.0
R E 189 Real Estate Economics ..................... 3.0
R E 191 Principles of Real Estate Appraisal ........ 3.0
Total: .................................................. 18.0

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 this prescribed program.

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 completion of this program, 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:

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in California Real Estate
Course ................................................. Units
Required courses:
R E 181 Principles of Real Estate* .................... 3.0
R E 184 Real Estate Practice .......................... 3.0
R E 185 Legal Aspects of Real Estate ............... 3.0
R E 186 Principles of Real Estate Finance ........... 3.0
R E 189 Real Estate Economics ..................... 3.0
R E 191 Principles of Real Estate Appraisal ........ 3.0
* If the candidate for the California Real Estate Certificate holds a valid California real estate salesperson's or broker's license, a three-unit course in real estate or another area of business may be substituted in lieu of RE 181.

Choose 6 units from course electives:
R E 182 Escrow Fundamentals ........................ 3.0
R E 183 Real Estate Property Management .......... 3.0
R E 187 Real Estate Taxation ........................ 3.0
R E 192 Advanced Real Estate Appraisal ........... 3.0
Total: .................................................. 24.0

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 (WAFC) Retail Management Certificate program.

Learning Outcomes
Upon completion of this program, 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.

Each course must be completed with a grade of C or higher or Pass. The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Retail Management
Course ................................................. Units
Required courses:
MABS 60 Introduction to Computer Applications .... 3.0
SUPV 231 Introduction to Supervision and Management 3.0
SUPV 232 Organizational Behavior for Supervisors .... 3.0
SUPV 233 Human Resources Management .......... 3.0
MRKT 140 Introduction to Marketing ................. 3.0
SMBS 135 Ownership and Operation of a Small Business .................. 3.0
Choose one of the following Accounting or Business Math options:
ACCT 10 Introduction to Accounting ................. 5.0
ACCT 1 Financial Accounting ...................... 5.0
BSMA 68 Mathematics of Business .................. 3.0
Choose one of the following Communications options:
BSEN 74 Written Business Communication ......... 3.0
SUPV 234 Communication for Business Management 3.0
Total: .................................................. 24.0 – 26.0

Small Business

Small Business Noncredit Certificate

Program Goal. Prepares students for a successful start in their own small business and helps small business owners increase the effectiveness and operation of their business in 5 areas: 1) Starting Out, 2)

Learning Outcomes
Upon completion of this program, students will be able to:

- Outline and describe the major tasks required to open a small business.
- Write a basic business plan to use in structuring and organizing a small business as well as applying for loans and securing partners or investors.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in Small Business
Course............................................ Hours
Required courses:
SMBU 9419 Developing a Business Plan ...... 18.0
SMBU 9467 Getting Started in Business ...... 18.0
Choose two of the following elective courses:
SMBU 9476 Green and Sustainable Small Business ...... 18.0
SMBU 9792 Small Business Management ........ 18.0
SMBU 9793 Small Business Marketing and Sales ...... 18.0
SMBU 9799 Technology for Small Business ...... 18.0
Total: ............................................ 72.0

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, nonprofit, and community-based organizations and also for others who are currently employed as supervisors and desire to upgrade their supervisory skills. 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.

Learning Outcomes
Upon completion of this program, 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 human resource management 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 theories and research with contemporary social problems in order to offer effective and ethical strategies for change.

Credit Toward Graduation. All credits that students earn in obtaining the Certificate of Accomplishment in Supervision may be applied toward satisfaction of the requirement for graduation from the college.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Supervision and Management
Course............................................ Units
Required courses:
SUPV 231 Introduction to Supervision and Management .................................. 3.0
SUPV 232 Organizational Behavior for Supervisors .................................. 3.0
SUPV 233 Human Resources Management .................................. 3.0
SUPV 234 Communication for Business Management .................................. 3.0

Choose one of the following courses:
SUPV 235 Organizational Leadership .................................. 3.0
SUPV 236 Women Leaders at Work .................................. 3.0
Total: ............................................ 15.0

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.

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, consulate 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, religion, 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. To successfully complete this Major every class must be completed with a grade of C or better.
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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Travel and Tourism

Course ................................................. Units

Required courses:
- TRTV 157 Principles of Travel and Tourism ............ 3.0
- TRTV 159 Careers in Travel and Tourism ............ 3.0
- TRTV 160 Travel and Tourism Internship ..........1.0-3.0
- TRTV 181 Business Travel ............................. 3.0
- TRTV 182 Tour Management .......................... 3.0
- MABS 60 Introduction to Computer
  Applications for Business ............................. 3.0

Choose 12 units from the following courses:
- TRTV 172 Destinations: Natural Wonders ............ 3.0
- TRTV 173 Destinations: Historical and Archaeological ........ 3.0
- TRTV 174 Destinations: Cruises ...................... 3.0
- TRTV 175 Destinations: Hotels, Resorts and Spas .....3.0
- TRTV 176 Destinations: Great Trips ................. 3.0
- TRTV 180 Eco-Travel & Tourism .................... 3.0

Total: .............................................. 28.0 – 30.0

Green and Sustainable Travel Certificate

Green travel and tourism 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 who have completed this certificate will have an advantage when entering the workplace.

Learning Outcomes

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

- 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

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Green and Sustainable Travel

Course ................................................. Units

Required courses:
- TRTV 180 Eco-Travel & Tourism ...................... 3.0
- GNBS 125 Green & Sustainable Business .......... 3.0

A minimum of 9 units of the following courses:
- TRTV 157 Principles of Travel and Tourism ........ 3.0
- TRTV 159 Careers in Travel and Tourism ............ 3.0
- TRTV 172 Destinations: Natural Wonders .......... 3.0
- TRTV 173 Destinations: Historical and Archaeological .... 3.0
- GNBS 127 Green & Sustainable Operations
  Management .......................................... 3.0

Total: .............................................. 15.0

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. To successfully complete this certificate every class must be completed with a grade of C or better.

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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Travel and Tourism

Course ................................................. Units

Required courses:
- TRTV 157 Principles of Travel and Tourism ........ 3.0
- TRTV 159 Careers in Travel and Tourism ............ 3.0
- TRTV 160 Travel and Tourism Internship ..........1.0-3.0
- TRTV 172 Destinations: Natural Wonders .......... 3.0
- MABS 60 Introduction to Computer
  Applications for Business ............................. 3.0

Choose 3 units from the following courses:
- TRTV 172 Destinations: Natural Wonders ............ 3.0
- TRTV 173 Destinations: Historical and Archaeological .... 3.0
- TRTV 174 Destinations: Cruises ...................... 3.0
- TRTV 175 Destinations: Hotels, Resorts and Spas .....3.0

Total: .............................................. 16.0 – 18.0

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 program, students will be able to:

- 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Travel and Tourism Management

Course ............................................. Units

Required courses:
TRTV 157 Principles of Travel and Tourism ...... 3.0
TRTV 159 Careers in Travel and Tourism ...... 3.0
TRTV 180 Eco-Travel & Tourism .......... 3.0
TRTV 181 Business Travel .......... 3.0
TRTV 182 Tour Management .......... 3.0

Choose 2 units from any of the following courses:
TRTV 160 Travel and Tourism Internship* .......... 1.0-3.0
MABS 202 PowerPoint Presentations .......... 3.0
* Repeatable course-max. of 2 units may count towards certificate
Total: ............................................. 17.0

Travel and Tourism: Destination Specialist Certificate

Travel and tourism is defined by its destinations. Those professionals that have the greatest knowledge of destinations are those that will have the most opportunity for career advancement. The Destinations Specialist Certificate is designed to give students a well rounded background in the important travel destinations of the world.

Learning Outcomes

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

- 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Travel and Tourism: Destination Specialist

Course ............................................. Units

Choose 15 units from any of the following courses:
TRTV 172 Destinations: Natural Wonders .......... 3.0
TRTV 173 Destinations: Historical and Archaeological .... 3.0
TRTV 174 Destinations: Cruises ................. 3.0
TRTV 175 Destinations: Hotels, Resorts and Spas ...... 3.0
TRTV 176 Destinations: Great Trips ................. 3.0
Total: .................................................. 15.0

Announcement of Courses

Accounting

Credit, Degree Applicable Courses:
ACCT 1. Financial Accounting (5)
Lec-87.5
Prereq: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 150 or placement in ENGL 88B or ESL 160
Advise: BSMA 68
Introduction to accounting information system and recording and reporting of business transactions with a focus on the accounting cycle, terminology, application 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. UC/CSU
C-ID ACCT 110

ACCT 2. Managerial Accounting (5)
Lec-87.5
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. UC/CSU
C-ID ACCT 120

ACCT 10. Introduction to Accounting (5)
Lec-87.5
Advise: BSMA G or BSMA H or BSMA J or MATH E1 or MATH E3 or MATH 35; ESL 140 or ESL 184 or placement in ESL 150 or ESL 186
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
ACCT 1 MAY BE ELECTED IN LIEU OF ACCT 10 TO SATISFY THE REQUIREMENT IN ANY CURRICULUM IN BUSINESS.

ACCT 51. Intermediate Accounting (5)
Lec-87.5
Advise: ACCT 2
Designed for the students who pursue 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 for the Certified Public Accountant (CPA) exam as determined by the California State Board. CSU

ACCT 52. Intermediate Accounting (5)
Lec-87.5
Advise: 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

**Offered Spring semesters**

ACCT 53. Accounting with Sage 50 (3)
Lec-52.5
Prereq.: ACCT 10 or ACCT 1.
Advise: MABS 60 AND BSMA 68.
Design, setup, and implementation of an accounting system in Sage 50 while following Generally Accepted Accounting Principles. Topics include accounts receivable, accounts payable, payroll, general ledger, financial statement analysis, and the comparison, analysis, and use of computer accounting software systems. CSU

ACCT 54. Auditing (3)
Lec-52.5
Advise: ACCT 2 and 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-52.5
Advise: 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-52.5
Advise: 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

**Offered Spring semesters**

ACCT 57. Accounting with QuickBooks (3)
Lec-52.5
Prereq.: ACCT 10 or 1
Design and operate an accounting system using Quickbooks software while following Generally Accepted Accounting Principles. Topics include implementing an accounting system for a new company, preparing reports on customer and sales activities, employee and payroll activities and purchase transactions. CSU

ACCT 58. Accounting Ethics (3)
Lec-52.5
Prereq.: ACCT 1
Ethical standards of the accounting profession with emphasis on contemporary issues confronting accountants and auditors including their social and ethical responsibilities. Topics include the history of ethical thought, tax and auditing fiduciary responsibilities, the America Institute of Certified Public Accountants Code of Professional Conduct, financial statement representations, and the theoretical and practical application of ethical principles in business and accounting. CSU

ACCT 59. Federal Income Tax (3)
Lec-52.5
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
Prereq.: ACCT 59 or demonstration of exit skills
Study of California State Income Tax law, income tax problems, and preparation of California income tax returns. CSU

**Noncredit Courses:**

ACBO 9201. Accounting I - Proprietorship & Partnership (90 hrs)
Advise: ESLN 3500 or TRST 2322 or placement in ESLN 3600 and TRST 3301
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 transactions, journals, ledgers, financial statements, cash control systems, and bank reconciliations. The integration of Microsoft Excel and QuickBooks is introduced.

**Offered Spring semesters**

ACBO 9202. Accounting II-Corporate (90 hrs)
Advise: 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 transactions, special journals, ledgers, financial statements, inventory, payroll and taxes. The integration of Microsoft Excel and QuickBooks is introduced.

**Offered Spring semesters**

ACBO 9205. QuickBooks Complete (90 hrs)
Advise: ESLN 3500 or placement in ESLN 3600
Through simulated practice for various business entities, students will learn to use QuickBooks Premier and Pro to perform and complete simple to complex accounting tasks such as accounts receivable, accounts payable and payroll.

**Offered Spring semesters**

ACBO 9206. Basic Accounting Concepts I (45 hrs)
Advise: ESL Level 6+
Introduction to business accounting principles and concepts. Topics include steps in the accounting cycle for a proprietorship such as financial statements, ledgers, journals, cash control systems, and bank reconciliations. The integration of Microsoft Excel is introduced.

ACBO 9207. Basic Accounting Concepts II (45 hrs)
Advise: ACBO 9206 or equivalent; ESL Level 6+
Basic accounting concepts and procedures introduce to students recording business transactions into special journals and subsidiary ledgers for accounts receivables and accounts payable, cash payments and payroll using a manual accounting system; students learn about banking procedures, bank reconciliations, accruals and deferrals and preparing classified financial statements.

ACBO 9208. QuickBooks: Level 1 (45 hrs)
Advise: 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.

ACBO 9209. QuickBooks: Level 2 (45 hrs)
Advise: ACBO 9200, 9203, 9206, 9208 or equivalent, COMP 9245, 9905 or equivalent, ESL Level 6+
Continuation of business accounting for a sole proprietorship and
This course is an introduction to the proper usage of business terminology.

**ACBO 9210. Income Tax Preparation (45 hrs)**
**ADVISE:** ESLN 3700 or PLACEMENT IN ESLN 3800
An introduction to the basic mechanism of federal individual, partnership, and corporate income taxation. Topics include: federal income tax history, types of federal tax forms, filing status, what income is reported and not reported, IRS website search for online forms, publications, and current tax laws, and how to complete individual income tax forms 1040EZ, 1040A and 1040 including Schedules A, B, C, D and E, corporation income tax form 1120, and partnership income tax form 1066.

**ACBO 9215. Microsoft Access for Accounting Principles (45 hrs)**
**ADVISE:** ESLN 3500 or PLACEMENT IN ESLN 3600
Integrating Microsoft Access with principles of accounting. Topics include queries, reports, tables, forms, using Access to track inventory and customer orders, interpreting financial information and payroll.

**ACBO 9216. Recordkeeping for the Business Office (45 hrs)**
**ADVISE:** ESLN 3500 or PLACEMENT IN ESLN 3600
Students will learn the recordkeeping procedures for accounts receivable, accounts payable, stock record, purchase order, sales and payroll clerks. This course will help students use Microsoft Excel to create forms, reports and financial statements for small businesses.

**BOSS 4500. Business English I (45 hrs)**
**ADVISE:** ESLN 3800
Development of written communication skills through strengthening business vocabulary, proper sentence structure, correct spelling, proper use of pronouns, and knowledge of online office reference.

**BOSS 4501. Business English II (45 hrs)**
**ADVISE:** BOSS 4500 or EQUIVALENT; ESLN 3800
Continued development of written communication skills: punctuation, business vocabulary, capitalization, varied sentence structure, spelling, proper use of verbs, adjectives and adverbs, and knowledge of online office reference materials. Introduction to composing a business letter.

**BOSS 4510. Business Communications (45 hrs)**
**ADVISE:** 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 the business writing process and traits to improve writing, as well as practice writing emails, memos, letters, instructions and summaries.

**Business Law**

**Credit, Degree Applicable Courses:**

**BSL 1. Business Law I (3)**
**Lec-52.5**
**Prereq.:** ENGL 96 or ENGL 88 or ENGL 88B 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, criminal law, business ethics, corporation, partnership and legal concepts. UC/CSU
**C-ID BUS 125**
**FORMERLY CLW 18**

**BSL 2. Business Law 2 (3)**
**Lec-52.5**
**Prereq.:** BSL 1
Sales, regulation of business, real property, community property, environmental law, employment law, bailment law, wills and trusts, and security regulations. UC/CSU
**FORMERLY CLW 19**

**Business Mathematics**

**Credit, Degree Applicable Course:**

**BSMA 68. Mathematics of Business (3)**
**Lec-52.5**
**Advise:** Completion of BSMA G, H, or J or MATH E
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

**Noncredit Course:**

**BOSS 2500. Business Math with Spreadsheets I (45 hrs)**
**Advise:** Completion of or Concurrent Enrollment in ESLN 3500
Students will perform business calculations including discounts, commissions, markups/markdowns, credit charges, simple/compound
interest, and future/present value of loans and annuities. This course includes manual and spreadsheet applications of each topic.

**Commercial Law**

See Business Law.

**Computer Applications for Business**

**Credit, Degree Applicable Courses:**

**MABS 30. Computer Keyboarding** (3)  
Lec-52.5 P/NP available  
**Advise:** ESL 140 or ESL 184 or placement in ESL 150 or ESL 186; ENGL 9  
Students learn to keyboard by touch on the computer for efficiency in executing routine business tasks. Topics include searching the Internet, maintaining electronic files, and using business applications. Course also includes basic computer concepts of hardware, software, and the operating system. CSU

**MABS 35. Speedbuilding I: Keyboarding (1.5)**  
Lab-87.5 P/NP available  
**Prereq.:** MABS 25 or 30 or ability to type 25 words per minute for 3 minutes 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 **Offered on occasion**

**MABS 38. Document Production Using Microsoft Word** (3)  
Lec-52.5 P/NP available  
**Advise:** MABS 30; MABS 35; ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A  
Format and word process business documents such as letters, memos, single- and multi-page reports, tables, and itineraries using proper business document formatting and Microsoft Word; prepared documents will be either printed and distributed or viewed and shared online. Learn to interpret and use proofreader’s½ marks and to analyze and determine formatting of rough-draft copy. CSU **Offered Fall semesters**

**MABS 60. Introduction to Computer Applications for Business** (3)  
Lec-52.5 P/NP available  
**Advise:** MABS 25 or MABS 30  
Introduction to the concepts and skills required for using computer applications for business. Includes fundamental concepts of hardware, the operating system, and the most frequently used office applications: word processing, electronic spreadsheet, database management, presentations, web browser, and email. UC/CSU

**MABS 62. Computer Applications for Business on Mac** (3)  
Lec-52.5, field trips P/NP available  
**Advise:** MABS 30; ENGL 92; ESL 150; COMPLETION OF OR CONCURRENT ENROLLMENT IN: BSEN 70  
Essential concepts and skills course required for using computer applications in Mac business environments. Includes fundamental concepts of hardware, the operating system, office software and cloud-based productivity applications in Word, PowerPoint, Excel, and Outlook. Students manage e-mail and calendars and create cloud-based storage file management structures. UC/CSU

**MABS 67. Database for Business/Microsoft Access** (3)  
Lec-52.5 P/NP available  
**Advise:** MABS 25, 30  
Introduction to a relational dynamic database environment using Microsoft's Access relational database software. Experience creating and modifying business databases, including queries, forms, reports and macros. CSU

**MABS 101. Spreadsheets for Business/Excel** (3)  
Lec-52.5 P/NP available  
**Advise:** MABS 25, 30 or ability to type 25 wpm; BSMA 66 or 68.  
Experience in creating, modifying, and printing spreadsheets using Excel software. Includes creating charts, working with advanced functions, database features, and the use of macros. CSU

**MABS 202. PowerPoint Presentations** (3)  
Lec-52.5 P/NP available  
**Advise:** MABS 25 or MABS 30  
Introduction to the concepts and skills required for creating business presentations using Microsoft PowerPoint. Topics include planning an effective presentation, developing on-screen slides; inserting pictures, tables, charts, and diagrams in to slides; and constructing a slide show with animation, transitions, sound, and timings. CSU

**MABS 391. Word Processing/Microsoft Word** (3)  
Lec-52.5 P/NP available  
**Prereq.:** MABS 30 or 35 or ability to type at least 35 words per minute with no more than one error per minute  
Experience creating and editing documents using Microsoft Word including paragraph and page formatting; proofing tools, tables, styles, columns, mail merge, headers/footers. Advanced features include building blocks, references, sharing/protecting documents. CSU **FORMERLY WDPR 391.**

**MABS 406. Developing Web Sites-Dreamweaver** (3)  
Lec-52.5 P/NP available  
**Advise:** MABS 60  
Experience in developing and maintaining a business website with HTML and CSS. Topics include tables, page divisions, links, image, forms, and built-in JavaScript behaviors. CSU

**MABS 408. Website Builder for Business Portfolio/ Productivity** (3)  
Lec-52.5, field trips P/NP available  
**Prereq.:** MABS 60  
**Advise:** BSEN 70  
This course will provide students with an overview of webpage development using drag and drop website builders. Assignments will focus online website builders, cloud-based productivity tools, and software applications available to users as and when needed for specific temporary projects, known or unexpected business workloads, and portfolio development. CSU **Offered on occasion**

**MABS 409. Developing Business Websites - Adobe Muse** (3)  
Lec-52.5 P/NP available  
**Advise:** MABS 60 and BSEN 70  
Fundamentals of custom business website development without coding using Adobe Muse web development software. Topics include tools that create and format web pages, add text, images, media, and widgets, add basic e-business functions, optimize layouts for mobile devices, and create a responsive business website. CSU
MABS 410. Photoshop and Acrobat for Business (3)
Lec-52.5 P/NP available
ADVISE: MABS 60; BSEN 70
Create, edit, organize, and optimize web images and documents using industry standard programs Adobe Photoshop and Adobe Acrobat. Topics include digital image editing, automation batch tools, document manipulation and conversion, optical character recognition (OCR), encryption, and interactive forms, and portable document format. Produce business office materials for outreach, social networks, electronic publications, print and web, and documents for use in content management systems (CMS). CSU

Noncredit Courses:
BOSS 3500. Job Preparation (45 hrs)
ADVISE: ESLN 3700 OR TRST 3332; COMP 9905 OR COMP 9245 OR COMP 9921 OR WOPR 9990
Improve the efficiency of job search strategies and develop methods for researching labor market data, including short term and long term employment projections, and local area employment opportunities. Self-assess strengths and communication skills, write resumes, cover letters, and thank you letters. Build interviewing skills, use the Internet to gather employment data where faster than average job growth is projected, and overview the importance of customer service.

BOSS 3501. Customer Service Skills (15 hrs)
ADVISE: WOPR 9991 OR EQUIVALENT; COMP 9921 OR EQUIVALENT; ESL LEVEL 6+
Teaches specific skills to effectively deal with customers and clients in a variety of different situations. For the front-line employee who is the first point of contact with customers.

BOSS 3502. Customer Service Principles & Soft Skills (45 hrs)
ADVISE: ESLN 3700 OR TRST 2322
This course focuses on retaining customers by establishing effective customer service practices. Topics include web-based customer service, electronic communication, the professional work ethic, customer loyalty, needs and wants of customers, difficult personalities, in-person customer service, business letters and emails, how to solve problems, and customer complaints. Students review interpersonal and soft skills.

BOSS 3500. Keyboarding for Computers (45 hrs)
ADVISE: ESLN 3400
Students will acquire basic knowledge of the keyboard to interact more efficiently with desktop computers. Instruction covers introduction to the keyboard and development of basic keyboarding skills.

BOSS 5501. Keyboading: Skill Development (90 hrs)
Keyboading 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 Keyboading (90 hrs)
ADVISE: BOSS 5500, 5501 or 5503
Emphasis on formatting business documents such as reports, letters, and memoranda. Topics also include skill building for accuracy/speed, keyboarding practice and working in a simulated office to learn the ten-key numeric keypad.

BOSS 5505. Keyboading: Quick Course (15 hrs)
This multilevel course serves as a quick introduction or review of the alphabetic and numeric keys, or a quick speed/accuracy building course. Emphasis is on individual student need. Skills taught through instructor-led and/or self-paced instruction.

BOSS 5506. 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, and develop speed and accuracy by touch. This course is useful for data entry accounting, administrative and office support positions requiring numeric input.

BOSS 5509. Office Procedures for the 21st Century (45 hrs)
ADVISE: ESL LEVELS 5/6
Essential office procedures and competencies in areas such as developing telephone etiquette, records management, handling financial procedures, making travel arrangements, planning meetings, and making oral presentations in order to be successful in the business office.

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)
ADVISE: ESLN 5/6
Essential computer concepts and techniques for the beginning computer user. Students will learn to use a Windows or Mac based operating system. Students are introduced to Internet and Email basics with an overview of business office productivity tools.

COMP 9857. MS Office Business Applications with Simulated Projects (90 hrs)
A comprehensive introduction of Microsoft Office business applications-Word, Excel, Outlook, 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 9894. Microsoft Access Essentials (15 hrs)
ADVISE: 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 9899. Electronic Publishing for Business I (45 hrs)
ADVISE: ESLN 3700 AND COMP 9245 OR COMP 9905 OR COMP 9967
Electronic publishing for the business office using such programs as Microsoft Publisher or Adobe InDesign. Students will create and manage business documents for print or electronic distribution including business newsletters, postcards, interactive forms, flyers, and web publications. Students develop page layouts, edit text, optimize bit-maps, correct simple spelling, punctuation, and grammar errors in the development of business documents.

COMP 9900. Microsoft Excel for Business I (45 hrs)
ADVISE: ESLN 3600 OR PLACEMENT IN ESLN 3700
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)**
**Prereq.: COMP 9905**
**Advise: ESLN 3600**
Students learn database design guidelines to create the structure of the database, which allows them to create tables, queries, forms, and reports for business data. Students learn to edit tables, design and establish query criteria, and customize forms and reports.

**COMP 9903. Software Update (15 hrs)**
**Advise: Windows OS Basics, ESL Level 6 or above**
An overview course that introduces students to current business software, including, but not limited to Windows/Mac operating systems, MS Office (word processing, spreadsheets, databases, presentations), Internet and E-mail, cloud based business productivity tools, 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)**
**Advise: ESLN 3600 or Placement in ESLN 3700**
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)**
**Advise: ES LN 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 9907. Electronic Publishing for Business II (45 hrs)**
**Advise: ES LN 3700; COMP 9933; COMP 9245 or COMP 9905**
This course further develops electronic publishing by enhancing business office publications and making them interactive using such programs as Microsoft Publisher, Adobe InDesign, and Adobe Acrobat Professional. Students deconstruct business documents and templates, create a business office newsletter, business posters, interactive business registration forms, upload files and folders in a cloud-based drive, and import/export documents in various file formats.

**COMP 9908. Computer & Web-based Applications (45 hrs)**
**Advise: 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)**
**Prereq.: COMP 9904**
**Advise: Completion of or concurrent enrollment in: ES LN 3500**
Students learn advanced spreadsheets formulas and formatting techniques and will concentrate on various Excel applications including formula auditing, PivotTables, PivotCharts, and macros.

**COMP 9910. Microsoft Access for Business II (45 hrs)**
**Prereq.: COMP 9901**
**Advise: ES LN 3600 and COMP 9905**
Students create custom reports, forms and combination Main Form/SubForm for business data. Data searches with multiple criteria using Queries and column sorts. Display data through PivotTables and PivotCharts. Create easy access to database objects by using Macros to design and develop a switchboard.

**COMP 9912. PC Upgrade and Optimization (15 hrs)**
**Advise: Windows OS Basics, ESL Level 6 or above**
An overview course that introduces students to the basic concepts of computer components, installing and uninstalling Microsoft Office application software, installing device drivers, installation and use of antivirus and spyware.

**Offered Spring Semesters**

**COMP 9917. Building Individual Web Sites (45 hrs)**
**Advise: ES LN 3700 or TRST 2322; and COMP 9245 or COMP 9905**
Fundamentals of website content management and blogging tools for creation of an individual or business blog. Students will create an individual online portfolio, or a business website enhancement. Students will develop, organize, format, manage, and publish content to the web using WordPress.

**Offered Spring Semesters**

**COMP 9918. Building Business Web Sites (45 hrs)**
**Advise: ES LN 3700 or TRST 2322; and COMP 9245 or COMP 9905**
An introductory hands-on project based website development course for the business office. Students will plan, format, develop, and publish a basic business website using Adobe Muse web development software. Students will add text, images, media, widgets, navigation elements, and links to a website.

**Offered Spring Semesters**

**COMP 9919. Using Dreamweaver for Basic Business Web Pages (45 hrs)**
**Advise: ES LN 3600 or COMP 9905 or COMP 9245**
Developing and maintaining a personal or business website using HTML and CSS built-in functions of Adobe Dreamweaver. Topics include new website definition, creating and editing the site, adding pages, links, images, text, and media. Beginning through intermediate skills are taught.

**COMP 9920. Using SharePoint Designer (Expression Web) for Basic Web Pages (45 hrs)**
**Advise: Windows OS Basics, ESL level 6 or above**
Instruction to Microsoft SharePoint Designer (Expression Web) web authoring tool to create a personal or business website. Topics include new site creation, editing, and maintaining the site, image and text insertions, publishing a site, and using tables, divs and forms.

**Offered on occasion**

**COMP 9921. The Internet and Social Customer Service (45 hrs)**
**Advise: Windows OS Basics, ESL Level 6 or above**
Introductory course provides increased focus on Internet research skills, including search topics to expand on concepts or find the most recent information about a topic. This course provides a broad understanding of the most up-to-date functions, email and Internet resources, and topics such as social media customer service.
COMP 9922. Flash for Bus/Office Presentations (45 hrs)
Advise: 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 slides, ad banners, and Web pages. Students are also introduced to basic publishing concepts for viewing their work in the Flash Player on multiple computer applications.
Offered Spring semesters

COMP 9928. PowerPoint for Business (45 hrs)
Advise: 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)
Advise: 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.
Offered Spring semesters

COMP 9933. Building Business Web Pages with Adobe Web Standard-Level I (45 hrs)
Advise: ESLN 3600 and (COMP 9905 or COMP 9245)
Project-oriented approach to developing a business website using various Adobe web development software applications. Topics include types and functions of software applications; creating and formatting web pages with text, graphics, and media; adding forms and interactivity, and integration of output from several software applications into a single website project.

COMP 9934. Building Business Web Pages with Adobe Web Standard-Level II (45 hrs)
Prereq.: COMP 9933 or COMP 9919 or COMP 9918
Advise: ESLN 3600 and COMP 9905
Project-oriented approach using Adobe web development software for the development of e-business and mobile websites. Topics include: further development of business websites by adding business functions to a website such as website analytics, search engine optimization, and e-business and shopping cart widgets; optimizing web pages for mobile devices; creating a mobile website; and creating a responsive website.

COMP 9935. Business Web Graphics (45 hrs)
Advise: ESLN 3600 and COMP 9245; and Knowledge of Windows OS Basics or COMP 9905
Create business web graphics and business web media using Adobe web graphics and web authoring tools. Create, edit, manage, and optimize vector and bitmap images for web pages. Topics include creation of a custom webpage layout, creation of web page banners, web page backgrounds, and adding digital media to a web page. Creation of a web page layer comp with navigational elements.

COMP 9936. Outlook for Office Support (45 hrs)
Advise: 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.
Offered Spring semesters

COMP 9938. Publisher for Business Desktop Publishing (45 hrs)
Advise: ESLN 3700 or TRST 2321, COMP 9245 or COMP 9905
This is a lecture and lab course which introduces students to the basic concepts of desktop publishing using Microsoft Publisher. Students will create business publications, such as, advertising, flyers, newsletters, trifold brochures, business cards, envelopes and letterheads.

COMP 9941. Computer Applications - Self Paced (45 hrs)
Prereq: ESLN 3600 or placement in ESLN 3700, or TRST 2322 or placement in TRST 3331, or ESL 120 or placement in ESL 130, or ENGL L or placement in ENGL 91
Advise: WOPR 9995 or COMP 9904 or COMP 9910 or COMP 9928; WOPR 9995 or COMP 9936; ACBO 9208 and ACBO 9209
A self-paced computer software course that supports the attainment of an industry standard certificate as a Microsoft Office Specialist (MOS) or Intuit QuickBooks Certified User (QBUC). Students will complete real-world simulated projects using Gmetrix and Certiport software in one selected core area: MS Word, MS Excel, MS PowerPoint, MS Access, MS Outlook, or Intuit QuickBooks. Students will analyze real-world business problems and then apply appropriate solutions using Gmetrix and Certiport training and testing software. Students train, test, and attain an industry recognized certification in one of the following products using Gmetrix software: Word, Excel, PowerPoint, Access, Outlook, Outlook Outlook, or QuickBooks. Gmetrix and Certiport or certification tools used for training & testing purposes. 800 score recommended for advancement to proctored Certiport exam.
Offered on occasion

COMP 9942. Microcomputer Lab (45 hrs)
Coreq.: Concurrent enrollment in any Business Department course
Instructor-supervised computer lab for currently enrolled Business Department students. Students work independently on assignments given in other Business Department credit and noncredit courses.

COMP 9944. Acrobat for Bus/Office (45 hrs)
Advise: COMP 9245, 9905 or equivalent, ESL Level 6+
An introductory hands-on project based course teaching business office students PDF document conversion, document consolidation, interactive form creation, PDF optimization, redaction, security, electronic PDF distribution, and portfolio development. Students will create interactive business/office forms/office forms for electronic distribution.
Offered Fall semesters

COMP 9947. Windows Folder and File Concepts (15 hrs)
Advise: ESL Level 5/6 or above
Fundamentals of efficient management of electronic files/folders in a business office using a Windows or Mac based operation system. Students create file and folder naming conventions, learn to view and navigate through levels of folders, setup a cloud storage system, and organize folders in removable storage devices.

COMP 9948. Acrobat Bus/Office Doc Conversion (15 hrs)
Advise: COMP 9245, 9905 or equivalent, ESL Level 6+
An introductory course teaching the business office students PDF document conversion, document consolidation, Adobe PDF creation, security, and interactive from development. Students will combine and convert business office documents from various file formats for electronic PDF distribution.
Offered on occasion
COMP 9952. Internet and E-mail for the Business Office (15 hrs)
Advised: COMP 9942, 9905, 9947 or equivalent; ESL Level 6+
Introductory course to provide familiarity of the Internet and email. Topics covered include an introduction to the Internet and email, browser features, navigating the Web, cloud computing services, and evaluate websites for clarity, content, and credibility.

COMP 9957. Photoshop Elements I (15 hrs)
Advised: COMP 9245, COMP 9905, or equivalent; ESLN 5/6
An introduction to image file management and digital image editing software. Students are introduced to file naming conventions and organization, bitmap file formats, and various digital editing modes. Students will learn to organize and enhance business graphics for personal portfolio development and business office work.

COMP 9958. Photoshop Elements II (15 hrs)
Advised: COMP 9245, COMP 9905, or equivalent; COMP 9957; ESLN 5/6
An introduction to digital image editing software to create business office graphics for Web and desktop publishing. Students apply auto correct features, make selections, repair exposure problems, combine images, reframe, retouch and recompose images, and share and export digital graphic files in various formats.

COMP 9959. Photoshop Elements (45 hrs)
Advised: COMP 9905, ESL Level 5/6 or above
Fundamental digital image software course. Students learn to organize, digitally edit, and create business office images for web page development, desktop publishing, and a personal portfolio. Students repair exposure problems, create selections, auto correct, reframe, retouch, recompose, and share and export image files in various file formats.

COMP 9964. Microsoft Outlook Essentials (15 hrs)
Advised: 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 9967. Google Apps for Business I (45 hrs)
Advised: ESLN 3700 or TRST 2322; and COMP 9245 or COMP 9905
Google Apps for Business I is a hands-on course that introduces students to cloud-based file storage, email, security, file management, Google Drive, Docs, Sheets, Slides, Calendar, Blogger, and group collaboration. Students learn to share docs, collaborate in groups, develop error free blog posts, memo, cover letter, and a personal budget, and migrate and convert Microsoft Office documents into Google Docs, Sheets, and Presentations, and archive them in the Google Drive.

COMP 9968. Google Apps for Business II (45 hrs)
Advised: ESLN 3700 and COMP 9245 or COMP 9905
Google Apps for Business II is a hands-on course that introduces to data collection strategies using Google Forms and builds on existing understanding of cloud productivity tools. Students create and embed surveys into blogs, support content management, gather employee and client feedback, manage spreadsheets, back up assignments in the cloud, create archives, learn to connect and collaborate, encrypt, and share documents in the most common file formats.

COMP 9975. MS Office Applications I (45 hrs)
Advised: ESLN 3600 and COMP 9905 and COMP 9947 and COMP 9952 or equivalent skills
An introduction to Microsoft 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.

COMP 9976. MS Office Applications II (45 hrs)
Advised: ESLN 3600 and COMP 9975 or or equivalent skills
An intermediate level course of Microsoft Office applications in Word, Excel, Access, and PowerPoint. Topics include creating a flyer and table in Word, analyzing data in Excel, creating forms and reports in Access, and building a PowerPoint presentation with animation, tables, and charts. The integration of Microsoft Office applications is introduced.

COMP 9977. Microsoft OneNote (45 hrs)
Advised: ESLN 3500 or placement in ESLN 3600
A hands-on course that introduces Microsoft OneNote, a free-form information gathering and multi-user collaboration software. Students will use this electronic notebook to create and gather notes, drawings, screen clippings and audio and video commentaries to share with other OneNote users over the Internet or on a network.

WOPR 9990. Word Processing (Multi-Level) (90 hrs)
Advised: BOSS 4503; BOSS 5503
Beginning to advance Microsoft Word course focusing on essential word processing skills as required in a business office. Students learn to prepare, format, maintain documents, create tables, merge documents, and create business letters.

WOPR 9995. Microsoft Word for Business I (45 hrs)
Advised: ESLN 3600 or TRST 2322
A hands-on course introducing Microsoft Word word-processing software application. Topics include Microsoft Word basics, creating and maintaining documents, tables, forms and mail merge.

WOPR 9996. Microsoft Word for Business II (45 hrs)
Prereq: WOPR 9995
Advised: ESLN 3600 or TRST 2322
Create custom documents containing a table of contents, sections, index references and an index. Students create macros, and learn techniques to collaborate effectively using features in Microsoft Word.

Finance

Credit, Degree Applicable Courses:
FIN 110. Principles of Risk Management (3)
Lec-52.5
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 Offered on occasion

FIN 130. Principles of Bank Operations (3)
Lec-52.5
P/NP available
Advised: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
Fundamentals of bank functions; operations involving day-to-day banking activities; various bank services such as deposits, loans, trust,
and international; legal aspects of banking; the Federal Reserve System and related regulatory controls. CSU

**Offered Fall semesters**

**FIN 133. Money and Banking (3)**  
Lec-52.5 P/NP available  
ADVISE: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or PLACEMENT IN ENGL 96 or ENGL 88B  
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

**Offered Spring semesters**

**FIN 136. Introduction to Financial Planning (3)**  
Lec-52.5 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 importance 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-52.5 P/NP available  
ADVISE: BSMA 68; ESL 150 or ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or PLACEMENT IN ESL 160 or ENGL 96 or ENGL 88B  
The principles and practices in the investment field and successful investment policies for the individual investor are studied, serving as a good practical application as well as good preparation for higher-level classes. This will include establishing an investment program, sources of investment information, tools utilized in security and market analysis, and an analysis of securities markets and institutions. CSU

**General Business**

**Credit, Degree Applicable Courses:**

**GNBS 119. Introduction to Business (3)**  
Lec-52.5  
ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or PLACEMENT IN ENGL 96 or ENGL 88B  
Overview of the functional areas of business -- including marketing, human resources, finance, accounting, operations, and management -- within a socially responsible global business environment. In addition, provides an overview of small business and entrepreneurship, ethics, economics, international business, and e-commerce. UC/CSU C-ID BUS 110

**GNBS 125. Green & Sustainable Business (3)**  
Lec-52.5 P/NP available  
ADVISE: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or PLACEMENT IN ENGL 96 or ENGL 88B  
This course examines the environmental profiles of the major business segments. Introduction to 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

**Offered Fall semesters**

**GNBS 127. Green & Sustainable Operations Management (3)**  
Lec-52.5 P/NP available  
ADVISE: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or PLACEMENT IN ENGL 96 or ENGL 88B  
This course examines the environmental impact of the functional areas of an organization and focuses on applying models for sustainability. Teaches important tools, including triple bottom line accounting, natural capitalism, social responsibility, and applying 'just in time' principles in a business environment. CSU

**Offered Spring semesters**

**International Business**

**Credit, Degree Applicable Courses:**

**INTR 162. Survey of International Business (3)**  
Lec-52.5  
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-52.5 P/NP available  
ADVISE: ENGL 86 or ENGL 91 or PLACEMENT IN ENGL 88  
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 167. International Law (3)**  
Lec-52.5  
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

**Offered Fall semesters**

**INTR 168. International Finance (3)**  
Lec-52.5  
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

**Offered Spring semesters**

**INTR 170. International Finance (3)**  
Lec-52.5  
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

Lec-52.5 P/NP available  
ADVISE: MABS 30 or EQUIVALENT KEYBOARDING AND COMPUTER SKILLS; ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or PLACEMENT IN ENGL 96 or ENGL 88B  
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, website alternatives, transportation tracking, governmental resources and assistance, electronic submission of customs documentation, electronic payments, internet software tools and business related hardware options. CSU

**Offered Spring semesters**

**INTR 173. Export-Import (3)**  
Lec-52.5 P/NP available  
ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or PLACEMENT IN ENGL 96 or ENGL 88B  
An introduction to the concepts of international export and import practices, including identifying foreign markets, export and import regulations, channels of distribution, tariffs, evaluating functions of
Study of the code of ethics in the legal profession; the steps to file a lawsuit; the California and federal court systems; the areas of torts, contracts, property law, and criminal law and procedure; the role of a paralegal; and the operations of a law office.

**Marketing**

**Credit, Degree Applicable Courses:**

**MRKT 122. Professional Selling (3)**
Lec-52.5; P/NP available
*Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B*

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. Introduction to Marketing (3)**
Lec-52.5; P/NP available
*Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B*

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-52.5; P/NP available
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 sideshow presentations. CSU

**MRKT 150. Consumer Behavior (3)**
Lec-52.5; P/NP available
*Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B*

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. Advertising and Integrated Marketing Communication (3)**
Lec-52.5; P/NP available
*Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B*

Exploration of the role of advertising and integrated marketing communications in the marketplace. Working knowledge of the following areas associated with the advertising industry: Target marketing, ad agency organizations and operations, media strategies, use of television, radio, outdoor advertising, online and social media, print media, sales promotions, and alternative advertising. CSU

**Paralegal/Legal Studies**

**Credit, Degree Applicable Courses:**

**PLS 1. Introduction to Paralegal Studies (3)**
Lec-52.5
*Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A*

Study of the code of ethics in the legal profession; the steps to file a lawsuit; the California and federal court systems; the areas of torts, contracts, property law, and criminal law and procedure; the role of a paralegal; and the operations of a law office.

**PLS 2. Legal Research and Writing I (3)**
Lec-52.5
*Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A*

Study and practice of written, verbal, electronic communication and legal research techniques and styles used in today's law offices. Students will also be required to research online and using print, Shepardize, and cite properly their sources. CSU

**PLS 3. Legal Research and Writing II (3)**
Lec-52.5
*Prereq.: PLS 1 and PLS 2*

This course teaches students how to research more effectively using both online and print sources, how to cite check and shepardize, and how to argue persuasively via two types of legal memoranda. CSU

**PLS 4. Litigation I (3)**
Lec-52.5
*Prereq.: PLS 1 and PLS 2*

This course teaches students how to gather the information and draft the pleadings to commence a lawsuit in court or respond to a lawsuit. CSU

**PLS 5. Litigation II (3)**
Lec-52.5
*Prereq.: PLS 3 and PLS 4*

This course focuses on the discovery, trial, and post-trial phases of a lawsuit and the role of a paralegal in each phase. CSU

**PLS 6. Law Office Management and Procedures (3)**
Lec-52.5
*Prereq.: PLS 3 and PLS 4*

Advising: MABS 60

This course covers law office management systems, personnel management, accounting, and operations. CSU

**PLS 7. Corporate Law (3)**
Lec-52.5
*Prereq.: PLS 3*

This course covers legal aspects of various business entities, including corporations, sole proprietorships, partnerships, and joint ventures and emphasizes the duties of a paralegal in forming, maintaining, and terminating the above entities. CSU

**PLS 9. Wills, Trusts, and Probate Administration (3)**
Lec-52.5
*Advising: PLS 3*

This course teaches the law of wills and trusts; the organization and jurisdiction of a California probate court; and the administration of estates in California probate courts, including gift inheritance and estate taxes. CSU
PLS 12. Family Law (3)  
Lec-52.5  
Prereq.: PL 3; PL 4  
This course covers the tasks associated with marital dissolutions such as the division of marital property and child custody as well as alternate family structures in today’s society. CSU  
Offered on occasion

PLS 13. Intellectual Property (3)  
Lec-52.5  
Prereq.: PL 3; PL 4  
This course focuses on the principles of intellectual property law in trademarks, copyrights, and patents including international conventions and the difference between ideas and expression of ideas, fair-use doctrine, trade secrets, and the notion of public domain. CSU  
Offered on occasion

PLS 14. Immigration Law (3)  
Lec-52.5  
Advis: PL 3  
This course is a practice-oriented overview of immigration law and covers family and employment visas, political asylum, naturalization, non-immigrant visas, and removal. CSU  
Offered Spring semesters

PLS 16. Paralegal Work Experience (1-3)  
Work-60 to 225, field trips  
Prereq: PL 1 and PL 2 and PL 3 and PL 4  
Repeat: Students can repeat once (total 2 enrollments)  
Students will work with practicing attorneys and paralegals, apply the skills learned in the paralegal classes, and gain experience working in a legal environment. CSU  
Replaces PL 16, PL 18, and PL 19

Real Estate

Credit, Degree Applicable Courses:

R E 181. Principles of Real Estate (3)  
Lec-52.5  
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

R E 182. Escrow Fundamentals (3)  
Lec-52.5  
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

R E 183. Real Estate Property Management (3)  
Lec-52.5  
An introductory course dealing with real estate property management and its relationships to agency, contracts, rentals, basic rent rules, rent control, tenant selection, insurance, repairs and maintenance, evictions, discrimination, landlord and tenant rights, public and private housing facilities, and government participation and regulations. CSU

R E 184. Real Estate Practice (3)  
Lec-52.5  
Advis: ENGL 86 or ENGL 91 or ESL 140 or ESL 184 or placement in ENGL 88 or ENGL 93 or ESL 150 or ESL 186  
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

R E 185. Legal Aspects of Real Estate (3)  
Lec-52.5  
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

R E 186. Principles of Real Estate Finance (3)  
Lec-52.5  
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

R E 187. Real Estate Taxation (3)  
Lec-52.5  
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

R E 189. Real Estate Economics (3)  
Lec-52.5  
Advis: R E 181; ESL 150 or ENGL 86 or placement in ESL 150 or ENGL 88  
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

R E 191. Principles of Real Estate Appraisal (3)  
Lec-52.5  
Advis: MATH E1 or MATH E3 or placement in MATH 40  
Basic course in real estate valuation with emphasis on residential property. Topics include: valuation principles; appraisal process; analysis of city, neighborhood and site data; architectural style; depreciation; market data valuation, cost and income approaches; correlation of approaches and final estimate of value; the appraisal report; and the professional appraiser. CSU

R E 192. Advanced Real Estate Appraisal (3)  
Lec-52.5  
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  
Offered on occasion

R E 193. Real Estate Computer Applications (3)  
Lec-52.5  
Exploration of basic computer functions, using the latest computer software in the real estate appraisal, property management, finance, escrow, sales, listings, record keeping and other related areas of real estate. Students will have an opportunity to use software to create or complete real estate documents. CSU  
Offered on occasion
Small Business

**Credit, Degree Applicable Courses:**

SMBS 135. Ownership and Operations of a Small Business (3)  
Lec-52.5  
An introduction to organizing and managing a successful small 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 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 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 9476. Green & 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 become a seller, research and create winning listings, use PayPal, deal with shipping and complete sales.

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 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.

**Supervision and Business Management**

**Credit, Degree Applicable Courses:**

SUPV 231. Introduction to Supervision/Management (3)  
Lec-52.5  
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-52.5  
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-52.5  
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-52.5  
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-52.5  
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. UC/CSU

**Offered Fall semesters**

SUPV 236. Women Leaders at Work (3)  
Lec-52.5  
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

**Offered Spring semesters**

Travel and Tourism

**Credit, Degree Applicable Courses:**

TRTV 157. Principles of Travel and Tourism (3)  
Lec-52.5, field trips  
Advise: ESL 160 or ENGL 93 or ENGL 95 or ENGL 88A or ENGL 88 or placement in ENGL 96 or ENGL 88B  
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. The course is designed to give the student the basics for all components of the industry. CSU

**Offered Spring semesters**

TRTV 159. Careers in Travel and Tourism (3)  
Lec-52.5  
Advise: TRTV 157; ENGL 88 or ENGL 88B or placement in ENGL 88A  
Methods of developing a travel destination and advertising and selling that destination; dynamics of tourism, sales and marketing concepts, including wholesale and retail practices of the travel industry, resume preparation for segments of the travel industry including hotels, travel agencies, rental car companies, tour companies, cruise lines and airlines. CSU

**Formerly Advanced Principles of Travel and Tourism**

**Offered Fall semesters**
Leisure traveler? Learn about special contract agreements and the business traveler An ideal class for administrative assistants and anyone working in the business world. CSU

Offered Spring semesters

TRTV 182. Tour Management (3)
Lec-52.5, field trips
Advise: TRTV 157 and/or TRTV 159
Learn how to develop, price, market, manage 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

Offered Fall semesters

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 333. General Work Experience (1-6)
Work-60-450 P/NP only
Prereq.: Approval of Business Department Work Experience Coordinator required
Repeat max. 6.00 units

General work experience course designed for students who may not yet have selected a specific occupational goal but who are presently employed off campus. Through supervised employment, students can increase their workplace success by undertaking new or expanded responsibilities at their jobs and acquiring improved work habits and career-related skills. One unit of credit is earned for each 60 hours of unpaid work or 75 hours of paid work. CSU

WKEX 777. On-Campus Work Experience (1-6)
Work-60-450 P/NP only
Prereq.: Approval of Business Department Work Experience Coordinator required
Repeat max. 6.00 units

General work experience course designed for students who may not yet have selected a specific occupational goal but who are presently employed off campus. Through supervised employment, students can increase their workplace success by undertaking new or expanded responsibilities at their jobs and acquiring improved work habits and career-related skills. One unit of credit is earned for each 60 hours of unpaid work or 75 hours of paid work. CSU

Career Development
Office: MU 101
Phone Number: (415) 239-3117
Web Site: www.ccsf.edu/cdc
Formerly CDCD

Announcement of Courses

Credit, Degree Applicable Courses:
CRER 60. Creating Career Options (3)
Lec-52.5, field trips P/NP available
Advise: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 150 or placement in ENGL 96 or ENGL 88B or ESL 160
An in-depth guide to creating career options throughout life. Topics include career curiosity, self assessment, occupational health, career development over the life span, and influence of career choice on
family and relationships. Emphasis on the role of career development in contributing to a satisfying and healthy life. Helpful to those considering a career change or undecided about a college major. UC/CSU

CRER 61. Orientation to Career Success (1)
Lec-17.5 P/NP available
Advise: ENGL 91 or ENGL 86 or ESL 140 or ESL 184 or placement in ENGL 88 or ENGL 95 or ESL 150 or ESL 186
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

CRER 62. Successful Job Search Techniques (1)
Lec-17.5 P/NP available
Advise: ENGL 91 or ENGL 86 or ESL 140 or ESL 184 or placement in ENGL 88 or ENGL 95 or ESL 150 or ESL 186
A comprehensive job search course that addresses skills assessment, generating employment options, hard copy and electronic resources and job postings, research techniques, traditional resume types as well as keyword scan able resumes and cover letters, and interview techniques. Emphasis on techniques to sustain healthy motivation for job search networking and development throughout life. CSU

CRER 63. Career Counseling for Work Experience (1)
Lec-17.5 P/NP available
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
Offered on occasion

CRER 64. Financial Planning for Academic/Career Success (1)
Lec-17.5 P/NP available
Advise: ESL 140 or ENGL 91
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
Formerly LERN 64

CRER 65. Career Coaching for Youth Workers (3)
Lec-52.5, field trips P/NP available
Advise: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 150 or placement in ENGL 96 or ENGL 88B or ESL 160
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. CSU
Offered on occasion

Noncredit Courses:
CRER 1062. Job Search Skills (15 hrs)
Advise: ESLN 3800
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. Formerly LERN 1062

Chemistry
Office: Science 233
Phone Number: (415) 239-3180
Web Site: www.ccsf.edu/chemistry

Announcement of Courses
Credit, Non-Degree Applicable Course:
CHEM C. Calculations in Chemistry (1.5)
Lec-26.25 P/NP only
Coreq.: CHEM 101A.
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. Recommended as a supplement to be taken concurrently with CHEM 101A for students who need additional help.

Credit, Degree Applicable Courses:
CHEM 32. Introduction to Medical Chemistry (4)
Lec-52.5, Lab-52.5 P/NP available
Basic concepts of inorganic and organic chemistry, biochemistry, and physics as they apply to the chemistry and physics of the human body. CSU
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 MB 12. Students preparing to enroll in CHEM 101A or 103A should enroll in CHEM 40.

CHEM 40. Introduction to Chemical Principles (5)
Lec-70, Lab-52.5
Prereq.: MATH 40 or ET/BTEC 108A or placement in MATH 60
Introductory chemistry. Nomenclature, stoichiometry, gases acids/bases, solution, solids, atomic/molecular structure. UC/CSU
C-ID CHEM 101
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.

CHEM 85. Seminar in Chemistry (1)
Lec-18 P/NP available
In partnership with San Francisco State University, career professionals in chemistry and related fields will discuss their current research programs and provide information on career opportunities. Presentations on career opportunities for students studying chemistry. CSU
UC upon review

CHEM 101A. General College Chemistry (6)
Lec-70, Lab-105
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. Stoichiometry, solubility, solutions, gas behavior, thermochemistry, atomic structure, periodic table, chemical bonding, molecular
structure, solids and liquids, and an introduction to chemical equilibriums. UC/CSU
C-ID CHEM 110; C-ID CHEM 120S (CHEM 101A + CHEM 101B)
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.

CHEM 101B. General College Chemistry (5)
Lec-52.5, Lab-105
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. UC/CSU
C-ID CHEM 120S (CHEM 101A + CHEM 101B)

CHEM 103A. General Chemistry for Engineering (5)
Lec-70, Lab-52.5
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
Thermochemistry, atomic structure, periodic properties, bonding, solid-state structures, fundamentals of organic chemistry, solution chemistry, thermodynamics, kinetics, equilibrium, acids and bases, and electrochemistry. UC/CSU
Designated for students majoring in all engineering programs except chemical engineering.

CHEM 110. Chemistry and the Environment (3)
Lec-52.5, field trips P/NP available
A presentation of chemical fundamentals related to environmental issues and society. Intended for non-science majors. UC/CSU
C-ID CHEM 110; C-ID CHEM 120S (CHEM 101A + CHEM 101B)

CHEM 208A. Organic Chemistry (4)
Lec-52.5, Lab-52.5
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 premedical students. UC/CSU
C-ID CHEM 150; C-ID CHEM 160S (CHEM 208A + CHEM 208B)

CHEM 208B. Organic Chemistry (4)
Lec-52.5, Lab-52.5
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. UC/CSU
C-ID CHEM 160S (CHEM 208A + CHEM 208B)

CHEM 212A. Organic Chemistry (6)
Lec-70, Lab-105
Prereq.: CHEM 101B
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. UC/CSU
C-ID CHEM 150; C-ID CHEM 160S (CHEM 212A + CHEM 212B)
CHEM 212A MAY BE SUBSTITUTED FOR CHEM 208A.

Chemical Engineering

C-ID CHEM 212A may be substituted for CHEM 208A.

CHEM 212B. Organic Chemistry (6)
Lec-70, Lab-105
Prereq.: CHEM 212A or 208A
The second semester of a one-year course in organic chemistry for students who major in chemistry, biochemistry, and other chemistry intensive sciences. UC/CSU
C-ID CHEM 160S (CHEM 212A + CHEM 212B)
CHEM 212B MAY BE SUBSTITUTED FOR CHEM 208B.

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.

Child and Adolescent Development Major (AA-T)

The Associate in Arts in Child and Adolescent Development for Transfer (AA-T) degree provides students with an interdisciplinary course of study in Child Development. For students not interested in teaching or in caring for children in group settings, this major provides an alternative preparation for students interested in working with children and families in a range of settings and provides lower division major preparation for transfer, particularly to Child and Adolescent Development majors at the California State University. This major provides coursework examining research that focuses on developmental outcomes and factors spanning conception to emerging adulthood. This option of study is intended for students who aspire to careers in developmental research, public policy, social work, school psychology, family support and similar fields. The courses provide content breadth in Child Development.

Learning Outcomes

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

- Identify and compare the stages of human development from conception to emerging adulthood.
- Analyze developmental milestones and typical and atypical development.
- Apply statistical and research methodologies for comparing and contrasting data on developmental outcomes and conditions.
- Differentiate cultural and historical impacts on development.
- Analyze and apply relevant psychological concepts to self-reflection and everyday life.

Students who wish to earn the Associate in Arts in Child and Adolescent Development 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 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.

Assuming students start this AA-T program with transfer‐level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AA-T in Child and Adolescent Development

Course ............................................. Units

Required core courses:
PSYC 1 General Psychology ......................... 3.0
CDEV 53 Child Growth and Development ........... 3.0

Choose one of the following Statistics core courses:
ECON 5 Introductory Statistics for Economics, Business and Social Sciences. .................. 5.0
PSYC 5 Statistics for Behavioral Sciences ........... 5.0
LALS 5 Introduction to Statistical Methods in Latin American and Latino/a Studies ........... 5.0
MATH 80 Probability and Statistics .................. 4.0

Choose 3 courses (minimum of 9 semester units) from the following:
GEOG 4 Cultural Geography .......................... 3.0
PSYC 21 Lifespan Development ........................ 3.0
CDEV 67 Child, Family, and Community ............... 3.0
CDEV 73 Observing and Assessing Young Children .... 3.0
BIO 9 Human Biology .................................. 4.0
or BIO 11 The Science of Living Organisms ........... 4.0

Total: ............................................. 19.0 – 21.0

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 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 this program, 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 healthful 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.

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 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.

Assuming students start this AS-T with transfer‐level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AS-T in Early Childhood Education

Course ............................................. Units

Required courses:
CDEV 65 Orientation to ECE Principles and Practice .... 3.0
CDEV 67 Child, Family, and Community ................. 3.0
CDEV 53 Child Growth and Development .................. 3.0
CDEV 66 Introduction to Early Childhood Curriculum .............. 3.0
CDEV 93 Cultural Diversity in Early Childhood Education .......................... 3.0
CDEV 73 Observing and Assessing Young Children ... 3.0
CDEV 92 Health, Safety and Nutrition in Early Childhood Programs ......................... 3.0
CDEV 72 Supervised Field Experience in Early Childhood ................. 3.0

Total: ............................................. 24.0

Child Development & Family Studies Major (AS)

The Child Development Program is designed so that students may satisfy the requirements for graduation from the College.

Learning Outcomes

Upon completion of this program, 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.
Learning Outcomes

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

- Differentiate and describe stages of child growth and development.
- Examine the role of families and communities in the lives of children and youth.
- Distinguish developmentally appropriate practice and diverse philosophical approaches in a range of settings for children and youth.
- Identify the general competencies and regulatory requirements needed to administer a child development program.
- Classify and explain the components of supervision needed to lead a child development program.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Child Development: Administration

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 66 Introduction to Early Childhood Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 67 Child, Family, and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 90 Early Childhood Administration I</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 91 Early Childhood Administration II</td>
<td>3.0</td>
</tr>
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<td>Total:</td>
<td>18.0</td>
</tr>
</tbody>
</table>

Child Development: Family Childcare Certificate

This certificate is appropriate for those students interested in opening or further developing a licensed family child care program or beginning a career in family child care. Current family child care providers interested in topical content and specific subjects would also be served. The 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 program, students will be able to:

- Differentiate basic components of and professional responsibilities in family childcare settings.
- Distinguish and describe the elements of family child care, including regulatory requirements.
- Explain the developmental needs of children and families when planning family child care programs.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

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>CDEV 41E Starting A Large Family Child Care or Center</td>
<td>1.0</td>
</tr>
<tr>
<td>CDEV 41H Advanced Business Practices in Family Child Care</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Child Development: Infant/Toddler Care Certificate

This certificate prepares students to care for infants and toddlers in a range of educational settings. This certificate satisfies the specialty area in Infant/Toddler Care for the California Commission on Teacher Credentialing Child Development Permit.

Learning Outcomes

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

- Differentiate stages of growth and development.
- Examine the role of families and communities in the lives of children and youth.
- Distinguish developmentally appropriate practice and diverse philosophical approaches in infant/toddler settings.
- Differentiate the critical elements of developmental needs for infants and toddlers.
- Apply understanding of infant and toddler development when caring for infants and toddlers.
- Examine and analyze appropriate curriculum choices for infants and toddlers.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Child Development: Infant/Toddler Care

Course ............................................ Units
Required courses:
CDEV 4I Development of Infancy in Family Child Care ............................................. 1.0
CDEV 4IK Infant/Toddler Curriculum in Family Child Care ............................................. 1.0
CDEV 44 Family Child Care Environmental Rating Scale ............................................. 1.0

SECTION II: Complete 3 units from the following courses:
CDEV 4IC Issues in CDEV – Leadership Seminar ............................................. 0.5-1.0
CDEV 4IF Serving Children with Special Needs in Family Child Care ............................................. 1.0
CDEV 4IG Communicating with Families in Family Child Care ............................................. 1.0
CDEV 4IH Family Child Care Environment ............................................. 1.0
CDEV 4IN Music and Movement in Family Child Care ............................................. 1.0
CDEV 4I0 Outdoor Learning in Family Child Care ............................................. 1.0
CDEV 4IP Mixed Ages in Family Child Care ............................................. 1.0
CDEV 4IS Learning Activities in Family Child Care ............................................. 1.0
CDEV 4IV Exploring Math in Family Child Care ............................................. 1.0
CDEV 4IW Exploring Science in Family Child Care ............................................. 1.0

Total: ............................................. 6.0

Child Development: Pre-Teacher Certificate

This Certificate of Accomplishment in TK-12 Pre-Teacher is an entry level certificate to introduce students to the field of TK-12 education and to begin on a pathway to earning an AS degree, a BA and a Multiple Subject or Single Subject credential. This certificate represents a beginning step for future TK to 12th grade classroom teachers. Coursework focuses on preparing students for teaching as a career and includes key content and fieldwork. The program prepares students to be classroom aides, para-professionals and to begin careers as assistants in TK to 12th grade classrooms as a first step.

Learning Outcomes

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

- Differentiate stages of growth and development of children and youth.
- Distinguish developmentally appropriate practice and diverse philosophical approaches in TK-12 settings.
- Examine the role of families and communities in TK-12 education.
- Examine the role of the TK-12 teacher and trends in public education.
- Organize the steps to becoming a credentialed teacher in California and examine current educational requirements.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Child Development: Pre-Teacher

Course ............................................ Units
Required courses:
CDEV 53 Child Growth and Development ............................................. 3.0
CDEV 150 Orientation to TK-12 Education ............................................. 3.0

Choose one of the following field experience courses:
CDEV 71 Elementary Supervised Field Experience ............................................. 3.0
CDEV 75 High School Supervised Field Experience ............................................. 3.0

Choose 6 units from the following elective courses:
CDEV 67 Child, Family, and Community ............................................. 3.0
CDEV 120 Special Education TK-12 ............................................. 3.0
PSC 11 Conceptual Physical Science ............................................. 3.0
PSC 1 II Conceptual Physical Science Laboratory ............................................. 1.0
LERN 53A Test Prep for CBEST Basic Skills Test-English ............................................. 0.5
LERN 53B Test Prep: Standardized Exams: CBEST ............................................. 0.5
LERN 53C Test Prep: Standardized Exams: CSET ............................................. 0.5
LERN 53D Test Prep for CSET Multiple Subjects Exam: Math ............................................. 0.5

Total: ............................................. 15.0

Child Development: Professional Development and Advocacy Certificate

The 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 program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Child Development: Professional Development and Advocacy

<table>
<thead>
<tr>
<th>Course</th>
<th>Required courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 67 Child, Family, and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 66 Introduction to Early Childhood Curriculum</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose 1 unit from the following area of specialization:

- Professional Development and Advocacy elective courses:
  - CDEV 41B Issues in CDEV Teacher Seminar | 0.5 |
  - CDEV 41C Issues in CDEV – Leadership Seminar | 0.5-1.0 |
  - CDEV 41L Advocacy and Professional Standards in ECE | 1.0 |

Choose 3 units from the following elective courses:

- CDEV 41M Substitute Teaching in ECE Programs | 1.0 |
- CDEV 41U Dual Language Learning in Early Childhood | 1.0 |
- CDEV 44 Family Child Care Environmental Rating Scale | 1.0 |
- CDEV 45 ITERS and ECERS Rating Scale | 1.0 |
- CDEV 46 Teacher-Child Interactions in Early Care and Education Using the Classroom Assessment Scoring System (CLASS) | 1.0 |

Total: 18.0

Child Development: Violence Intervention in Early Childhood Certificate

This Certificate prepares students to implement trauma-informed practices in community-based organizations and educational settings with a focus on how to understand and support families and children exposed to violence. This Certificate satisfies the educational requirements for the Specialization Component of the California Commission on Teacher Credentialing's Child Development Permit.

Learning Outcomes

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

- Differentiate and describe stages of child growth and development.
- Examine the role of families and communities in the lives of children and youth.
- Distinguish developmentally appropriate practice and diverse philosophical approaches in a range of settings for children and youth.
- Classify and distinguish the unique characteristics of child development settings for older, school-age children in out-of-school time settings.
- Analyze the impact of violence and trauma on children and families.
- Assess violence prevention and intervention strategies for children, families and communities.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Child Development: Violence Intervention in Early Childhood

<table>
<thead>
<tr>
<th>Course</th>
<th>Required courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 66 Introduction to Early Childhood Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 97 School Age Growth &amp; Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 18.0

Child Development: School-Age Care Certificate

This Certificate prepares students to work with school-age children in group educational settings and satisfies the educational requirements for the California Commission on Teacher Credentialing's Child Development School Age Permit.

Learning Outcomes

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

- Differentiate and describe stages of child growth and development.
- Examine the role of families and communities in the lives of children and youth.
- Distinguish developmentally appropriate practice and diverse philosophical approaches in a range of settings for children and youth.
- Classify and distinguish the unique characteristics of child development settings for older, school-age children in out-of-school time settings.
- Analyze the impact of violence and trauma on children and families.
- Assess violence prevention and intervention strategies for children, families and communities.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Child Development: School-Age Care

<table>
<thead>
<tr>
<th>Course</th>
<th>Required courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 66 Introduction to Early Childhood Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 97 School Age Growth &amp; Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 18.0
CDEV 66 Introduction to Early Childhood Curriculum ........................... .3.0
CDEV 67 Child, Family, and Community ................................. .3.0
CDEV 65 Orientation to ECE Principles and Practice ........................ .3.0

**Required courses for area of specialization: Violence Intervention**
CDEV 100 Violence and Its Impact on Children and Their Families ..................... .3.0
CDEV 101 Intro to Violence Intervention ......................................... .3.0

**Total: .......................................................... 18.0**

### Child Development: Youth Worker Certificate

The Youth Worker Certificate is designed to prepare students interested in pursuing careers with older children and youth in a variety of settings. Content includes youth development principles relevant to working in group or one-on-one settings with older children and youth. Students can also pursue transfer opportunities in recreation, child and adolescent development, social work, teaching, health education and other related fields.

**Learning Outcomes**

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

- Compare the developmental needs of older children and youth when planning curriculum for youth programs in the community.
- Examine the role of families and communities in the lives of children and youth.
- Analyze the emerging field of youth worker and examine the variety of settings where youth are served.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**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 67 Child, Family, and Community</td>
<td>.3.0</td>
</tr>
<tr>
<td>CDEV 78 Supervised Field Experience in Community Youth Organizations</td>
<td>.3.0</td>
</tr>
<tr>
<td>CDEV 79 Youth Program Development</td>
<td>.3.0</td>
</tr>
<tr>
<td>HLTH 65 Youth Development &amp; Leadership</td>
<td>.3.0</td>
</tr>
<tr>
<td><strong>Choose one of the following growth and development courses:</strong></td>
<td></td>
</tr>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>.3.0</td>
</tr>
<tr>
<td>CDEV 97 School Age Growth &amp; Development</td>
<td>.3.0</td>
</tr>
<tr>
<td><strong>Choose 3 units from the following elective courses:</strong></td>
<td></td>
</tr>
<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: Class and 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: Ageism and Adultism (Age-based Oppression)</td>
<td>.1.0</td>
</tr>
<tr>
<td>IDST 81B Diversity and Social Justice: Anti-Semitism/Anti-Arabism</td>
<td>.1.0</td>
</tr>
<tr>
<td>CDEV 99 Sensory Processing Disorder in Children</td>
<td>.1.0</td>
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<tr>
<td>CDEV 121 Children with ADHD</td>
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<tr>
<td>CDEV 122 Social Emotional Differences K-12</td>
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<tr>
<td>CDEV 123 Learning Disabilities</td>
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<tr>
<td>CDEV 124 Individualized Education Programs</td>
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<tr>
<td>CDEV 125 Children's Emotional Development</td>
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</tbody>
</table>

**Choose 6 units from the following elective courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMJ 51 Juvenile Procedures</td>
<td>.3.0</td>
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<tr>
<td>ADMJ 59 Organized Crime</td>
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<tr>
<td>CDEV 71 Elementary Supervised Field Experience</td>
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</tr>
<tr>
<td>CDEV 95 School-Age Child Care Curriculum</td>
<td>.3.0</td>
</tr>
<tr>
<td>CDEV 97 School Age Growth &amp; Development</td>
<td>.3.0</td>
</tr>
<tr>
<td>CDEV 100 Violence and Its Impact on Children and Their Families</td>
<td>.3.0</td>
</tr>
<tr>
<td>HLTH 38 Trauma Response and Recovery</td>
<td>.3.0</td>
</tr>
<tr>
<td>HLTH 67 HIV and Hepatitis Navigation Skills</td>
<td>.3.0</td>
</tr>
<tr>
<td>WOMN 54 The Politics of Sexual Violence</td>
<td>.3.0</td>
</tr>
<tr>
<td>WOMN 55 Ending Sexual Violence: Peer Education</td>
<td>.3.0</td>
</tr>
</tbody>
</table>

**Total: .......................................................... 24.0**

### ECE Associate Teacher Certificate

This certificate includes Early Childhood Education (ECE) courses and is an entry level certificate for students preparing to work with groups of children in early childhood settings. The courses are required by the Department of Social Services, Community Care Licensing to work in licensed child care facilities in California. Completing the certificate also satisfies the educational requirements for the Associate Teacher level of the California Commission on Teacher Credentialing's Child Development Permit. These core courses form the foundational requirements for continued work with young children in a variety of educational and classroom settings, including ECE, infant/toddler care, school-age care, and after additional study, K-12 classrooms.

**Learning Outcomes**

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

- Differentiate stages of child growth and development.
- Examine the role of families and communities in the lives of children and youth.
- Distinguish developmentally appropriate practice and diverse philosophical approaches in a range of settings for young children.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in ECE Associate Teacher**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
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</tr>
<tr>
<td>CDEV 66 Introduction to Early Childhood</td>
<td>.3.0</td>
</tr>
<tr>
<td>ADMJ 59 Organized Crime</td>
<td>.3.0</td>
</tr>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>.3.0</td>
</tr>
<tr>
<td>CDEV 66 Introduction to Early Childhood Curriculum</td>
<td>.3.0</td>
</tr>
<tr>
<td>CDEV 67 Child, Family, and Community</td>
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</tr>
</tbody>
</table>

**Total: .......................................................... 12.0**

### ECE Practitioner Certificate

This Certificate provides the Early Childhood Education Practitioner with a course of study that satisfies multiple requirements and content needs. The core licensing requirements required by the Department of Social Services, Community Care Licensing are satisfied as well as the courses required for the California Commission on Teacher Credentialing, Child Development Permit. Students interested in working as a classroom teacher in ECE, early elementary (TK) or similar settings will develop the foundational knowledge of how children
learn and grow and what they need for optimal development in a range of settings.

Learning Outcomes

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

- Differentiate stages of child growth and development.
- Examine the role of families and communities in the lives of children and youth.
- Distinguish developmentally appropriate practice and diverse philosophical approaches in a range of settings for young children.
- Distinguish best practices and professional competencies for a variety of careers in teaching.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in ECE Practitioner

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDEV 53 Child Growth and Development</td>
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</tr>
<tr>
<td>CDEV 65 Orientation to ECE Principles and Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 66 Introduction to Early Childhood Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 67 Child, Family, and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose 3 units from following elective courses:</td>
<td></td>
</tr>
<tr>
<td>CDEV 72 Supervised Field Experience in Early</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 73 Observing and Assessing Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 92 Health, Safety and Nutrition in Early Childhood Programs</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 93 Cultural Diversity in Early Childhood Education</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose 3 units required from following depth elective courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CDEV 64 Introduction to Stress Reduction and Coping in Early Childhood and Elementary School Programs</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 68 Interactions with Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 76 Supporting LGBT Families in Educational Settings</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 98 Sensory Motor Development and Activities</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 106 Exploring Science in Early Childhood</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 107/HLTH 177 Introduction to Child Nutrition</td>
<td>3.0</td>
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<tr>
<td>CDEV 108 Communicating with Families</td>
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</tbody>
</table>

Total: 18.0

Introduction to Special Education Certificate

This Certificate of Accomplishment in Special Education-Autism is a 8 unit entry point into the field of Special Education and prepares students to work in entry-level positions with children with special needs in a variety of school settings. It completes the educational requirements for a Behavioral Specialist Internship working one-on-one with children with autism. These units also count towards a Certificate of Achievement in Special Education.

Learning Outcomes

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

- Differentiate strategies for collaborating with families and connecting families with community resources.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Introduction to Special Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CDEV 41T Early Autism Spectrum Disorders</td>
<td>1.0</td>
</tr>
<tr>
<td>CDEV 74 Children with Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>or CDEV 120 Special Education TK-12</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>or CDEV 67 Child, Family, and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose 1 unit from the following elective courses:</td>
<td></td>
</tr>
<tr>
<td>CDEV 121 Children with ADHD</td>
<td>1.0</td>
</tr>
<tr>
<td>CDEV 122 Social Emotional Differences K-12</td>
<td>1.0</td>
</tr>
<tr>
<td>CDEV 123 Learning Disabilities</td>
<td>1.0</td>
</tr>
<tr>
<td>CDEV 124 Individualized Education Programs</td>
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</tr>
</tbody>
</table>

Total: 8.0

Special Education: ECE Intervention Certificate

This Certificate of Achievement builds on the Introduction to Special Education Certificate of Accomplishment and continues the pathway to an ongoing career in Early Childhood Special Education. The coursework builds skills for general and special education teachers to understand the strengths and challenges of children with special needs and to describe inclusive strategies to respond to them. The coursework prepares students to work with young children with special needs in a range of settings, both one-on-one and group, in both general education and special education environments. Taken together, the courses complete educational requirements for the California Commission on Teacher Credentialing’s Child Development Permit and satisfy the core licensing requirements required by the Department of Social Services Community Care Licensing. The Certificate of Accomplishment will be granted upon successful completion of the required number of units of coursework.

Learning Outcomes

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

- Differentiate stages of child growth and development, with particular emphasis on typical and atypical development.
- Examine the role of families and communities in the lives of children and youth, particularly children with special needs.
- Distinguish developmentally appropriate practice and diverse philosophical approaches in early childhood settings.
- Compare differentiated teaching strategies for creating inclusive early childhood classrooms and engaging children with diverse learning styles, strengths and needs.
- Categorize sensory and learning challenges for children and identify strategies to address them.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Special Education: ECE Intervention

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses:</td>
<td></td>
</tr>
<tr>
<td>CDEV 74 Children with Special Needs</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Introduction to Child Development Careers

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 programs 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 completion of this program, students 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 bilingual 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in Introduction to Child Development Careers

Course ........................................... Hours
Choose one of the following courses:
CDEV 8101 The Child Development Lab School .... 54.0
CDEV 8100 Child Observation .......................... 54.0
CDEV 8002 Parents and Infants ......................... 45.0
CDEV 8003 Infant Development .......................... 45.0

Required course:
TRST 1322 Academic Reading and Writing 1.5 .... 90.0
Total: ........................................ 135.0 – 144.0

Announcement of Courses

Child Development

Credit, Degree Applicable Courses:
CDEV 11B. Pediatric Preventive Health Ed (.5)
Lec-9 P/NP available
Instruction 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 the State EMS Authority for child care providers. CSU

CDEV 11C. First Aid Care For III Children (.5)
Lec-9
Identification, transmission, control and care for common childhood illness and communicable disease. Child care first aid practices and procedures for the management of well children with mild illness, chronic health conditions and special needs. This course fulfills the partial continuing education requirement of the AB 243 mandated Health and Safety Training established by the State EMS Authority for Child Care Providers. CSU

CDEV 11D. Child Care Disaster Prep (.5)
Lec-9
Training for child care personnel on how to develop their own program plan for disaster management and emergency preparedness. Instruction in preparing for and then effectively dealing with, and recovery from emergency and crisis situation. Training certificate of completion will be awarded to those who qualify. This course fulfills the partial continuing education requirement of the AB 243 mandated Health and Safety Training established by the State EMS Authority for Child Care Providers. CSU

CDEV 41B. Issues in CDEV-Teacher Seminar (.5)
Lec-8.75 P/NP available
Teachers in ECE, K-12 and youth-serving programs attend seminars on emerging trends and issues related to improving program quality, understanding child development, specific curricular content, advocacy and community resources in the SF Bay Area, assessment and planning and teaching and learning. CSU

CDEV 41C. Issues in CDEV - Leadership Seminar (1)
Lec-17.5 P/NP available
Courses in seminar format for practitioners, directors, site supervisors, leaders and staff in programs serving children and youth related to professional development, including topics such as: emerging trends in the field, quality improvement efforts, advocacy, staff supervision, legal and licensing issues, facilities and fund development and other topics as needed. CSU

CDEV 41D. The Child Development Permit and Professional Growth Advising (1)
Lec-17.5
Overview of the Child Development Permit Matrix, including the application process, recent changes and requirements for education and experience. Emphasis on the role of the Professional Growth
Advisor using the "California Early Childhood Educator (ECE) Competencies". Utilizing the CA ECE Registry and the role of the Registry in tracking professional development and academic coursework will also be covered. CSU

**Offered on occasion**

CDEV 41E. Starting A Large Family Child Care or Center (1)  
Lec-17.5  
**Advise:** ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or placement in ESL 140 or ESL 184 or ENGL 88  
Requirements for opening a child care center or family child care, or expanding an existing family child care. Emphasis on space and program considerations, including those unique to San Francisco. Strategies for the provision of quality, developmentally appropriate and culturally relevant services to children and families. CSU

**Offered on occasion**

CDEV 41F. Serving Children with Special Needs in Family Child Care (1)  
Lec-17.5  
P/NP available  
**Advise:** ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
An overview of the range of developmental differences of children with special needs with an emphasis on the role of the family child care provider in designing environments to include children with special needs; creating appropriate accommodations; sharing community support strategies and resources with families; and participating in the Individualized Education Plan (IEP) process. CSU

**Offered on occasion**

CDEV 41G. Communicating with Families in Family Child Care (1)  
Lec-17.5  
**Advise:** ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or placement in ESL 140 or ESL 184 or ENGL 88  
The value of positive family-provider communication. Techniques and strategies for communicating the developmental needs of children with a variety of social, economic, cultural and family structures factors are considered. CSU

**Offered on occasion**

CDEV 41H. Family Child Care Environment (1)  
Lec-17.5  
Developmentally appropriate environments in home-based group care for children at various ages and stages, and areas of development. The role of the licensed family child care provider in supporting growth and development, particularly in physical-sensory motor development, through thoughtful design of the environment. CSU

**Offered on occasion**

CDEV 41I. Advanced Business Practices in Family Child Care (1)  
Lec-17.5  
**Advise:** ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or placement in ESL 140 or ESL 184 or ENGL 88  
Overview of the operation of a family child care. Information on continuous compliance with licensing requirements, procedures for a successful business, marketing and meeting the developmental needs of young children in group care. CSU

**Offered on occasion**

CDEV 41J. Development of Infancy in Family Child Care (1)  
Lec-17.5  
**Advise:** ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
Introduction to the developmental patterns from the prenatal to toddler years for family child care providers; enhance skills in caring for young children in a home care setting. CSU

**Offered on occasion**

CDEV 41K. Infant/Toddler Curriculum in Family Child Care (1)  
Lec-17.5  
Theory and practice of the care and education of the very young child with an emphasis on the significance of the early years and how children learn. The importance of quality care, relationships and planning curriculum and environments that meet the needs of young children in family child care settings will be stressed. CSU

**Offered on occasion**

CDEV 41L. Advocacy and Professional Standards in ECE (1)  
Lec-17.5  
**Advise:** ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or placement in ESL 140 or ESL 184 or ENGL 88  
Professional standards in child development including quality rating scales, the profession's code of ethics, and strategies for advocacy. CSU

**Offered on occasion**

CDEV 41M. Substitute Teaching in ECE Programs (1)  
Lec-17.5  
P/NP available  
Emphasis on strategies for working with children, staff, administrators and families in new and rotating child care settings. CSU

**Offered on occasion**

CDEV 41N. Music and Movement in Family Child Care (1)  
Lec-17.5  
P/NP available  
Integrating music and movement activities into the family child care curriculum for infants, toddlers and preschoolers. Opportunities for physical, cognitive and social-emotional and cultural learning will be covered along with effective strategies for facilitating small group activities. CSU

**Offered on occasion**

CDEV 41O. Outdoor Learning in Family Child Care (1)  
Lec-17.5, field trips  
P/NP available  
An exploration of outdoor learning opportunities for young children in home-based child care based on the developmental needs of infants, preschoolers and school-age children. Active and sensory play, discoveries in nature, imaginative and creative arts, safety standards, design elements, community resources for equipment, materials and financial or labor assistance. CSU

**Offered on occasion**

CDEV 41P. Mixed Ages in Family Child Care (1)  
Lec-17.5  
P/NP available  
An exploration of the benefits and challenges of meeting the developmental needs of mixed ages of children in family child care. Environmental adaptations for time together and time apart, daily planning and flexibility, and effective strategies to maximize the benefits will be examined and practiced. CSU

**Offered on occasion**

CDEV 41S. Learning Activities in Family Child Care (1)  
Lec-17.5  
P/NP available  
An examination of learning activities during play and routine care in Family Child Care that addresses the standards of the Family Daycare Rating Scale. Materials, arrangement, scheduling and caregiver strategies that support language and reasoning, problem solving, concept development and socialization will be emphasized. CSU

**Offered on occasion**
CDEV 41T. Early Care for Children with Autism (1)
Lec-17.5
Overview of the unique characteristics and needs of young children with Autism Spectrum Disorder (ASD). The role of the paraprofessional in an exceptional needs setting will be examined. Early intervention strategies will be emphasized. CSU
Offered on occasion

CDEV 41U. Dual Language Learning in Early Childhood (1)
Lec-17.5
Emphasis is on the acquisition of second languages in Dual Language and Bilingual Early Care and Education programs. Current cross-cultural research on language acquisition, best practices for language curriculum development and strategies for authentic assessment and home/school connections will be emphasized. CSU
Offered on occasion

CDEV 41V. Exploring Math in Family Child Care (1)
Lec-17.5
An exploration of the developmental sequence of early mathematical concepts and their application in the family child care setting. Selection of materials, the development of activities and games to foster math learning and the practice of using teachable moments during daily routine and play experiences. CSU
Offered on occasion

CDEV 44. Family Child Care Environmental Rating Scale (1)
Lec-17.5
Advised: ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or ENGL 88 or ENGL 95
The Family Child Care Environmental Rating Scale, Revised (FCCERS-R) for family child care providers in multi-age groupings. The FCCERS-R continues to be used nationally and locally to measure quality of care of family child care programs. This course is designed to support current practitioners in using the FCCERS-R in family child care programs. CSU
Offered on occasion

CDEV 45. ITERS and ECERS Rating Scale (1)
Lec-17.5
Examination of standardized environmental rating scales for early care and education programs. Provides knowledge and skills necessary for administering and interpreting the ECERS-R and ITERS-R rating scales for development of high quality care. CSU
Offered on occasion

CDEV 46. Teacher-Child Interactions in Early Care & Education Using Classroom Assessment Scoring System (1)
Lec-17.5
Overview of the Classroom Assessment Scoring System (CLASS) with an emphasis on the importance of adult-child interactions for development and learning outcomes and the analysis of classroom practice. CSU
Offered on occasion

CDEV 53. Child Growth and Development (3)
Lec-52.5
Advised: ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or ENGL 88 or ENGL 95
Major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception to adolescence, with an emphasis on interactions between maturational processes and environmental factors. Developmental theory, investigative research methodologies, observation of children, evaluation of individual differences and analysis of development at various stages. UC/CSU
C-ID CDEV 100

CDEV 61. Infant/Toddler Growth and Development (3)
Lec-52.5
Advised: ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or ENGL 88 or ENGL 95
Physical/sensory-motor, social-emotional, and cognitive/language development of the prenatal period 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 the guiding principles for practice. Caring adults as a foundation for all development will be emphasized. CSU

CDEV 62. Infant/Toddler Care in Group Settings (3)
Lec-52.5, field trips
Advised: ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or ENGL 88 or ENGL 95
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, and individualized care in small groups. CSU

CDEV 64. Introduction to Stress Reduction and Coping in Early Childhood and Elementary School Programs (3)
Lec-52.5
Advised: ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or ENGL 88 or ENGL 95
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
Offered on occasion

CDEV 65. Orientation to ECE Principles and Practice (3)
Lec-52.5
Advised: ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or ENGL 88 or ENGL 95
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-52.5
Advised: ESL 130 or ESL 182 or ENGL 86 or ENGL 91 or ENGL 88 or ENGL 95
Appropriate curriculum and environments for children from birth to age 6. Teachers’ roles in supporting development and joy of learning.
CDEV 67. Child, Family, and Community (3)
Lec-52.5
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
An examination of tile 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. UC/CSU
C-ID CDEV 110

CDEV 68. Interactions with Children (3)
Lec-52.5
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
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
Offered on occasion

CDEV 71. Elementary Supervised Field Experience (3)
Lec-26.5
Prereq.: Approval of the Child Development Department
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Supervised fieldwork in diverse public elementary schools. Practical classroom experiences linking theory and practice, professionalism and comprehensive understanding of elementary school children and various roles of adults. Assessment and curriculum emphasized, as students design, implement and evaluate experiences for development and learning for elementary school children. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU
Offered Fall semesters

CDEV 72. Supervised Field Experience in Early Childhood (3)
Lec-26.5, work-90 (total hrs)
Prereq.: CDEV 53; CDEV 65; CDEV 66; CDEV 67
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88
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-52.5
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
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-52.5
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Early childhood teachers and paraprofessionals will explore the developmental 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-26.5, work-90 (total hrs)
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Repeat: Students can repeat once (total 2 enrollments)
This course provides supervised fieldwork in high school or middle school classrooms. Lab hours in SFUSD classrooms will be combined with lectures covering observation, evaluation and curriculum planning strategies, Common Core standards, adult roles and the student-learner. This course fulfills the pre-admissions field experience requirement for CSU credential programs. UC/CSU
Offered on occasion

CDEV 76. Supporting LGBT Families in Educational Settings (3)
Lec-52.5
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
Offered on occasion

CDEV 78. Supervised Field Experience in Community Youth Organizations (3)
Lec-26.5, work-90
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Repeat: Repeated up to 12.00 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 of 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 Worker Certificate. CSU
Offered Spring semesters

CDEV 79. Youth Program Development (3)
Lec-52.5
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Explore various aspects of programming for youth including curriculum planning, observation, evaluation and assessing developmental needs. Youth settings and programs will be examined with an emphasis on the cultivation of an “assets-based” model of youth development and leadership principles. This course fulfills the requirement for the Community Youth Certificate. CSU
Offered Fall semesters
CDEV 81. Early Literacy Development-Preschool Child (1)  
Lec-17.5  
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or Placement in ENGL 88B or ENGL 96  
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  
Offered on occasion

CDEV 85. Relationship-based Infant/Toddler Care (3)  
Lec-52.5  
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
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 87. Promoting Social and Emotional Competence in Young Children (3)  
Lec-52.5  
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
Course topics will include 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  
This course meets requirements for the Certificate of Achievement in Child Development: Professional Development and Advocacy. CSU  
Offered on occasion

CDEV 89. Early Childhood Administration Practicum (3)  
Lec-52.5  
Prereq.: Completion of or concurrent enrollment in: CDEV 90 or CDEV 91  
This class provides advanced content for administrators and directors in effective administration, supervision and management of early childhood programs. Emphasis will be on financial management, governance, data-based decision making, and human relations. CSU

CDEV 90. Early Childhood Administration I (3)  
Lec-52.5  
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
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 Administration II (3)  
Lec-52.5  
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
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-52.5  
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
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

CDEV 93. Cultural Diversity in Early Childhood Education (3)  
Lec-52.5  
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
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 95. School-Age Child Care Curriculum (3)  
Lec-52.5  
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
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 Challenging Behaviors (3)  
Lec-52.5  
P/NP available  
Prereq.: CDEV 53  
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
Overview of issues related to children who exhibit behaviors that are challenging for adults in early childhood programs. Explores current brain research, theories in preventing challenging behaviors, sensory-motor intervention approaches, the importance of nurturing relationships and reflective practices. CSU  
Offered on occasion

CDEV 97. School Age Growth & Development (3)  
Lec-52.5  
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
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-52.5
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
Offered on occasion

CDEV 99. Sensory Processing Disorder in Children (1)
Lec-17.5
Advise: CDEV 53; ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Overview of issues related to Sensory Processing Disorder (SPD) in young children, with an emphasis on early identification and intervention strategies. The class will explore subtypes of SPD, sensory integration interventions and overlapping patterns with ADHD and autistic-spectrum disorders. CSU
Offered on occasion

CDEV 100. Violence and Its Impact on Children and Their Families (3)
Lec-52.5
Advise: ENGL 91 or ENGL 86 or ESL 130 or ESL 182 or placement in ENGL 88 or ENGL 95 or ESL 140 or ESL 184
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
Offered Fall semesters

CDEV 101. Intro to Violence Intervention (3)
Lec-52.5
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 who experience high levels of stress and chronic violence. CSU
Offered Spring semesters

CDEV 105. Adult Supervision & Mentoring in Early Care and Education (2)
Lec-35
Prereq: CDEV 90 or CDEV 91
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
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
Offered Spring semesters

CDEV 106. Exploring Science in Early Childhood Education (3)
Lec-52.5
Advise: CDEV 66
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
Offered Spring semesters

CDEV 107. Introduction to Child Nutrition (3)
Lec-52.5
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 108. Communicating with Families (3)
Lec-52.5
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Importance of communication in child care and school settings. Family needs, differences, and expectations are stressed. Special attention paid to cultural, racial, economic, gender, and family structure differences and their various impacts on communication strategies. CSU

CDEV 114. Work Experience in Child Development (1-3)
Work-60.00-225.00
P/NP only
Repeat: CDEV 71, 72, 75, 78, 86, and 114 combined, maximum credit: 16 units.
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 TK-12 (3)
Lec-52.5, field trips
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Introduction to basic issues in special education TK-12 including legal rights of children with disabilities and their families, Individual Educational Plans (IEPs), ‘dis’ability awareness, inclusion, overview of common learning differences, collaboration strategies and community resources. CSU
Offered Fall semesters

CDEV 121. Children with ADHD (1)
Lec-17.5
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Explore behaviors, strengths, and needs of children with ADHD 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 Differences K-12 (1)
Lec-17.5
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
This course will explore the definition and etiology of social emotional disturbance (SED), disproportionality and strategies to address it, prevention/intervention strategies for supporting children diagnosed with SED and strategies for teacher self-awareness and reflection. CSU

CDEV 123. Learning Disabilities (1)
Lec-17.5
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Explore common learning disabilities including dyslexia, dyscalculia 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 Programs (1)
Lec-17.5
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Learn about Individualized Education Programs and Plans (IEPs) and Individualized Family Service Plans (IFSPs) for children with special needs, including planning IEP/IFSP meetings, setting goals and objectives, writing the IEP plan, legal rights of children with disabilities, and collaborating with families and colleagues to develop and implement an Individualized Education Program or Individual Family Service Plan. CSU Offered on occasion

CDEV 125. Children’s Emotional Development (1)
Lec-17.5
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
Learn about emotional development of young children and strategies for building emotional competence and supporting children’s social-emotional development. This course emphasizes fostering social-emotional coping strategies for children and teachers. CSU

CDEV 150. Orientation to TK-12 Education (3)
Lec-52.5, field trips
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
An overview of TK-12 teaching from multicultural perspectives including the history of US public education, inequities in the field, actions to address inequities, current trends in the field, philosophies of teaching, and teaching strategies. UC/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 on issues of concern to new parents. Course will cover characteristics of normal infant 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 held in an enriched play environment. Topics include physical/sensory-motor, social-emotional, cognitive and language development. Influence of parenting styles, family life, and the infant’s impact on the family would be covered.

Preschool and School-Age Children

CDEV 8100. Child Observation (54 hrs)
An exploration of child growth and development through observation and interaction with children 15 months through kindergarten age; child rearing practices; effective parenting; health, safety and nutrition; decision making in family life; utilization of community resources.

CDEV 8101. The Child Development Lab School (54 hrs)
A 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, 18 mos-5 yrs old. Provide educational opportunities and community service resource information for students and parents.

CDEV 8104. Parenting 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 8117. Positive Parenting (54 hrs)
Includes the role of parents/ guardians in the healthy development of children from birth through adolescence. Emphasis on building positive relationships with children in the areas of bonding, attachment, self esteem, family dynamics, age-appropriate expectations and the importance of positive communications. Fulfills court-mandated parent education requirements.

Parenting

CDEV 8202. Foster Parenting (18 hrs)
Exploration of the role of the foster parent. Emphasis placed on human development from birth through adolescence. Topics include separation and grieving; drug and sexual education for adolescents; the roles of foster parents and biological parents; community resources including the agency and placement worker. Fulfills requirements of the California Community FKCE Licensing mandated in-service curriculum.

CDEV 8206. Parenting in the Business Community (54 hrs)
General principles of human development, birth through adolescence. Emphasis on issues for working parents, family dynamics, and community resources for child care. (Classes may be available at the college or in community or workplace settings). Offered on occasion

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 program, 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.
Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Chinese (Mandarin)

Course ......................................... Units
18 total units -- either Option 1 (Chinese Language Learners) or Option 2 (Native Speakers)

OPTION 1: Chinese Language Learners
Choose 15 units from this list of core courses:
CHIN 2 Continuation of Elementary Chinese ........... 5.0
CHIN 2A Continuation of Elementary Chinese ....... 3.0
CHIN 2B Continuation of Elementary Chinese ....... 3.0
CHIN 3 Intermediate Chinese .......................... 5.0
CHIN 3A Intermediate Chinese ........................ 3.0
CHIN 3B Intermediate Chinese ........................ 3.0
CHIN 4 Continuation of Intermediate Chinese ...... 5.0
CHIN 4A Continuation of Intermediate Chinese ... 3.0
CHIN 4B Continuation of Intermediate Chinese ... 3.0

Choose 3 units from the following courses or any course not used from the list above:
CHIN 1 Elementary Chinese ........................... 5.0
CHIN 1A Elementary Chinese .......................... 3.0
CHIN 1B Elementary Chinese .......................... 3.0
CHIN 12B Continuation of Beginning Conversational Mandarin .......................... 3.0
CHIN 12C Intermediate Conversational Mandarin .... 3.0
CHIN 30A Advanced Intermediate Chinese ........... 3.0
CHIN 30B Continuation of Advanced Intermediate Chinese .................. 3.0
ASIA 11 East Asian Calligraphy: An Introduction ...... 3.0

OPTION 2: Native Speakers:
Required courses:
CHIN 31A Intermediate Mandarin Chinese for Bilingual Students ........................................ 3.0
CHIN 31B Continuation of Intermediate Mandarin Chinese for Bilinguals .............................. 3.0
CHIN 32 Chinese Grammar and Chinese Culture .... 3.0

Choose 9 units from the following courses:
CHIN 14A Conversational Mandarin for Speakers of Other Chinese Dialects .................. 3.0
CHIN 14B Conversational Mandarin for Other Dialect Speakers ........................................ 3.0
CHIN 14C Intermediate Conversational Mandarin for Chinese Speaking Students .............. 3.0
CHIN 33 Chinese Culture for Heritage Learners ........................................ 3.0
CHIN 36 Chinese Idioms And Proverbs .......................... 3.0
CHIN 38 Translation Foundation in Chinese .......................... 3.0
ASIA 11 East Asian Calligraphy: An Introduction ...... 3.0
Total: ........................................... 18.0

Courses Required for the Certificate of Accomplishment in Chinese (Mandarin)

Course ......................................... Units
Choose 9 units from the following core courses:
CHIN 1 Elementary Chinese ........................... 5.0
CHIN 1A Elementary Chinese .......................... 3.0
CHIN 1B Elementary Chinese .......................... 3.0
CHIN 2 Continuation of Elementary Chinese ...... 5.0
CHIN 2A Continuation of Elementary Chinese ....... 3.0
CHIN 2B Continuation of Elementary Chinese ....... 3.0
CHIN 3 Intermediate Chinese .......................... 5.0
CHIN 3A Intermediate Chinese ........................ 3.0
CHIN 3B Intermediate Chinese ........................ 3.0
CHIN 4 Continuation of Intermediate Chinese ...... 5.0
CHIN 4A Continuation of Intermediate Chinese ... 3.0
CHIN 4B Continuation of Intermediate Chinese ... 3.0

Choose 6 units from the following elective courses:
CHIN 1A Conversational Mandarin for Speakers of Other Chinese Dialects .................. 3.0
CHIN 1B Conversational Mandarin for Other Dialect Speakers ........................................ 3.0
CHIN 1C Intermediate Conversational Mandarin for Chinese Speaking Students .............. 3.0
CHIN 12A Beginning Conversational Mandarin .... 3.0
CHIN 12B Continuation of Beginning Conversational Mandarin ........................................ 3.0
CHIN 12C Intermediate Conversational Mandarin .... 3.0
CHIN 33 Chinese Culture for Heritage Learners ........................................ 3.0
CHIN 36 Chinese Idioms And Proverbs .......................... 3.0
CHIN 38 Translation Foundation in Chinese .......................... 3.0
ASIA 11 East Asian Calligraphy: An Introduction ...... 3.0
Any core option course not yet completed.
Total: ........................................... 15.0

Chinese (Mandarin) Certificate

The Certificate of Accomplishment in Chinese (Mandarin) provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language.

Learning Outcomes

Upon completion of this program, 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.
- Judge 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

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-87.5  P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B or completion of any City College or University Foreign Language course. Beginner's course. Grammar, composition, and reading. Practice in speaking and understanding Mandarin. UC/CSU

CHIN 1A. Elementary Chinese (3)
Lec-52.5  P/NP available
Prereq.: CHIN 1A or CHIN 1B or demonstration of CHIN 1A exit skills. Beginner's course. Grammar, composition, and reading. Practice in speaking and understanding Mandarin. UC/CSU

CHIN 1B. Elementary Chinese (3)
Lec-52.5  P/NP available
Prereq.: CHIN 1A or CHIN 1B or demonstration of CHIN 1A/1B exit skills. Second semester course. Continuation of study of grammar, composition, and reading. Practice in speaking and understanding Mandarin. UC/CSU

CHIN 2. Continuation of Elementary Chinese (5)
Lec-87.5  P/NP available
Prereq.: CHIN 1 or 1B or demonstration of CHIN 1/1B exit skills. Second semester course. Continuation of study of grammar, composition, and reading. Practice in speaking and understanding Mandarin. UC/CSU

CHIN 2A. Continuation of Elementary Chinese (3)
Lec-52.5  P/NP available
Prereq.: CHIN 1 or 1B or demonstration of CHIN 1/1B exit skills. Continuation of study of grammar, composition, and reading. Practice in speaking and understanding Mandarin. UC/CSU

CHIN 2B. Continuation of Elementary Chinese (3)
Lec-52.5  P/NP available
Prereq.: CHIN 2A or CHIN 2B or demonstration of CHIN 2A/2B exit skills. Continuation of study of grammar, composition, and reading. Practice in speaking and understanding Mandarin. UC/CSU

CHIN 3. Intermediate Chinese (5)
Lec-87.5  P/NP available
Prereq.: CHIN 2 or 2B or demonstration of CHIN 2/2B exit skills. Grammar, composition and reading. Practice in speaking and understanding Mandarin. Understanding of Chinese culture. For speakers of Mandarin. UC/CSU

CHIN 3A. Intermediate Chinese (3)
Lec-52.5  P/NP available
Prereq.: CHIN 2 or 2B or demonstration of CHIN 2/2B exit skills. Grammar, composition and reading. Practice in speaking and understanding Mandarin. Understanding of Chinese culture. Not for speakers of Mandarin. UC/CSU

CHIN 3B. Intermediate Chinese (3)
Lec-52.5  P/NP available
Prereq.: CHIN 3A or demonstration of CHIN 3A exit skills. Grammar, composition and reading. Practice in speaking and understanding Mandarin. Understanding of Chinese culture. UC/CSU

CHIN 4. Continuation of Intermediate Chinese (5)
Lec-87.5  P/NP available
Prereq.: CHIN 3 or CHIN 3B or demonstration of CHIN 3 or 3B exit skills. Intermediate grammar, composition and reading. Practice in speaking and understanding Mandarin. Understanding of Chinese culture. UC/CSU

CHIN 4A. Continuation of Intermediate Chinese (3)
Lec-52.5  P/NP available
Prereq.: CHIN 3 or 3B or demonstration of CHIN 3 or 3B exit skills. Continuation of intermediate grammar, composition and reading. Practice in speaking and understanding Mandarin. UC/CSU

CHIN 4B. Continuation of Intermediate Chinese (3)
Lec-52.5  P/NP available
Prereq.: CHIN 4A or CHIN 4B or demonstration of CHIN 4B exit skills. Continuation of intermediate grammar, composition and reading. Practice in speaking and understanding Mandarin. UC/CSU

CHIN 10A. Beginning Conversational Cantonese (3)
Lec-52.5  P/NP available
Advise: CHIN 10A or demonstration of CHIN 10A exit skills. 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-52.5  P/NP available
Advise: CHIN 10A or demonstration of CHIN 10A exit skills. 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-52.5  P/NP available
Advise: CHIN 10B or demonstration of CHIN 10B exit skills. 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

Not recommended for native speakers of Cantonese.
Offered on occasion

CHIN 12A. Beginning Conversational Mandarin (3)
Lec-52.5
P/NP available
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

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.

CHIN 12B. Continuation of Beginning Conversational Mandarin (3)
Lec-52.5
P/NP available
Advise: CHIN 12A or 1A or demonstration of CHIN 12A or 1A exit skills.
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

Offered Spring semesters

CHIN 12C. Intermediate Conversational Mandarin (3)
Lec-52.5
P/NP available
Advise: CHIN 12B or CHIN 1 or 1B 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

Offered on occasion

CHIN 14A. Conversational Mandarin for Speakers of Other Chinese Dialects: Level 1 (3)
Lec-52.5
P/NP available
Beginner's course in Mandarin for students who speak another dialect of Chinese. 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

Recommended for all beginning students of Mandarin who can speak at least one Chinese dialect and for students who have some knowledge of Chinese. Not recommended for native speakers of Mandarin.

CHIN 14B. Conversational Mandarin for Speakers of Other Chinese Dialects: Level 2 (3)
Lec-52.5
P/NP available
Advise: CHIN 14A or demo of CHIN 14A exit skills.
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

Recommended for all students who can speak at least one Chinese dialect. Recommended for Chinese speaking students and for students who have knowledge of Chinese. Not recommended for native speakers of Mandarin.

CHIN 14C. Intermediate Conversational Mandarin for Chinese Speaking Students (3)
Lec-52.5
P/NP available
Advise: CHIN 14B or demo of CHIN 14B exit skills.
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

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.
Offered on occasion

CHIN 16. Chinese Characters for Beginners (3)
Lec-52.5
P/NP available
An intensive study of 300 commonly used characters to enhance reading and writing Chinese. UC/CSU

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.

Offered on occasion

CHIN 30A. Advanced Intermediate Chinese (3)
Lec-52.5
P/NP available
Advise: CHIN 4 or demonstration of oral fluency in a Chinese dialect (including standard Mandarin) and knowledge of 450 Chinese characters

Intermediate 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 compositions. UC/CSU

Offered Fall semesters

CHIN 30B. Continuation of Advanced Intermediate Chinese (3)
Lec-52.5
P/NP available
Prereq.: CHIN 30A or demonstration of exit skills
Advise: CHIN 4 or demonstration of oral fluency in a Chinese dialect (including standard Mandarin) and knowledge of 550 Chinese characters

Continued intermediate training in written and spoken Mandarin with emphasis on reading, speaking and composition. Increased 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 compositions. UC/CSU

Offered Spring semesters

CHIN 30C. Advanced Intermediate Chinese (3)
Lec-52.5
P/NP available
Advise: CHIN 30B or demonstration of CHIN 30B exit skills
Advanced intermediate 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 compositions. UC/CSU

CHIN 31A. Intermediate Mandarin Chinese for Bilingual Students (3)
Lec-52.5
P/NP available
Advise: Oral fluency in at least one Chinese dialect other than standard Mandarin and knowledge of approximately
800-1000 Chinese characters. 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. Intermediate training in written and spoken Mandarin. UC/CSU

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.

Offered Fall semesters

CHIN 31B. Intermediate Mandarin Chinese for Bilingual Students (3) Lec-52.5 P/NP available
Prereq.: Oral fluency in at least one Chinese dialect other than standard Mandarin and knowledge of approximately 800-1000 Chinese characters. Intensive training in written and spoken Mandarin with emphasis on reading, speaking and composition. Increased 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 compositions. Advanced training in written and spoken Mandarin. UC/CSU

Chinese 31A is not a prerequisite for Chinese 31B. These courses may be taken non-sequentially. This course is 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.

Offered Spring semesters

CHIN 32. Chinese Grammar and Chinese Culture (3) Lec-52.5 P/NP available
Prereq.: CHIN 14A or CHIN 14B or CHIN 14C or CHIN 31A or CHIN 31B or demonstration of equivalent language skills
Advise: Oral fluency in a Chinese regional language including Mandarin and an intermediate-high reading and writing comprehension in Chinese
Advanced review of grammatical structures and discussions on various aspects of Chinese culture and customs as manifested through the Chinese language. UC/CSU

Offered on occasion

CHIN 33. Chinese Culture for Heritage Learners (3) Lec-52.5 P/NP available
A consideration of the humanistic tradition of China and the major achievements of Chinese culture as reflected in language, literature, art, craft and daily life. Taught in Chinese. UC/CSU

Offered on occasion

CHIN 36. Chinese Idioms and Proverbs (3) Lec-52.5 P/NP available
Prereq.: CHIN 14A or CHIN 14B or CHIN 14C or CHIN 31A CHIN 31B or demonstration of equivalent language skills
Advise: Oral fluency in a Chinese regional language including Mandarin and an intermediate-high reading and writing comprehension in Chinese
An in-depth study of Chinese idioms and proverbs, which are closely linked with Chinese mythology, history, literature, philosophy and moral teaching. They are still commonly used in vernacular Chinese writing, and in the spoken language today. The course is designed for heritage learners. UC/CSU

Offered on occasion

CHIN 38. Translation Foundation in Chinese (3) Lec-52.5 P/NP available
Prereq: CHIN 4 or CHIN 14A or CHIN 14B or CHIN 14C or CHIN 31B or CHIN 32 or CHIN 33 or demonstration of exit skills
Advise: Fluency in at least one Chinese regional dialect including Mandarin, and an intermediate-high reading and writing comprehension in Chinese.
Focused training in written translation of English to Chinese and vice versa through comparison and contrast of English and Chinese grammar and authentic sentences and short passages guided by basic written translation principals. CSU

Offered on occasion

CHIN 39. Major Achievements of Chinese Thought and Culture (3) Lec-52.5
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
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. UC/CSU

No knowledge of Chinese required. Not recommended for students who are enrolled in or who have completed CHIN 49.

Offered on occasion

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.

Cinema
Office: Cloud Hall 126
Phone Number: (415) 239-3651
Web Site: www.ccsf.edu/film
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 program, 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

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Cinema Production

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester:</td>
<td></td>
</tr>
<tr>
<td>CINE 21 Introduction to Film Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>CINE 24 Basic Film Production</td>
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<tr>
<td>CINE 25 Narrative Filmmaking</td>
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<tr>
<td>CINE 60 Sound for Motion Pictures I</td>
<td>3.0</td>
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<tr>
<td>Second Semester:</td>
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<tr>
<td>CINE 30 Production Planning</td>
<td>3.0</td>
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<tr>
<td>CINE 54 Cinematography &amp; Lighting</td>
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<tr>
<td>CINE 56 Introduction to Digital Film Editing</td>
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<td>Third Semester: choose one of the following courses:</td>
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<tr>
<td>CINE 75 Screenwriting</td>
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<tr>
<td>CINE 72 Nonfiction Scriptwriting</td>
<td>3.0</td>
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<tr>
<td>Third Semester: choose one of the following courses:</td>
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<tr>
<td>CINE 61 Sound for Motion Pictures II</td>
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<tr>
<td>CINE 74 Advanced Cinematography And Lighting</td>
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<tr>
<td>CINE 76 Advanced Digital Film Editing</td>
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<td>Third Semester: choose one of the following courses:</td>
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<td>CINE 131 Directing Motion Pictures</td>
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<tr>
<td>CINE 126 Documentary Filmmaking</td>
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<tr>
<td>Fourth Semester required course:</td>
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<tr>
<td>CINE 124A Film Production Workshop</td>
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<td>Fourth Semester: choose one of the following courses:</td>
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<td>CINE 131 Directing Motion Pictures</td>
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<tr>
<td>CINE 126 Documentary Filmmaking</td>
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<tr>
<td>Total: 38.0 – 39.0</td>
<td></td>
</tr>
</tbody>
</table>

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

Film, Television & Electronic Media Major (AS-T)*
* See Broadcast Electronic Media Arts section of the Catalog.

Announcement of Courses
Credit, Degree Applicable Courses:
CINE 18. American Cinema (3)  Lec-52.5, field trips  P/NP available
An introductory course in film studies examining the history and development of Hollywood and the movie business and their sustained influence on American culture. The tools of cinematic grammar in creating a universal visual language are also explored. UC/CSU

CINE 19. Documentary, Digital Media and Society (3)  Lec-52.5  P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
This course examines how evolving digital technology has dramatically altered how we understand society, politics, and culture in the context of documentary. The course explores the aesthetics of documentary and how digital technology has transformed how we understand the rhetoric of documentary form and culture. Topics of study include documentary modes, citizen journalism, social media, digital convergence, transmedia storytelling, immersive journalism, and interactive documentary. UC/CSU

CINE 20A. Film History: Evolution of Film Expression (3)  Lec-52.5  P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
History of cinema as a unique expressive medium from 19th century origins to the 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. UC/CSU

Offered Fall Semesters
CINE 20B. Film History: Contemporary Film Expression (3)  Lec-52.5  P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
History of cinema as a 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 through the critical analysis of motion pictures. The course covers and how digital technology has transformed how we understand society, politics, and culture in the context of documentary. The course explores the aesthetics of documentary form and culture. Topics of study include documentary modes, citizen journalism, social media, digital convergence, transmedia storytelling, immersive journalism, and interactive documentary. UC/CSU

Offered Spring Semesters
CINE 21. Introduction to Film Studies (3)  Lec-52.5  P/NP available
Advise: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
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. UC/CSU

CINE 22. The Documentary Tradition (3)  Lec-52.5  P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
An introductory course that addresses documentary film history, methods, and practices. This is a survey course that covers a wide
range of documentary topics such as early Soviet documentary, ethnographic films, cinema vA®ritA®, Direct Cinema, experimental documentary, and political nonfiction cinema. UC/CSU
Offered on occasion

CINE 23A. Films of Alfred Hitchcock (3)
Lec-52.5  P/NP available
Advise: CINE 18, 20A, 20B, or 21
An auteur study of the films of Alfred Hitchcock as both the “master of suspense” and an artist of anxiety. The course will explore Hitchcock’s films in terms of their themes, stylistic tendencies and social/historical context. Hitchcock’s place in film history and his influence will be explored in depth. UC/CSU
Offered on occasion

CINE 23B. Focus on Film Noir (3)
Lec-52.5  P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or PLACEMENT IN ENGL 1A
Study the enduring appeal of film noir’s dark shadows, corruption, seductive femme fatales, alienated antiheroes, mid-century psychological struggles, and rain-slicked streets, often adapted from pulp novels and hardboiled crime fiction. UC/CSU
Offered on occasion

CINE 24. Basic Film Production (4)
Lec-70  P/NP available
Advise: ENGL 88 or ESL 160 or PLACEMENT IN ENGL 1A
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 equipment and crew workshops, assigned technical and creative exercises, individual off-campus film and video projects, in-class screening and critique of student work. Each student completes at least two individual projects. UC/CSU

CINE 25. Narrative Filmmaking (3)
Lec-52.5, field trips  P/NP available
Prereq.: Completion/concurrent enrollment in CINE 24.
Intensive practice in basic narrative filmmaking. Emphasis on planning, filming and editing scenes for dramatic effect. The history of narrative continuity systems is explored. CSU

CINE 30. Production Planning (3)
Lec-52.5, field trips  P/NP available
Advise: ENGL 88 or ENGL 88B or ENGL 96 or PLACEMENT IN ENGL 1A
This course covers all aspects of planning the production of film projects. The skills to estimate, calculate, negotiate and evaluate all costs, legal concerns, insurance issues, permits and pitfalls of film production will be explored. Project budgets and organization for shorts, music videos, commercials, documentaries and narrative feature films are examined. CSU

CINE 40. Film Festival (3)
Lec-52.5  P/NP available
An overview of the cultural and practical considerations of presenting a public film festival. The class produces, curates and screens the annual City Shorts Student Film Festival. Experience in planning, programming, promotion, fundraising, exhibition and house management. CSU
Offered Spring semesters

CINE 54. Cinematography and Lighting (3)
Lec-52.5, field trips
Prereq.: Completion of or concurrent enrollment in CINE 25
Development and execution of short, single camera styled projects concerning the art and practice of cinematography and lighting. These projects focus on the skills of cinematography and lighting: composition, use of lenses, camera angles, color theory and practice, camera operation, lighting design, and camera movement. CSU

CINE 56. Introduction to Digital Film Editing (4)
Lec-52.5, Lab-52.5, field trips
Prereq.: CINE 24, 25
Introduction to digital film editing and post-production techniques using current industry standard, non-linear editing systems within the cinematic discipline. Editing skills are learned in the context of examining film form, style and aesthetics. CSU

CINE 57. Experimental Filmmaking (3)
Lec-52.5, field trips  P/NP available
Prereq.: CINE 24 and CINE 25
Coreq.: CINE 54
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 class. CSU
Offered on occasion

CINE 60. Sound for Motion Pictures I (3)
Lec-52.5, field trips
Advise: CINE 24 and CINE 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 sync sound, dialogue, sound effects, music, and mixing. Film screenings, lectures, demonstrations and field trips. CSU

CINE 61. Sound for Motion Pictures II (3)
Lec-52.5, 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
Offered Fall semesters

CINE 72. Nonfiction Scriptwriting (3)
Lec-52.5
An introductory course that offers essential skills in writing a professional nonfiction script. Attention to research methods supporting content development, interviewing techniques, story structure, script format, and cinematic grammar are emphasized. Historical nonfiction films and their influence on current work will also be explored. CSU

CINE 74. Advanced Cinematography and Lighting (3)
Lec-52.5, field trips
Prereq.: CINE 54
Refine cinematography and lighting techniques and aesthetics to create professional caliber motion picture imagery. Execute single camera style projects focused on mastering advanced skills using: professional
CAMERAS AND LIGHTING INSTRUMENTS AND ADVANCED COLOR TECHNIQUES AND COLOR CORRECTION FOR AESTHETIC AND STYLISTIC PURPOSES. CSU

**OFFERED SPRING SEMESTERS**

CINE 75. Screenwriting (3)  
Lec-52.5  
Prereq.: ESL 150 or ENGL 96 or ENGL 88 or ENGL 88B; Placement in ENGL 1A  
An introductory course that addresses writing for cinema. Professional format, story structure and aesthetics are emphasized as these skills are then utilized in creating original screenplays. CSU

CINE 76. Advanced Digital Film Editing (4)  
Lec-52.5, Lab-52.5, field trips  
Prereq.: CINE 24, 25, and 56 or BCST 144  
Advanced editing skills and techniques to create professional quality projects, including transcoding, color correction and mastering, Historical and contemporary editing styles are explored, CSU  
**OFFERED SPRING SEMESTERS**

CINE 85. Advanced Screenwriting (3)  
Lec-52.5  
Prereq.: CINE 75  
An advanced course reinforcing writing skills required for visual media and, in particular, cinema. Professional format, character and plot development, film grammar and aesthetics are emphasized in creating and revising original screenplays. CSU  
**OFFERED ON OCCASION**

CINE 124A. Film Production Workshop (3)  
Lec-52.5, field trips  
Prereq.: CINE 54 and CINE 56 and CINE 60  
Advis.: CINE 30 and CINE 61 and CINE 74 and CINE 75 and CINE 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. UC/CSU

CINE 124B. Film Production Workshop (3)  
Lec-52.5, field trips  
Prereq.: CINE 124A  
Advis.: CINE 30 and CINE 61 and CINE 74 and CINE 75 and CINE 76  
This is an advanced production course that refines and expands skills developed in prior CCSF Cinema classes. This course focuses on the production and completion of a short film that has been prepared in Cinema 124A. UC/CSU

CINE 126. Documentary Filmmaking (3)  
Lec-52.5, field trips  
Advis.: CINE 24  
Introduction to documentary filmmaking production, from concept to distribution. Emphasis on fundamental skills including documentary producing, sound recording, lighting, cinematography and editing. Production practice is explored in the context of historical movements and contemporary issues. CSU  
**OFFERED FALL SEMESTERS**

CINE 131. Directing Motion Pictures (3)  
Lec-52.5  
Prereq.: CINE 24 and CINE 25; ESL 150 or ENGL 86 or ENGL 91 or Placement in ESL 160 or ENGL 88; Completion of or concurrent

**ENROLLMENT IN: CINE 54**  
Explores the role of the film director in the translation of script to screen through development and execution of single-camera-style projects. Emphasis is on script analysis, pre-visualization planning and blocking, crew management and working with actors. CSU

CINE 136. Special Effects (3)  
Lec-52.5  
Advis.: CINE 24 and 25  
Introduction to design and creation of professional level Special Effects for cinema using industry standard tools such as After Effects and Photoshop. Focus is primarily on the Computer Generated Imagery (CGI) special effects production process. Contemporary effects processes are examined in a historical context. CSU  
**OFFERED ON OCCASION**

CINE 170. Film/Video Work Experience (2)  
Work-120 to 150 hrs  
Prereq.: Consent of CINE Work-Experience coordinator  
Repeat: Students can repeat three times (total 4 enrollments)  
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, such as issuing film equipment, mentoring/tutoring cinema students, crewing or editing sound or picture for a local production company, are within the scope of this learning experience. CSU

**ANNOUNCEMENT OF COURSE**

**NONCREDIT COURSE:**

CINE 1000. Supplemental Instruction for Cinema (80 hrs)  
A course to assist students in achieving cinema learning outcomes, reinforce classroom learning and improve practical skills in screenwriting, budgeting, scheduling, film production, sound recording and mixing, post production, special effects, animation and exhibition. Students work on individual and team assignments with faculty instruction and consultation.

**COMMUNICATION STUDIES**

Office: Cloud 208A  
Phone Number: (415) 452-7126  
Web Site: www.ccsf.edu/communicationstudies

**ANNOUNCEMENT OF CURRICULA**

**COMMUNICATION STUDIES MAJOR (AA-T)**

Speech communication majors learn the theory and principles behind the communication process and acquire skills needed to effectively communicate with others—both within and across cultural boundaries—in a variety of public, professional, and interpersonal settings. Students learn how to analyze audiences and craft messages that work well within these contexts as well as develop organizational, critical thinking, research, and listening skills. Students completing this major typically transfer into a broad array of communication studies majors.

**LEARNING OUTCOMES**

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

- Articulate an understanding of the way humans manage and contextualize symbolic behavior and how communication practices shape realities and develop civic, social and environmental awareness.
- Identify and use culturally competent communication practices and effectively communicate diverse cultural understandings.
• Manage speaking anxiety to furnish confident and effective verbal presentations with presentation aids.
• Apply advanced critical thinking skills to structure diverse, logical, credible, and well researched arguments that address complex problems.
• Critique the communication practices of others in order to develop critical listening skills that further the constructive exchange of ideas.

Students who wish to earn the Associate in Arts in Communication Studies 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 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.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AA-T in Communication Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>Core courses:</td>
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<tr>
<td>CMST 1A Elements of Public Speaking</td>
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<tr>
<td>CMST 5 Intercultural Communication</td>
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<tr>
<td>CMST 20 Interpersonal Communication</td>
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<tr>
<td>Choose one of the following courses:</td>
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<td>CMST 7 Oral Interpretation of Literature</td>
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<tr>
<td>CMST 38 Forensics Competition</td>
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<tr>
<td>Choose one of the following courses:</td>
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<td>CMST 3 Argumentation and Debate</td>
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<tr>
<td>CMST 4 Group Communication</td>
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<td>Choose one of the following courses:</td>
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<td>CMST 2 Introduction to Rhetorical Criticism</td>
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<tr>
<td>ENGL 1B Writing about Literature</td>
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<tr>
<td>ENGL 1C Writing about Nonfiction</td>
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<td>Total:</td>
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Announcement of Courses

Credit, Degree Applicable Courses:

CMST 1A. Elements of Public Speaking (3)
Lec 52.5, P/NP available
Prereq: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
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. UC/CSU Formerly SPCH 1A.

CMST 2. Introduction to Rhetorical Criticism (3)
Lec 52.5
Prereq: ENGL 1A
Studies the rhetorical tradition and significant rhetorical artifacts. Analyzes public discourse through the application of commonly applied rhetorical methods. Communication artifacts are evaluated for support, reasoning, language use, message construction, and context in a series of academic research papers. Emphasizes critical thinking principles alongside techniques of effective discourse. UC/CSU Formerly SPCH 2.

CMST 3. Argumentation and Debate (3)
Lec 52.5
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
Critical approaches to legal, social, political problems are studied through oral argument and debate formats. Analysis, evidence, reasoning, rhetorical positioning, persuasion, refutation, and rebuttal from a communication perspective. UC/CSU Formerly SPCH 3.

CMST 4. Group Communication (3)
Lec 52.5, P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B 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. UC/CSU Formerly SPCH 4.

CMST 5. Intercultural Communication (3)
Lec 52.5, field trips P/NP available
Prereq: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
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. UC/CSU Formerly SPCH 5.

CMST 6. Workplace Communication (3)
Lec 52.5 P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
Study and application of effective workplace communication principles. Focus on development of communication skills that support the development of healthy workplace relationships, delivery of effective business presentations, and pursuit of career opportunities. UC/CSU Formerly SPCH 6.

CMST 7. Oral Interpretation of Literature (3)
Lec 52.5, field trips P/NP available
Prereq: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
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 culturally diverse literature, students will better understand the structural and aesthetic components of narrative and performance. UC/CSU Formerly SPCH 7.

CMST 8. Rhetoric of Popular Culture (3)
Lec 52.5 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. UC/CSU Formerly SPCH 8.
CMST 11. Basic Public Speaking (3)
Lec-52.5 P/NP available
Prereq.: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or Placement in ENGL 96 or ENGL 88B
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 Formerly SPCH 11.

CMST 12. Fundamentals of Oral Communication (3)
Lec-52.5 P/NP available
Prereq.: ESL 160 or ENGL 95 or ENGL 88 or ENGL 88A or Placement in ENGL 88B
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 Formerly SPCH 12.

CMST 20. Interpersonal Communication (3)
Lec-52.5 P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or Placement in ENGL 1A
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. UC/CSU Formerly SPCH 20.

CMST 30. Individual Project in Oral Communication (1)
Lec-11, Lab-20, field trips P/NP only
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or Placement in ENGL 88B
Skills development in researching, writing, and delivering scripted speeches or debates that publicly address a socially significant issue. CSU

CMST 38. Forensics Competition (3)
Lec-52.5, Lab-17.5, field trips P/NP available
Advise: CMST 1A or CMST 3 or CMST 4 or ESL 79
Students can repeat three times (total 4 enrollments)
Students develop speaking and argumentation skills, specializing in one or more of the following areas: oral interpretation of literature, debate, platform speaking or limited preparation speaking. Students who repeat the course master communication skills through further instruction and practice. Participation in tournament, campus or community presentations is required. CSU Formerly SPCH 38.

Areas of study include computer technical support, networking, cyber security and web development.

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 program, 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 (see program description).

Optional competency 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

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.
Courses Required for the Major in Computer Networking and Information Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Core courses:</td>
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<tr>
<td>CNIT 103 Computer Hardware</td>
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<tr>
<td>CNIT 131 Internet Basics and Beginning HTML</td>
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<tr>
<td>CNIT 120 Network Security</td>
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<tr>
<td>Choose one of the following network courses:</td>
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</tr>
<tr>
<td>CNIT 106 Introduction to Networks</td>
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</tr>
<tr>
<td>CNIT 201C Introduction to Cisco Networks</td>
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<tr>
<td>Choose one of the following options</td>
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</tr>
<tr>
<td>OPTION 1: Computer Technical Support</td>
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<tr>
<td>CNIT 104 Operating Systems Technologies</td>
<td>3.0</td>
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<tr>
<td>CNIT 105 IT Customer Support</td>
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<tr>
<td>CNIT 401 Windows 10 Technical Support</td>
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<tr>
<td>CNIT 103L Computer Hardware Lab</td>
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<tr>
<td>or CNIT 105L Computer Technical Support</td>
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<tr>
<td>OPTION 2: Internet and Web Development Techniques</td>
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<tr>
<td>CNIT 132 Intermediate HTML and CSS</td>
<td>3.0</td>
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<tr>
<td>CNIT 133 JavaScript, jQuery, AJAX</td>
<td>3.0</td>
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<tr>
<td>CNIT 134 Server Side Technologies for the Web</td>
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<tr>
<td>OPTION 3: Network Security</td>
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<tr>
<td>CNIT 121 Computer Forensics</td>
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<tr>
<td>CNIT 122 Firewalls</td>
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<tr>
<td>CNIT 123 Ethical Hacking &amp; Network Defense</td>
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<tr>
<td>OPTION 4: Wireless Networks</td>
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<tr>
<td>CNIT 107 Wireless LANs</td>
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<tr>
<td>CNIT 113 Technology of Smartphones &amp; Mobile Devices</td>
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<tr>
<td>CNIT 108 Wireless Networks, Advanced</td>
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<tr>
<td>OPTION 5: Cisco Networking</td>
<td></td>
</tr>
<tr>
<td>CNIT 202C Routing and Switching Essentials</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 203C Scaling Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 204C Connecting Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>OPTION 6: Microsoft Windows</td>
<td></td>
</tr>
<tr>
<td>CNIT 411 Administering Windows Server</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 412 Configuring Advanced Windows Server</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 401 Windows 10 Technical Support</td>
<td>3.0</td>
</tr>
<tr>
<td>or CNIT 415 SQL Server Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>21.0 – 22.0</td>
</tr>
</tbody>
</table>

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 Web Development Techniques Certificate
This certificate includes instruction and practice in the advanced techniques for development, configuration and operation of web sites.

Students completing this certificate program will be qualified for employment in entry-level or mid-level positions in front-end web site development.

Learning Outcomes
Upon completion of this program, students will be able to:

- Develop and maintain web sites according to industry standards
- Apply techniques to add interactivity to web pages via scripting programs and/or use of libraries/frameworks
- Apply techniques to enhance ranking of websites in search engines and enhance accessibility

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Advanced Web Development Techniques

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CNIT 132 Intermediate HTML and CSS</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 133 JavaScript, jQuery, AJAX</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 133A JavaScript Libraries/Frameworks</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 133M Mobile Web w/HTML, CSS &amp; JS</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 132A Advanced HTML and CSS</td>
<td>1.0</td>
</tr>
<tr>
<td>CNIT 132S SEO &amp; Analytics for Web Dev</td>
<td>1.0</td>
</tr>
<tr>
<td>Total:</td>
<td>17.0</td>
</tr>
</tbody>
</table>

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 program, 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.

Students must complete each course with a grade of “C” or higher. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

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>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CNIT 100 Intro to Computers Using PCs</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 101 Operating Systems I Windows</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 102 Operating Systems II Command Line</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 103 Computer Hardware</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 104 Operating Systems Technologies</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Computer Networking and Information Technology

CNIT 105 IT Customer Support ................. 3.0
CNIT 106 Introduction to Networks ............. 3.0
Choose one of the following courses:
CNIT 197 Internship and Work Experience .... 1.0
CNIT 103L Computer Hardware Lab ............. 1.0
CNIT 105L Computer Technical Support ....... 1.0
Total: ........................................... 22.0

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 program, 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.

Students must complete each course with a grade of “C” or higher.

The minimum time for completion of this certificate is 2 semesters.
Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Computer Technician
Course ............................................. Units
Required courses:
CNIT 101 Operating Systems I Windows ....... 3.0
CNIT 102 Operating Systems II Command Line . 3.0
CNIT 103 Computer Hardware ................. 3.0
CNIT 103L Computer Hardware Lab .......... 1.0
CNIT 104 Operating Systems Technologies .... 3.0
CNIT 197 Internship and Work Experience ..... 1.0
Total: .................................................. 14.0

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 CompTIA Security+ exam and the E-C Council Certified Ethical Hacker exam.

Learning Outcomes
Upon completion of this program, students will be able to:
- Describe common Cybersecurity threats and defenses, prioritize them, and properly implement defenses such as firewalls and intrusion defense systems
- Analyze systems for evidence of abuse or intrusions
- Perform advanced attacks and defend against them
- Communicate with management effectively and clearly, and prepare security management policies

Students must complete each course with a grade of “C” or higher.

The minimum time for completion of this certificate is 2 semesters.
Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Cybersecurity
Course ............................................. Units
Required courses:
CNIT 40 DNS Security .......................... 1.0
CNIT 120 Network Security ...................... 3.0
CNIT 121 Computer Forensics .................. 3.0
CNIT 122 Firewalls ............................... 3.0
CNIT 123 Ethical Hacking & Network Defense .... 3.0
Choose one of the following network courses:
CNIT 106 Introduction to Networks ............. 3.0
CNIT 201C Introduction to Cisco Networks ...... 3.0
Total: .................................................. 16.0

Advanced Cybersecurity Certificate
This certificate includes instruction in security risks and protection techniques for mobile devices, Web applications, and telephone networks, and how to manage information security programs. Students completing this certificate program will be qualified for employment as incident response specialists, Chief Security Officers, or malware analysts, and be able to prepare for the (ISC)^2 Certified Information Systems Security Professional exam.

The minimum time for completion of this certificate is 2 semesters.
Completion time will vary based on student preparation and number of units or classes completed per semester.

Learning Outcomes
Upon completion of this program, students will be able to:
- Describe common cybersecurity threats and defenses, prioritize them, and properly implement defenses such as firewalls and intrusion defense systems
- Analyze systems for evidence of abuse or intrusions
- Perform advanced attacks and defend against them
- Communicate with management effectively and clearly, and prepare security management policies

Courses Required for the Certificate of Accomplishment in Advanced Cybersecurity
Course ............................................. Units
Core courses:
CNIT 124 Advanced Ethical Hacking ........... 3.0
CNIT 125 Information Security Professional Practices .... 3.0
CNIT 126 Practical Malware Analysis ............ 3.0
CNIT 127 Exploit Development .................. 3.0
CNIT 128 Hacking Mobile Devices .............. 3.0
Total: .................................................. 15.0

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 indus
try training in order to be qualified for entry-level positions in network administration.

Learning Outcomes
Upon completion of this program, 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.

Students must complete each course with a grade of “C” or higher. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

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>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CNIT 103 Computer Hardware</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 104 Operating Systems Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 106 Introduction to Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 131 Internet Basics and Beginning HTML</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>12.0</td>
</tr>
</tbody>
</table>

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 program, 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.

Students must complete each course with a grade of “C” or higher. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

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>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CNIT 100 Intro to Computers Using PC’s</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 103 Computer Hardware</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 104 Operating Systems Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 105 IT Customer Support</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 197 Internship and Work Experience</td>
<td>1.0</td>
</tr>
<tr>
<td>Total:</td>
<td>13.0</td>
</tr>
</tbody>
</table>

JavaScript Specialist Certificate

This certificate includes instruction and practice in the development, configuration and operation of web sites focusing on JavaScript and its libraries/frameworks. Students completing this certificate program will be qualified for employment in entry-level positions in dynamic front-end web site development.

Learning Outcomes
Upon completion of this program, students will be able to:

- Develop and maintain web sites according to industry standards
- Apply techniques to add interactivity to web pages via scripting programs and/or use of libraries/frameworks

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in JavaScript Specialist

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CNIT 132 Intermediate HTML and CSS</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 133 JavaScript, jQuery, AJAX</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 133A JavaScript Libraries/Frameworks</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 133M Mobile Web w/HTML, CSS &amp; JS</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>12.0</td>
</tr>
</tbody>
</table>

Microsoft 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 program, students will be able to:

- Define various components of Windows Server
- Install Windows Server
- Use advanced techniques to implement and manage active directory infrastructure.
- Support hardware, software and end-users of Windows OS Desktop edition

The minimum time for completion of this certificate is three semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Certificate of Accomplishment in Microsoft Windows Networking

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>CNIT 106 Introduction to Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 201C Introduction to Cisco Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CNIT 401 Windows 10 Technical Support</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 410 Installing and Configuring Windows Server</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 411 Administering Windows Server</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>CNIT 412 Configuring Advanced Windows Server</td>
<td>3.0</td>
</tr>
</tbody>
</table>
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 program, students will be able to:

- Define basic network security issues and possible solutions
- 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.

Students must complete each course with a grade of “C” or higher. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

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</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 120 Network Security</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 122 Firewalls</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 123 Ethical Hacking &amp; Network Defense</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 124 Advanced Ethical Hacking</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 121 Computer Forensics</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 125 Information Security Professional Practices</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 15.0

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 Entry Networking Technician (CCENT) and the Cisco Certified Network Associate (CCNA) certification exam.

Learning Outcomes
Upon completion of this program, 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

Students must complete each course with a grade of “C” or higher. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Routing and Switching (Cisco)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 103 Computer Hardware</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 201C Introduction to Cisco Networking</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 202C Routing and Switching Essentials</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 203C Scaling Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 204C Connecting Networks</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 15.0

Mobile Web App Development Certificate

The program of study for the Certificate of Accomplishment in Mobile Web App Development includes instruction and practice in the development of web sites and web apps for mobile devices. This course of study prepares students for adapting and/or creating web sites, web apps, and hybrid apps that are able to work well in mobile devices.

Learning Outcomes
Upon completion of this program, students will be able to:

- Use front-end web development techniques, such as HTML, CSS, and JavaScript to develop web sites or web apps for different platforms (desktop and mobile devices)
- Evaluate, select, and use appropriate tools to convert/adapt and test Web Sites for mobile devices
- Recognize and apply the different available solutions to build web apps or hybrid web apps

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Mobile Web App Development

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 204C Connecting Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 203C Scaling Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 202C Routing and Switching Essentials</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 201C Introduction to Cisco Networking</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 103 Computer Hardware</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 15.0

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 program, 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.

Students must complete each course with a grade of “C” or higher. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Routing and Switching (Cisco)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 103 Computer Hardware</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 201C Introduction to Cisco Networking</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 202C Routing and Switching Essentials</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 203C Scaling Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 204C Connecting Networks</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 15.0
CNIT 120 Network Security ........................................... 3.0
CNIT 411 Administering Windows Server ...................... 3.0
Total: ........................................................................ 21.0

Security for Web App Development Certificate

The program of study for the Certificate of Accomplishment in Security for Web App Development includes instruction and practice in the development of web sites and web apps using the most current security techniques. This course of study prepares students for adapting and/or creating web sites with techniques that enhance the security of those applications.

Learning Outcomes

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

- Use front-end web development techniques to develop and publish web sites or web apps for different platforms
- Compare the different methods for securing shared resources used by web apps
- Evaluate the different types of security problems that might occur in a web application project
- Implement web application security techniques effectively

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Security for Web App Development

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 120 Network Security</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 132 Intermediate HTML and CSS</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 133 JavaScript, jQuery, AJAX</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 129S Securing Web Applications</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following courses:

- CNIT 131A XML and JSON .................................. 3.0
- CNIT 129 Web 2.0 Internet Technologies .................. 3.0

Total: .......................................................... 15.0

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 certificate 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 program, 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

Students must complete each course with a grade of “C” or higher.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Wireless Networking

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 106 Introduction to Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 107 Wireless LANs</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 108 Wireless Networks, Advanced</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 120 Network Security</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 113 Technology of Smartphones &amp; Mobile Devices</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: .......................................................... 15.0

Announcement of Courses

Credit, Degree Applicable Courses:

CNIT 10. Careers in Computer Networking and Information Technology (1)

Lec-17.5 P/NP available

Introduction to new technologies and employment opportunities in computer networking and information technology. Guest speakers currently working in the field describe opportunities, working conditions, pay levels, and training required to succeed in the field today. CSU

Offered Fall Semesters
CNIT 11. IT Professional Conduct (1)
Lec-17.5  P/NP available
Advise: CRER 62
Skills and techniques for effective professional self-promotion and workplace rapport in an Information Technology environment. Establishing a professional image and reputation, including resumes and portfolio building, and adhering to workplace protocols and standards for professional conduct. CSU

Offered on occasion

CNIT 30. Internet Safety (1)
Lec-17.5  P/NP available
Best practices to avoid common malicious invasions over the Internet. The course includes an overview of security dangers, a review of simple procedures that can be adopted by all users, descriptions and demonstrations of protective software utilities, and security and privacy on a personal computer. CSU

Offered on occasion

CNIT 40. DNS Security (1)
Lec-17.5  P/NP available
Advise: CNIT 106 or 201E
DNS is essential but has numerous security issues: hijacking, packet amplification, spoofing, snooping, and more. Configure secure DNS servers and detect malicious activity. DNSSEC (DNS Security) principles and deployment. Hands-on project using both Windows and Linux platforms. CSU

Offered on occasion

CNIT 50. Network Security Monitoring (1)
Lec-17.5  P/NP available
Advise: CNIT 106
Learn modern, powerful techniques to inspect and analyze network traffic, to quickly detect abuse and attacks and respond to them. This class also covers the configuration and use of Security Onion, a popular open-source Linux distribution designed for network security monitoring. CSU

CNIT 100. Introduction to Computers Using PCs (3)
Lec-52.5  P/NP available
Advise: CNIT 103; CNIT 104
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. UC/CSU

CNIT 100M. Introduction to Computers Using Macintosh (3)
Lec-52.5  P/NP available
Computer literacy course using Apple computers. Prepares students to use computers to write papers, organize information and use email. Overview of computer components including hardware, software and data. Fundamentals of the Finder and applications such as word processing, spreadsheets, email, and the Internet. Students use Apple computers to complete class assignments. UC/CSU

CNIT 101. Operating Systems I - Windows (3)
Lec-52.5  P/NP available
Advise: CNIT 100.
A technical course about the Microsoft Windows operating system for students who have some computer experience. Learn techniques to manage a personal computer through the use of operating system utilities and commands. Practice setting up and customizing the interface and managing programs and data. Manage the computer system hardware. Compare several graphical user interfaces and command line interfaces. CSU

CNIT 102. Operating Systems II - Command Line (3)
Lec-52.5  P/NP available
Advise: CNIT 101.
An advanced course covering the use Windows command shells, such as CMD, netsh, nslookup, and PowerShell and CMD shell programs. This course is especially for students planning to take a certificate with concentration in Windows server and client administration, Networking or Hardware, and for advanced Windows shells to create scripts manage Windows severs, Cisco routers and switches and VMware virtual servers. CSU

Offered on occasion

CNIT 103. Computer Hardware (3)
Lec-52.5  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 computer systems in a typical office environment. Topics include hardware components and peripherals, assembly, upgrading and basic troubleshooting. CSU

CNIT 103L. Computer Hardware Lab (1)
Lab-52.5  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

Offered on occasion

CNIT 103M. Apple Mac Hardware (3)
Lec-52.5  P/NP available
This course provides the knowledge and skills needed to service the hardware on various Apple Mac systems. Topics include hardware components, system configuration, hardware upgrades, troubleshooting techniques, Apple specific tools and safety procedures. CSU

Offered on occasion

CNIT 104. Operating Systems Technologies (3)
Lec-52.5  P/NP available
Advise: 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 105. IT Customer Support (3)
Lec-52.5  P/NP available
Advise: CNIT 103; CNIT 104
Introduction to the field of technical support, including the critical people skills and exceptional technical knowledge required to provide outstanding service. Emphasis on information resources and technical tools needed most to function effectively in a technical support position. CSU
CNIT 105L. Computer Technical Support Lab (1)
Lab-52.5 P/NP available
ADVISE: CNIT 105.
Hardware diagnosis and troubleshooting, software maintenance, upgrading, and problem solving; work with Help Desk software to log calls, and real end-user 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-52.5 P/NP available
ADVISE: CNIT 100 or 101.
Analysis of technologies for connecting computers and devices into networks. Terminology and the major components of networks: architecture, technologies, hardware, connections, protocols, operations, administration, support, security and troubleshooting. Local Area Networks (LANs), Wide Area Networks (WANs), Wireless LANs and Virtual networks are also covered. Follows the objectives of the CompTIA Network+ certification exam. CSU

CNIT 107. Wireless LANs (3)
Lec-52.5 P/NP available
ADVISE: CNIT 106 or 201E or 342
Selection, installation and configuration of 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 already familiar with LAN technologies. CSU

CNIT 108. Wireless Networks, Advanced (3)
Lec-52.5 P/NP available
ADVISE: CNIT 107
Students will design, install, configure, manage, and maintain wireless networks with advanced fundamentals of WLANs, current and developing standards and protocols, boosting, detecting and extending signal, troubleshooting and monitoring the network, security issues, research of proposed security solutions. The course follows objectives for the Certified Wireless Network Administrator Exam (CWNA). CSU

Offered Spring semesters

CNIT 113. Technology of Smartphones & Mobile Devices (3)
Lec-52.5 P/NP available
ADVISE: CNIT 100
Overview of mobile device technologies with an emphasis on smartphones and tablets. This course will introduce the technologies behind smartphones and tablets including the hardware, cellular networks, operating systems, browsers, app development process, and support needs from an individual and corporate perspective. CSU

Offered Fall semesters

CNIT 120. Network Security (3)
Lec-52.5 P/NP available
ADVISE: CNIT 106 or 201C
Knowledge and skills to recognize security vulnerabilities, implement security measures, analyze network environments for known security threats or risks, defend against attacks or viruses, ensure data privacy and integrity. Terminology and procedures for implementation and configuration of security: access control, authorization, encryption, packet filters, firewalls and Virtual Private Networks (VPNs). CSU

CNIT 121. Computer Forensics (3)
Lec-52.5 P/NP available
ADVISE: CNIT 120
Forensics tools, methods and procedures for investigating computers. Data recovery techniques and evidence collection, protection of evidence, expert witness skills and computer crime investigation techniques. Analysis of various file systems and specialized diagnostic software to retrieve data. Prepares in part for CompTIA Security+ and maps to Computer Investigation Specialists exam. CSU

CNIT 122. Firewalls (3)
Lec-52.5 P/NP available
ADVISE: CNIT 106 or 120 or 201C
Fundamentals, techniques, and procedures to design an effective secure Internet connection using software or hardware firewalls. Discussion of types of firewalls, packet filtering, proxy servers, Intrusion Detection Systems, and Virtual Private Networks (VPNs). CSU

CNIT 123. Ethical Hacking and Network Defense (3)
Lec-52.5 P/NP available
ADVISE: CNIT 106 or 120 or 201C
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

Offered Fall semesters

CNIT 124. Advanced Ethical Hacking (3)
Lec-52.5 P/NP available
ADVISE: CNIT 123
Advanced techniques of defeating computer 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

Offered Spring semesters

CNIT 125. Information Security Professional Practices (3)
Lec-52.5 P/NP available
ADVISE: CNIT 123
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. CSU

Offered Spring semesters

CNIT 126. Practical Malware Analysis (3)
Lec-52.5 P/NP available
ADVISE: CS 110A
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

Offered Spring semesters
CNIT 127. Exploit Development (3)
Lec-52.5 P/NP available
ADVISE: CNIT 123
Learn how to find vulnerabilities and exploit them to gain control of target systems including operating systems. Covers essential exploit development skills for advanced penetration testers and security professionals. Students will be required to obey high ethical principles and not exploit systems without authorization. CSU
Offered Fall semesters

CNIT 128. Hacking Mobile Devices (3)
Lec-52.5 P/NP available
ADVISE: CNIT 113 and 123
Mobile devices run specialized operating systems with security problems. Students will learn how mobile operating systems and apps work, how to find and exploit vulnerabilities and how to defend them. Topics will include phone call, voicemail, SMS intrusion, jailbreaking, rooting, NFC attacks, malware, browser exploitation, and application vulnerabilities. CSU
Offered on occasion

CNIT 129. Web 2.0 Internet Technologies (3)
Lec-52.5 P/NP available
ADVISE: CNIT 100
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 129S. Securing Web Applications (3)
Lec-52.5 P/NP available
ADVISE: CNIT 120 and CNIT 131
Techniques used by attackers to breach Web applications, and how to protect them. How to secure authentication, access, databases, and back-end components. How to protect users from each other. How to find common vulnerabilities in compiled code and source code. CSU

CNIT 130. Internet Basics and Beginning HTML (3)
Lec-52.5 P/NP available
Methods of using the Internet. History, design and protocol methods used on Internet including: electronic mail, connection to remote computers, file transfer, World Wide Web, basic web page creation and publishing using HTML and CSS. Additional topics include: computer security, copyright and electronic commerce, and basic Unix shell commands requisite to shell account use. CSU

CNIT 131A. XML and JSON (3)
Lec-52.5 P/NP available
ADVISE: CNIT 131H or CNIT 131
Introduction to eXtensible Markup Language (XML) and JavaScript Object Notation (JSON). Hands-on experience with XML documents, Document Type Definition (DTD), namespaces, schemas, and data presentation with eXtensible Style Language (XSLT) or Cascading Style Sheets (CSS). Introduction to JSON syntax to store and exchange data. CSU
Offered Spring semesters

CNIT 131H. Introduction to HTML and CSS (1)
Lec-17.5 P/NP available
ADVISE: CNIT 100
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-52.5 P/NP available
ADVISE: CNIT 131
Intermediate and advanced HTML and CSS, based on W3C latest standards, to publish information on the World Wide Web, including images, multimedia, tables, and forms. Cascading Style Sheets used to standardize the appearance of web pages. Introduction to JavaScript, XML and server side technology (CGI-scripts and/or PHP). CSU
Hand-coded web pages using HTML, CSS following latest standards and FTP to transfer to web server.

CNIT 132A. Advanced HTML and CSS (1)
Lec-17.5 P/NP available
Prereq: CNIT 132
Advanced HTML & CSS techniques such as performance and organization of files, advanced pseudo-classes, flexible grids, transitions and animations, semantics and accessibility, preprocessors and complex selectors. CSU
Offered Spring semesters

CNIT 132S. SEO & Analytics for Web Dev (1)
Lec-17.5 P/NP available
Prereq: CNIT 132
Techniques to improve search engine rankings of web sites, including the use of analytic tools to give a better understanding of the audience accessing the web sites. CSU
SEO = Search Engine Optimization and Analytics mainly Google Analytics
Offered Spring semesters

CNIT 133. JavaScript, jQuery, AJAX (3)
Lec-52.5 P/NP available
ADVISE: CNIT 132
Creation of interactive Web pages using JavaScript, including properties, methods, objects, and event handlers of the Document Object Model (DOM). Creation of interactive Web pages using jQuery and AJAX techniques. CSU

CNIT 133A. JavaScript Libraries/Frameworks (3)
Lec-52.5 P/NP available
Prereq: CNIT 133
ADVISE: CNIT 132
An extension of the JavaScript course to define and study the use of the most common JavaScript frameworks/libraries to enhance web development projects. CSU
Offered Fall semesters

CNIT 133M. Mobile Web w/HTML, CSS & JS (3)
Lec-52.5 P/NP available
Prereq: CNIT 133 or equivalent knowledge of HTML, CSS, and JavaScript/ jQuery
Conversion of desktop websites and an introduction to building web applications for smartphones 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 frameworks and platforms. CSU
Offered Fall semesters
CNIT 134. Server Side Technologies for the Web (3)
Lec-52.5  P/NP available
Prereq.: CNIT 133 or CS 110A or CS 111A or CS 112A or CS 113A
Advise: CNIT 132
Creation and maintenance of web pages using server side technologies such as ASP.NET: Server controls, HTML controls, database access, validation of input data, sitemap, navigation (menu) based on the most current ASP.NET technology. CSU
First part requires Windows OS to install Visual Studio
Offered Spring semesters

CNIT 140. IT Security Practices (3)
Lec-52.5
Advise: CNIT 123
This course explores techniques used by hackers to access protected data. Students will learn about cybersecurity laws, penalties and organizations defending civil liberties of citizens. Students will learn about the various methodologies hackers use to gain access to confidential data such as stealthy network recon, passive traffic identification, etc. CSU
Offered on occasion

CNIT 141. Cryptography for Computer Networks (3)
Lec-52.5  P/NP available
Advise: CNIT 120 and MATH 40
The class focuses on practical applications: selecting, implementing, testing, and maintaining systems to protect data on modern computer networks. Mathematical underpinnings and practical applications of modern cryptographic systems, including the Advanced Encryption Standard (AES), the Secure Hash Algorithms (SHA), and Rivest-Shamir-Adleman (RSA). CSU

CNIT 151. Introduction to Windows Virtualization (3)
Lec-52.5
This course is an introduction to virtualization using Microsoft Windows. Students will learn about server, cloud, client, storage networking and application virtualization in the public and private cloud, and requirements for virtual environments, administration, and data security. Students will be exposed to different virtualization applications and platforms such as: Azure and VMware. CSU
Offered on occasion

CNIT 152. Incident Response (3)
Lec-52.5  P/NP available
Advise: CNIT 120 and CNIT 106
When computer networks are breached, incident response (IR) is required to assess the damage, eject the attackers, and improve security measures so attackers cannot return. This class covers the IR tools and techniques required to defend modern corporate networks. This class is part of the Advanced Cybersecurity Certificate. CSU

CNIT 153. VMware: Install, Configure, Manage (3)
Lec-52.5  P/NP available
Prereq.: CNIT 106
This hands-on training course explores installation, configuration, and management of VMware products. Upon completion of this course students can take the examination to become a VMware Certified Professional. The course is based on the latest release of VMware software available. CSU

CNIT 154. EMC - Information Storage and Management (3)
Lec-52.5  P/NP available
Prereq.: CNIT 106
Students will learn about the transition from a Classic Data Center environment to Virtual Data Center and the Cloud virtualization at each layer - compute, storage, network, desktop, and application - along with business continuity in a VDC environment. Students will also learn Cloud computing basics, infrastructure components, service management activities, security concerns, and considerations for Cloud adoption. CSU

CNIT 155. Cloud Infrastructure and Services (3)
Lec-52.5  P/NP available
Prereq.: CNIT 154
This course covers Cloud deployment and service models, Cloud infrastructure, and the key considerations in migrating to Cloud computing. This course also provides the required technology essentials across all domains - including server, storage, networking, applications, and databases - to help develop a strong understanding of virtualization and Cloud computing technologies. CSU

CNIT 159. Advanced Cybersecurity Certificate (3)
Lec-52.5  P/NP available
Prereq.: Completion of 9 units of CNIT courses
This course covers advanced topics in cybersecurity, including intrusion detection systems, advanced threat defense, and incident response. Students will learn about modern cyber threat vectors and develop skills to protect against them. Offered on occasion

CNIT 195. Software Development Practicum (3)
Lec-52.5, field trips  P/NP available
Advise: CS 177 or CS 130B or CS 231 or CS 150A or CS 211E or CS 232 or CNIT 133 or CS 110B or CS 111B or CS 114B or CS 114D
Integrate and apply knowledge gained through CS/CSE coursework in a team-based environment, collaborating with students in Visual Media Design’s VMD 200A/B: Design Studio Practicum. Work on realistic projects with input invited from local employers. Develop, design and program a professional software project in a team environment. CSU
CNIT 195 = CS 195
Offered on occasion

CNIT 197. Internship and Work Experience (1)
Work-60 to 75
Advise: Completion of 9 units of CNIT courses
Repeat: CNIT 197 and 198 combined, max. credit: 9 units
Supervised on- or off-campus work involving computer use. Internships are joint ventures between institutions or companies 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, web development, or computer operation. CSU

CNIT 198. Internship and Work Experience (2)
Work-120 to 150
Advise: Completion of 9 units of CNIT courses
Repeat: CNIT 197 and 198 combined, max. credit: 9 units
Supervised on- or off-campus work involving computer use. Internships are joint ventures between institutions or companies 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, web development, or computer operation. CSU

CNIT 201C. Introduction to Cisco Networks (3)
Lec-52.5
Advise: 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 Cisco Networking Academy Exploration series preparing for CCNET and CCNA Certifications. CSU

CNIT 202C. Routing and Switching Essentials (3)
Lec-52.5
Prereq.: 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 IPv4 and IPv6 networks. Second course in Cisco Networking Academy towards CCENT and CCNA Certifications. CSU

Offered Spring semesters

CNIT 203C. Scaling Networks (3)
Lec-52.5
Prereq.: CNIT 202C
Architecture, components, and operations of routers and switches in larger and more complex networks. Configuration and troubleshooting of routers and switches for advanced functionality with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Knowledge and skills needed to implement a WLAN in a small-to-medium network. CSU

Offered Fall semesters

CNIT 204C. Connecting Networks (3)
Lec-52.5
Prereq.: CNIT 203C
WAN technologies and network services required by converged applications in a complex network. Selection criteria of network devices and WAN technologies to meet network requirements. Configuration and troubleshooting of network devices with data link protocols. Implementation of virtual private network (VPN) operations in a complex network. CSU

Offered Fall semesters

CNIT 205C. CCNA Security (3)
Lec-52.5 P/NP available
Prereq.: CNIT 201C; Completion of or concurrent enrollment in CNIT 202C
Cisco Certified Network Associate (CCNA) Security provides the knowledge and skills needed to prepare for entry-level security specialist careers. CCNA Security aims to develop an in-depth understanding of network security principles as well as the tools and configurations required to secure a network. Preparation for the CCNA-Security certification exam. CSU

Offered Spring semesters

CNIT 214. Internet of Things (3)
Lec-52.5 P/NP available
Prereq.: CNIT 106 or CNIT 201C
Advis: CS 131A; CNIT 202C
Introduction to the Internet of Things (IoT), where people, processes, things, and data are connected via emerging Internet technologies. A variety of networking and computer hardware devices will be integrated into end-to-end systems to solve practical problems. CSU

CNIT 401. Windows 10 Technical Support (3)
Lec-52.5 P/NP available
Advis: CNIT 101
Knowledge, skills and hands-on experience to install, configure, and maintain Windows 10 Operating system. Course aligned with the Microsoft Certification Certificates. CSU

CNIT 410. Installing and Configuring Windows (3)
Lec-52.5 P/NP available
Advise: CNIT 103 or 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

Offered Spring semesters

CNIT 411. Administering Windows Server (3)
Lec-52.5 P/NP available
This course introduces the new line of servers introduced by Microsoft. It provides students with the knowledge and skills required to administer Windows core infrastructure services. This course is aligned with the Microsoft Certified System. CSU

Offered on occasion

CNIT 412. Configuring Advanced Windows Server (3)
Lec-52.5 P/NP available
Advise: CNIT 411
This course provides students with the knowledge and skills required to administer advanced Microsoft servers. The students acquire hands-on knowledge of real world experience to become IT administrators. This course is aligned with the Microsoft Certification exams on configuring advanced server services. CSU

Offered Fall semesters

CNIT 415. SQL Server Administration (3)
Lec-52.5
Offered Fall semesters

CNIT 416. Installing and Configuring Windows Server 2016 (3)
Lec-52.5 P/NP available
Advise: CNIT 103; Completion of or concurrent enrollment in: CNIT 106
This course introduces the new line of servers introduced by Microsoft. It provides students with the knowledge and skills required to install and configure Windows 2016 core infrastructure services. This course is aligned with the Microsoft Certified System Administrator 70-740. CSU

CNIT 417. Administering Windows Server 2016 (3)
Lec-52.5 P/NP available
Advise: CNIT 416
This course introduces the new line of servers by Microsoft. It provides students with the knowledge and skills required to administer Windows core infrastructure services. This course is aligned with the Microsoft Certified System Administrator exam. CSU

CNIT 418. Identity With Windows 2016 (3)
Lec-52.5 P/NP available
Advise: CNIT 417
This course provides the knowledge and skills required to administer advanced Microsoft servers. The students acquire hands-on knowledge of real world experience to become IT administrators. This course is aligned with the Microsoft Certification exams on configuring advanced server services. CSU
CNIT 420. Configuring and Administering Microsoft Azure (3)  
Preq.: CNIT 416 and CNIT 417 and CNIT 418  
Azure administrator skills training needed to be successful deploying  
Software-as-a-Service (SaaS), Infrastructure-as-a-Service (IaaS), and  
Platform-as-a-Service (PaaS) solutions. Includes training in planning  
IaaS solutions for fault tolerance and performance, deployment of  
Virtual Machines (VMs), and systems management using Windows  
PowerShell and the Azure CLI V2. CSU

CNIT 501. Certified Information Systems Auditor (3)  
Preq.: CNIT 120  
Preparation for the Certified Information Systems Auditor (CISA)  
credential. This field includes information systems audit, governance,  
life cycle, system implementation, protecting information assets, business  
continuity, and disaster recovery. CSU

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, and Unix/Linux system administration. We  
have transfer and degree programs, as well as certificate programs. Our  
courses range from entry-level to professional development.

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.

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.

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 after completion  
of the two-year degree program should consult the “Transfer  
Information” section of the catalog and discuss their plans with their  
program advisor or counselor. So as to not 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 institu-  
tion 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 programming series they take (CS 110A-  
B-C or CS 111A-B-C), as different four-year schools may take one or  
the other track. The web site www.assist.org can provide additional  
information about applicable courses for transfer.

Learning Outcomes  
Upon completion of this program, students will be able to:

- Solve problems and conduct experiments in basic computer sci-  
ence and physics.  
- Solve mathematical problems using discrete math and calculus.  
- Create and program algorithmic solutions to solve problems.  

Enrollment is recommended only to students who have a solid under-  
standing of Algebra (at the level of MATH 60 or higher).

Assuming students start this AS with transfer-level math and  
English eligibility, the minimum time for completion is 4 semesters.  
Completion time will vary based on student preparation and number  
of units completed per semester.

Courses Required for the Major in Computer Science  
Course ................................................................... Units

<table>
<thead>
<tr>
<th>Required courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 270 Computer Architecture with Assembly Language</td>
<td>4.0</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 115 Discrete Mathematics</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 4A Classical Mechanics for Scientists and Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 4AAL Mechanics Laboratory for Scientists and Engineers</td>
<td>1.0</td>
</tr>
<tr>
<td>PHYC 4B Electromagnetism for Scientists and Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 4BL Electromagnetism Laboratory for Scientists and Engineers</td>
<td>1.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Choose one of the following courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110A Intro to Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 111A Introduction to Programming: Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 110B Programming Fundamentals: C++</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 111B Programming Fundamentals: Java</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Choose one of the following courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110C Data Structures and Algorithms: C++</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 111C Data Structures and Algorithms: Java</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommended additional coursework:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 160A Introduction to Unix/Linux</td>
<td>2.0</td>
</tr>
<tr>
<td>CS 150A Introduction to SQL Databases and NoSQL</td>
<td>3.0</td>
</tr>
<tr>
<td>or CS 151A Oracle SQL Databases</td>
<td>3.0</td>
</tr>
<tr>
<td>or CS 155A MySQL Databases</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 130A PHP Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 131A Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 132A Ruby Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CNIT 131 Internet Basics and Beginning HTML</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 132 Intermediate HTML and CSS</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 133 JavaScript, jQuery, AJAX</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 212 iPhone Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>Total:</td>
<td>37.0</td>
</tr>
</tbody>
</table>

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, databases, and Unix/Linux system administration.

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 program, students will be able to:

- Analyze problems and interpret technical specifications to create and program appropriate algorithmic solutions, utilizing the most appropriate features of Java.
- Create Java programs with graphical user interfaces.
- Implement applications that utilize the distinctive capabilities of Android.
- Operate effectively within a team, gaining work experience

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Android App Programming

Course ................................................. Units
Required courses:
CS 111B Programming Fundamentals: Java ........ 4.0
CS 211S Advanced Java: Standard Edition ........... 3.0
CS 211D Android Programming ........................ 3.0
CS 311D Advanced Android Programming ........... 3.0

Choose one of the following Internship/Project Experience courses:
CS 195/CNIT 195 Software Development Practicum .... 3.0
CS 177 Software Engineering ............................ 3.0
CS 198 Industry Internship ............................... 1.0 – 4.0
CNIT 197 Internship and Work Experience ........... 1.0
CNIT 198 Internship and Work Experience ........... 2.0
Total: .................................................. 14.0 – 17.0

Build Automation for DevOps & QA Certificate

The program of study for the certificate in Build Automation for DevOps & QA 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 DevOps, Software QA and/or Build and Release Automation.

Learning Outcomes

Upon completion of this program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Build Automation for DevOps & QA

Course ............................................. Units
Required courses:
CS 160A Introduction to Unix/Linux .................... 2.0
CS 160B Unix/Linux Shell Scripting ................... 2.0
CS 177 Software Engineering ............................ 3.0
CS 178 Build Automation for DevOps & QA .......... 3.0

Choose one of the following elective courses:
CS 132A Ruby Programming ............................. 3.0
CS 131A Python Programming ........................... 4.0
CNIT 133 JavaScript, JQuery, AJAX ................... 3.0
Total: .................................................. 13.0 – 14.0

Computer Programming: C++ Certificate

The program of study for the certificate in Computer Programming: C++ includes instruction and practice in the programming language C++, use of the Linux operating system, and a broader context of computer architecture, parallel programming, shell scripting, or database queries. 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 program, students will be able to:

- Analyze problems and interpret technical specifications to create and program appropriate algorithmic solutions, utilizing the most appropriate features of C++.
- Compare and contrast algorithms for efficiency.
- Predict the results of code using standard data structures with associated algorithms.
- Write Linux/Unix commands to manipulate files, directories, their contents and their permissions.
- Program within a specialized context: write programs that use
more than one thread, process or task concurrently to solve a problem, selecting data structures that maintain integrity under concurrent access; design computer circuits and implement code in assembly language; write multiple table database queries in SQL; or write shell scripts to accept command-line arguments and capture program output.

- Operate effectively within a team, gaining work experience.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Computer Programming: C++

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110B Programming Fundamentals: C++</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 110C Data Structures and Algorithms: C++</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 160A Introduction to Unix/Linux</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Choose one:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 280 Introduction to Parallel and Cloud Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 270 Computer Architecture with Assembly Language</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 150A Introduction to SQL Databases and NoSQL</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 151A Oracle SQL Databases</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 155A MySQL Databases</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 160B Unix/Linux Shell Scripting</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Choose one of the following Internship/Project Experience courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 195/CNIT 195 Software Development Practicum</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 177 Software Engineering</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 198 Industry Internship</td>
<td>1.0–4.0</td>
</tr>
<tr>
<td>CNIT 197 Internship and Work Experience</td>
<td>1.0</td>
</tr>
<tr>
<td>CNIT 198 Internship and Work Experience</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total: 13.0 – 18.0

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 or Python, and will learn database fundamentals using MySQL.

Learning Outcomes

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

- Write Unix commands, including redirection of 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.

Students must receive a grade of C or higher in all courses. Where available, grades of “Pass” may also be used.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Certificate of Accomplishment in Computing Skills for Scientists

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 160A Introduction to Unix/Linux</td>
<td>2.0</td>
</tr>
<tr>
<td>CS 155A MySQL Databases</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of these programming courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 131A Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 113A Introduction to Perl Programming</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total: 9.0
Database Programming: Microsoft SQL Server with C# Certificate

This certificate includes instruction and practice in the Microsoft SQL Server database systems and the fundamentals of computer programming systems using Java and C#. This course of study prepares students for entry-level positions in database development and in computer programming in a variety of settings.

Learning Outcomes

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

- Analyze a problem and interpret technical specifications to create and program appropriate algorithmic solutions.
- Create C# applications that use ADO.NET techniques to interact with SQL Server databases.
- Design and create queries in SQL for accessing and updating data.
- Create SQL Server stored procedures, user defined functions, and triggers.
- Design and create relations and other objects as a normalized database and implement that design.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Database Programming: Microsoft SQL Server with C#

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 111D C# with Databases</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 150A Introduction to SQL Databases and NoSQL</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 111B Programming Fundamentals: Java</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total: 17.0

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. This course of study prepares students for entry-level positions in database management and development.

Learning Outcomes

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

- Design and create queries in SQL for accessing and updating data.
- Design and create relations and other objects as normalized database and implement that design.
- Analyze a problem and interpret business requirements to create and program appropriate solutions that use Oracle database queries and programming components.
- Design and create relations and other objects as a normalized database and implement that design.
- Install and configure an Oracle Relational Database Management System, and administer the system.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Database Programming: MySQL/Open Source Technologies

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 155A MySQL Databases</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following introductory database courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 150A Introduction to SQL Databases and NoSQL</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 151A Oracle SQL Databases</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 155A MySQL Databases</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 151B MySQL Database Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 155P MySQL Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 159A Database Design and Modeling</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following programming courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 130A PHP Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 113A Introduction to Perl Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 131A Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 132A Ruby Programming</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 15.0 – 16.0

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. This course of study prepares students for entry-level positions in database management and development.

Learning Outcomes

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

- Design and create queries in SQL for accessing and updating data.
- Analyze a problem and interpret business requirements to create and program appropriate solutions that use Oracle database queries and programming components.
- Design and create relations and other objects as a normalized database and implement that design.
- Install and configure an Oracle Relational Database Management System, and administer the system.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Database Programming: Oracle

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 151A Oracle SQL Databases</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 155A MySQL Databases</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one introductory database course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 150A Introduction to SQL Databases and NoSQL</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 151A Oracle SQL Databases</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 155A MySQL Databases</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 151B Oracle Database Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 151P Oracle PL/SQL Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 159A Database Design and Modeling</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 13.0

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 Swift, and possibly also Java or C++. Students also learn 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 program, students will be able to:

- Analyze a problem and interpret technical specifications to create and program appropriate algorithmic solutions.
- Develop and test Swift classes and protocols, implementing the model-view-controller (MVC) paradigm.
- Extend User Interface Kit (UIKit) classes to create custom view controllers.
- Create working iPhone applications that utilize the distinctive capabilities of iOS.
- Operate effectively within a team, gaining work experience

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Certificate of Accomplishment in iPhone App Programming

Course ............................................. Units
Choose one of the following Programming Fundamentals courses:
CS 112 Beginning iPhone Programming using Swift ............ 4.0
CS 11B Programming Fundamentals: C++ .................. 4.0
CS 111B Programming Fundamentals: Java ............... 4.0
Required capstone course:
CS 212 iPhone Programming .................................. 4.0
Choose one of the following Internship/Project Experience courses:
CS 115A Introduction to Perl Programming .............. 3.0
CS 177 Software Engineering ................................. 3.0
CS 198 Industry Internship ..................................... 1.0-4.0
CNIT 197 Internship and Work Experience ............. 1.0
CNIT 198 Internship and Work Experience ............. 2.0
Total: .......................................... 9.0 – 12.0

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 program, 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. The minimum time for completion of this certificate is 1 semester.

Courses Required for the Certificate of Accomplishment in Linux Administration I

Course ............................................. Units
Required courses:
CS 160A Introduction to Unix/Linux .......................... 2.0
CS 160B Unix/Linux Shell Scripting .......................... 2.0
CS 260A Linux System Administration ................... 4.0
CS 260P Linux Administration Projects .................. 2.0
Recommended additional coursework:
CNIT 106 Introduction to Networks ......................... 3.0
CS 113A Introduction to Perl Programming .............. 4.0
CS 131A Python Programming ............................... 4.0
Total: ........................................... 10.0

Linux Administration II Certificate

The program of study for this second certificate in Linux Administration builds on the Linux Administration I Certificate to deepen expertise in the networking side of Linux Administration. Besides learning basic networking, students learn how to configure and manage standard networked services such as NFS, ssh, mail, DHCP, DNS, ftp, web servers and client LDAP. A second standard scripting language is required to provide greater implementation flexibility. This certificate is designed to prepare students for the industry-standard RHCE certification and for entry-level positions in Linux Administration.

Learning Outcomes

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

- Configure a physical or virtual local subnet for a set of hosts and the networking interfaces of each.
- Write system administration scripts in Python or Perl
- Control access to network services by firewall rules, server configuration, and SELinux restrictions.
- Implement and configure standard network services including DHCP, NFS, ftp, and ssh.
- Configure a master name server to map names for a local subdomain.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of Pass may be used. The minimum time for completion of this certificate is 1 semester.
Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Linux Administration II

Course ................................................. Units
Required courses:
CS 260B Linux Network Administration .......... 3.0
CNIT 106 Introduction to Networks .............. 3.0
Choose one of the following scripting languages:
CS 113A Introduction to Perl Programming ...... 4.0
CS 131A Python Programming ................... 4.0
Total: ................................................... 10.0

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 SQL databases; and server-side programming techniques using Ruby, PHP, Python, C#, ASP.NET and/or Java. This course of study prepares students for entry-level positions developing web applications.

Learning Outcomes

Upon completion of this program, 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 a problem and interpret technical specifications to create and program algorithmic solutions.
- Write multiple table database queries in SQL.
- Create, build, and publish interactive Web pages using HTML and JavaScript.
- Write object-oriented server-side web site programs that interact with databases.
- Operate effectively within a team, gaining work experience.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Web Application Programming

Course ................................................. Units
Required courses:
CS 160A Introduction to Unix/Linux ............. 2.0
CNIT 132 Intermediate HTML and CSS .......... 3.0
CNIT 133 JavaScript, jQuery, AJAX ............. 3.0
Choose one of the following Database courses:
CS 150A Introduction to SQL Databases and NoSQL 3.0
CS 155A MySQL Databases ...................... 3.0
CS 151A Oracle SQL Databases .................. 3.0
Choose one of the following Programming courses:
CS 132A Ruby Programming ...................... 3.0
CS 131A Python Programming ................... 4.0
CS 130A PHP Programming ..................... 4.0
CS 111B Programming Fundamentals: Java .... 4.0
CS 114B C# Programming ....................... 4.0
CS 114D C# with Databases ..................... 3.0
Choose one of the following Advanced Programming courses:
CS 130B Advanced PHP Programming ........... 3.0
CS 232 Ruby on Rails Development ............ 3.0
CNIT 134 Server Side Technologies for the Web 3.0
CS 211E Advanced Java: Enterprise .......... 3.0
CS 231 Advanced Python Programming ......... 3.0
Choose one of the following Internship/Project Experience courses:
CS 195/CNIT 195 Software Development Practicum ... 3.0
CS 177 Software Engineering .................... 3.0
CS 198 Industry Internship ..................... 1.0-4.0
CNIT 197 Internship and Work Experience ...... 1.0
CNIT 198 Internship and Work Experience ...... 2.0
Total: .................................................. 18.0 – 22.0

Announcement of Courses

Credit, Degree Applicable Courses:
CS 101. Introduction to Information Systems (3)
Lec-52.5
Introduction to uses, technology and terminology of hardware, software, networks, data, communications. Survey of job opportunities in business, research and government. Students learn to plan and write spreadsheet applications, write a simple program, and analyze a simple database query UC/CSU
C-ID ITIS 120

CS 110A. Intro to Programming (4)
Lec-70
ADVISE: MATH 60 or MATH 92
Introduction to computer programming and problem solving. No prior programming experience required. Course concepts include: problem solving techniques, algorithms, program design, control structures, functions, and arrays. UC/CSU
C-ID COMP 112

CS 110B. Programming Fundamentals: C++ (4)
Lec-70
ADVISE: CS 110A or CS 111A
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. UC/CSU
C-ID COMP 122

CS 110C. Data Structures and Algorithms: C++ (4)
Lec-70
PREREQ.: CS 110B
Analysis and design of computer algorithms and the underlying data structures using an object-oriented approach. Analysis of algorithm timing and efficiency. Study of lists, stacks, queues, trees, searching, sorting, and recursion. Introduction to Unified Modeling Language (UML), heaps, graphs, tables, hashing, and direct access files. Further study of abstract data types. UC/CSU
C-ID COMP 132

CS 111A. Intro to Programming: Java (4)
Lec-70
ADVISE: MATH 60 or MATH 92 or placement in MATH 90
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. UC/CSU
C-ID COMP 112
Offered on occasion

CS 111B. Programming Fundamentals: Java (4)
Lec-70
Advis: CS 110A or CS 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. UC/CSU
C-ID COMP 112

CS 111C. Data Structures and Algorithms: Java (4)
Lec-70
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. UC/CSU
C-ID COMP 113

CS 112. Beginning iPhone Programming using Swift (4)
Lec-70
P/NP available
This course provides a hands on, project based curriculum for first-time programmers to learn the very basics of computer programming using the Swift language. Students will learn how to use variables, basic logic, and simple Object Oriented Programming to create working apps. CSU

CS 113A. Introduction to Perl Programming (4)
Lec-70
P/NP available
Advis: CS 160A and (MATH 60 or MATH 92 or Placement in MATH 90)
Introduction to the interpreted language Perl. Recommended for anyone working with files and text. Semantics and syntax of the Perl language, including Object Oriented Perl. Discussion on the practical kinds of problems that Perl can solve. Students write stand-alone programs that perform various tasks, including text and file manipulation. UC/CSU
Offered on occasion

CS 114B. C# Programming (4)
Lec-70
P/NP available
Advis: CS 110A or II1A
A continuation of the concepts and principles introduced in CS 110A or II1A. 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
Offered on occasion

CS 114D. C# with Database (3)
Lec-52.5
P/NP available
Advis: CS 111A or demonstrated equivalent programming experience; and CS 150A or CS 151A or CS 155A or demonstrated experience writing SQL queries
An intermediate course in computer programming and problem solving using C# and the .NET platform with ADO.NET. Students develop Windows-oriented application programs that interface with databases using the ADO.NET data access model. CSU
Offered on occasion

CS 130A. PHP Programming (4)
Lec-70
P/NP available
Advis: CS 110A or similar programming experience
Introduction to the open source Web scripting language PHP. Build dynamic Web applications. Semantics and syntax of the PHP language, including discussion on the practical problems that PHP solves. Write server-side cross-platform HTML-embedded scripts to implement dynamic Web pages that interact with databases and files. CSU

CS 130B. Advanced PHP Programming (3)
Lec-52.5
P/NP available
Advis: 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. Class project demonstrates using PHP and a database (MySQL) to build a scalable, object oriented, template-based web application. CSU
Offered on occasion

CS 131A. Python Programming (4)
Lec-70
P/NP available
Advis: CS 110A or 111A or II1A or 130A or 160B.
Python is interpreted, interactive, and object-oriented. Recommended for general-purpose programming, system administration, or web programming. Write stand-alone programs that perform various tasks including manipulating numerical and textual information; accessing content in files; transferring information to and from web sites. UC/CSU

CS 132A. Ruby Programming (3)
Lec-52.5
P/NP available
Advis: CS 110A or II1A or II1A or 130A or 160B.
Ruby is interpreted, interactive, and object-oriented. Recommended for general-purpose programming, system administration, or web programming with the Ruby on Rails web framework. Write stand-alone programs that perform tasks including interfacing or system calls and libraries, processing text using regular expressions, and retrieving information from web sites. CSU

CS 142. Programming Techniques for XML (3)
Lec-52.5
P/NP available
Prereq.: CS 110A or CS 111A or CS 132A or CS 133A or CS 130A or CS 131A or CS 132A or CS 160B
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. Use of XML with databases and serialization. CSU
Offered on occasion

CS 150A. Introduction to SQL Databases and NoSQL (3)
Lec-52.5
P/NP available
A course in the use of SQL database management systems to create, query, and update database tables. The course covers both the syntax
and the logic of the major features of the SQL language. It also covers a brief overview of NoSQL (Not Only SQL) data sources such as JSON, and MongoDB. CSU

CS 150P. SQL Server Programming Using T-SQL (4)
Lec-70 P/NP available
Advise: CS 150A or CS 151A or CS 155A
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. Work with dynamic SQL and with XML data. CSU Offered on occasion

CS 151A. Oracle SQL Databases (3)
Lec-52.5 P/NP available
A course in the use of the Oracle database management system to create, query, and update 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 Offered on occasion

CS 151B. Oracle Database Administration (3)
Lec-52.5 P/NP available
Advise: CS 150A or CS 151A or CS 155A; and CS 160B
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 Offered on occasion

CS 151P. Oracle PL/SQL Programming (4)
Lec-70 P/NP available
Advise: CS 150A or CS 151A or CS 155A
An advanced course in the use of the PL/SQL programming language. Create and manage PL/SQL program units and data structures. Develop stored procedures and functions, database triggers, and packages to process data using database objects. CSU Offered on occasion

CS 155A. MySQL Databases (3)
Lec-52.5 P/NP available
A course in the use of the MySQL database management system to create, query, and update 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 Offered on occasion

CS 155B. MySQL Database Administration (3)
Lec-52.5
Advise: CS 155A or CS 150A or 151A; CS 160B
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 Offered on occasion

CS 155P. MySQL Programming (3)
Lec-52.5 P/NP available
Advise: CS 150A or CS 151A or CS 155A
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 Offered on occasion

CS 159A. Database Design and Modeling (3)
Lec-52.5 P/NP available
Prereq.: CS 150A or CS 151A or CS 155A.
A course in the design of database structures and the use of database modeling tools. CSU Offered on occasion

CS 160A. Introduction to Unix/Linux (2)
Lec-35 P/NP available
Introduction to using the Unix/Linux operating system. Unix/Linux file management and common text processing utilities including searching. UC/CSU

CS 160B. Unix/Linux Shell Scripting (2)
Lec-35 P/NP available
Advise: CS 160A or Demonstration of CS 160A Exit Skills
Analyze, design, write, test, and debug shell scripts. Students learn basic shell scripting techniques and develop scripting skills needed for Unix/Linux System Administration courses. The bash shell is used. UC/CSU

CS 177. Software Engineering (3)
Lec-52.5 P/NP available
Advise: prior programming experience such as CS 110A or 111A or 113A or 130A or 131A or 132A
Introduction to principal software engineering processes and pitfalls. Focus on user needs, development organizations, methodologies, testing, and tools. Use of techniques and tools including Agile Software Development, Test-Driven Development, and version control. UC/CSU

CS 178. Build Automation for DevOps & QA (3)
Lec-52.5, Lab-17.5 P/NP available
Advise: CS 132A, 177, and 260A
Development and Operations (DevOps) is the use of build automation tools to automate provisioning, configuration, monitoring, and management of data centers and networks. These same tools are used to automatically build and test software for Quality Assurance (QA). You will learn how to design tests and use tools like Jenkins to execute planned systematic actions that provide confidence in a software product under development, and its infrastructure. CSU Offered Fall semesters

CS 195. Software Development Practicum (3)
Lec-52.5, field trips P/NP available
Advise: CS 177 or CS 130B or CS 231 or CS 150A or CS 211E or CS 232 or CNIT 133 or CS 110B or CS 114B or CS 114D
Integrate and apply knowledge gained through CCSF coursework in a team-based environment, collaborating with students in Visual Media Design's VMD 200A/B; Design Studio Practicum. Work on realistic projects with input invited from local employers. Develop, design and program a professional software project in a team environment. CSU CS 195 = CNIT 195 Offered Spring semesters

CS 197P. Technical Interview Preparation (1)
Lec-17.5 P/NP only
Prereq.: Completion of or concurrent enrollment in: CS 110C or CS 111C
Preparation for programming job interviews - problem-solving and algorithm questions, solved on a whiteboard or online chat. How to approach these interviews, and how to solve the common kinds of problems given. Requires prior experience programming Data Structures and Algorithms in C++, Java, or similar. CSU

**CS 197V. Version Control and Online Code Repositories (1)**
Lec-17.5  P/NP only
Advise: CS 110A or CS 111A or prior programming experience
How to use version control software such as Git, and online code repositories such as GitHub. Use these systems for team collaboration in software development, and to present work online as a portfolio for job applications. Set up an online code repository as a portfolio for employers to assess what kind of programming experience an applicant has. CSU

**CS 198. Industry Internship (1-4)**
Work-60 to 300  P/NP available
Repeat: Maximum credit: 9 units
Provides students with the opportunity to earn course and certificate credit for working in the field, in a supervised setting in the ICT/Computer Science industry. Internships include software quality assurance (QA), junior developer, database programmer or administrator, Linux system administrator, etc. CSU

**Offered only in Summer semesters**

**CS 199. Independent Study (1-3)** (1-3)
Lab-52.5 to 157.5  P/NP available
Advise: CS 110C or 111C or 211E or 212 or 311D or CS 177
Large-scale individual projects in computer science to be defined in cooperation with an instructor-supervisor. The project must be in an area not covered by other course offerings. The student is responsible for the project definition and completion under the guidance of an instructor/supervisor. CSU

UC upon review

**CS 211D. Android Programming (3)**
Lec-52.5  P/NP available
Advise: CS 111B
An advanced course in the design and development of applications for mobile devices running the Android operating system. Students will use the Android SDK and Android Studio to create programs including how to craft User Interfaces (UIs), create location-based applications, and access web services. CSU

**CS 211E. Advanced Java: Enterprise (3)**
Lec-52.5  P/NP available
Advise: CS 111B and CS 211S.
Advanced Java Enterprise Edition covers features of the Java language essential for building network and web oriented applications. Topics include networking, Java Database Connectivity (JDBC), Servlets, JavaBeans, JavaServer Pages (JSP), Remote Method Invocation (RMI), JavaScript Object Notation (JSON), and Extensible Markup Language (XML). CSU

**Offered Spring semesters**

**CS 211S. Advanced Java: Standard Edition (3)**
Lec-52.5
Advise: CS 111B
Introduces advanced Java language features and packages that are essential for building Java Standard Edition applications. Topics include multithreading, collections, generics, Swing classes, lambdas, functional programming, and streams. Helps prepare students for industry certification in Java programming. CSU

**CS 212. iPhone Programming (4)**
Lec-70  P/NP available
Advise: CS 112 or CS 110B or CS 111B
An advanced course in the design and development of iOS applications using Xcode and Swift. CSU

**CS 214U. Unity Game Programming in C# (4)**
Lec-70  P/NP available
Advise: CS 114B or CS 110B or CS 111B
This course provides students with the opportunity to learn computer science concepts in the context of game development. Data algorithms, behavioral algorithms, memory management, object and class hierarchy, and Unity’s architectural pattern will be presented. CSU

**Offered Fall semesters**

**CS 230W. WordPress and Drupal CMS Development (3)**
Lec-52.5  P/NP available
Advise: CS 130A and CNIT 132 and CS 160A
This course introduces students to creating and deploying WordPress and Drupal content management systems (CMS) for web development using custom plug-ins and modules. Topics include WordPress and Drupal core features, APIs, plug-in and module development, architecture, deploying to cloud hosting, PHP performance tuning, data management, and security. CSU

**CS 231. Advanced Python Programming (3)**
Lec-52.5  P/NP available
Prereq: CS 131A
Second course in the Python programming language. Covers resources, practices, and modules used by successful Python programmers; processes in the Python ecosystem; documentation, debugging, and testing; data serialization and use of persistent stores and web services; various implementations of the Python language. Students write useful programs demonstrating mastery of these techniques, which are applicable to real world problems. UC/CSU

**CS 232. Ruby on Rails Development (3)**
Lec-52.5  P/NP available
Advise: CNIT 132 and CS 132A
Developing data driven web applications with Ruby on Rails. Core aspects of the framework including ActiveRecord, HTML with embedded Ruby (ERB), Rails Controller classes, Action Mailer, and application testing. CSU

**Offered Fall semesters**

**CS 256. Data Visualization (3)**
Lec-52.5  P/NP available
Prereq.: CS 131A or CS 110B or CS 111B or CS 132A or CS 212 or CS 114B or CS 113A
Advise: MATH 80 or ECON 5 or PSYC 5 or LALS 5
Access and analyze data and produce information visualizations to discover patterns. Fundamental skills and concepts for Data Science, applicable for scientists, journalists, business people, and database programmers. Requires programming in a language of student's choice. CSU

**CS 260A. Linux System Administration (4)**
Lec-70  P/NP available
Advise: CS 160B
The administration of a Linux server. Prepares students for industry certification and entry-level employment in System Administration.
Construction Management

See Architecture.

Consumer Education

See Health Education.

Counseling Development

Office: MU 39
Phone Number: (415) 452-5235
Web Site: www.ccsf.edu/cscd

Announcement of Course
Credit, Degree Applicable Course:
COUN 105. Student Success Seminar II (.5)
Lec-9
P/NP only
This brief course is intended to help students on third and fourth semester probation re-gain good academic standing. Students develop time management and motivational strategies and learn about college policies, study skills, and student resources. Developing a comprehensive educational plan is key. CSU

Announcement of Courses
Credit, Degree Applicable Courses:
\begin{itemize}
  \item AAPS 100. Achieving an Academic Attitude (3)
    \begin{itemize}
        \item Lec-52.5
        \item P/NP available
    \end{itemize}
  \item AAPS 101. Achieving an Academic Attitude (3)
    \begin{itemize}
        \item Lec-52.5
        \item P/NP available
    \end{itemize}
  \item AAPS 103. Orientation to College Transfer (3)
    \begin{itemize}
        \item Lec-52.5
        \item P/NP available
    \end{itemize}
  \item AAPS 104. Student Success Seminar (.5)
    \begin{itemize}
        \item Lec-9
        \item P/NP only
    \end{itemize}
\end{itemize}

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 policies, study skills, and student resources. Developing a comprehensive educational plan is key. CSU

Construction Trades

See Automotive/Motorcycle, Construction, and Building Maintenance.
available college resources to help them reach academic success. Students also learn about academic policies and educational goal options. CSU

Noncredit Courses:
AAPS 1111. Orientation to Noncredit Certificate Programs (10 hrs)
Advise: ESLN 3300 or Placement in ESLN 3400 (Beginning High 4)
Introduction to the nature, purpose and application of noncredit studies and programs at City College of San Francisco. Topics include the range and variety of noncredit studies, contrast to credit studies, expectations for noncredit students, and introduction to the college's services for noncredit students' success.

CSU GE-Breadth
Website: www.ccsf.edu/artic

Announcement of Curricula

CSU GE-Breadth Certificate
Students who complete the approved California State University General Education-Breadth transfer pattern may obtain the Certificate of Achievement in CSU GE-Breadth. Details of the course requirements and learning outcomes are available in the Transfer Information section of this catalog. Students are strongly encouraged to consult with a counselor for further information.
(See also IG ETC Certificate)

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, cafeterias, cruise ships, retirement communities, catering companies, educational institutions and purveyors, to name a few career possibilities.
The jobs that students receive immediately upon graduating vary greatly, depending upon which program they completed, their career goals, and practical experience. Graduates may accept positions such as: line cook, pastry cook, baker, host, food server, hotel reservationist, desk clerk, cashier and night auditor; to entry level management positions, such as: assistant restaurant manager, 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 can apply for a Certificate of Completion from the Accrediting Commission of the American Culinary Federation (ACF). Please see Program Advisor for more information regarding the certificate. For more information about this agency, see the "Overview of the College" section of this Catalog.

Food Safety Managers Certification. As a prerequisite 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.

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 CAHS 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 10A-B/N-NL, CAHS 20A-B-C, CAHS 30A-B) 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 can apply for a Certificate of Completion from the Accrediting Commission of the American Culinary Federation (ACF). Please see Program Advisor for more information regarding the certificate. For more information about this agency, see the "Overview of the College" section of this Catalog.

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.

Prerequisites:

- Applicants must have completed ESL 150 or placed in ESL 160; or completed ENGL 91 or ENGL 86 and/or placed into ENGL 93 or ENGL 88; or completed ENGL 1A at CCSF or its equivalent at another college.
- A 2.0 grade point average on prior college or high school transcripts is advised.
- Applicants must be in good physical and mental health.

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 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, kitchen tools, and material fees at an approximate cost of $575.00 (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 10A, 10B, CASH 10/10N, CAHS 20A, 20B, CAHS 20C, CAHS 30A, 30B and the internship class CAHS 40W.

This program includes extensive hands-on training in the department’s four kitchens, bakery, quick service cafe, cafeteria, and fine dining restaurant.

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 courses 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. This major is offered to prepare students for a culinary career. This is a two year program and includes management related courses in their respective fields. It 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 must complete 12 units of A.S. degree requirements before continuing to the second year.

Learning Outcomes

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

- Apply the concept and techniques of sanitation, personal hygiene and professional attire to hospitality environments.
- Use costing principles and trends to profitably operate hospitality establishments
- Work in a professional kitchen as a line and/or pastry cook.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester. There is a separate application form for the CAHS program. Applicants should contact the Culinary Arts and Hospitality Studies department for deadline dates.

Prerequisites for entry into the program: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B; Math E1 or Math E3 or Math 30 or placement in Math 40
Courses Required for the Major in Culinary Arts Management

Course............................................Units
Required introductory course:
CAHS 100 Introduction to Hospitality...........3.0

Choose one of the following required options:
OPTION ONE
CAHS 10A Culinary Fundamentals I ............5.5
CAHS 10B Culinary Fundamentals I.............5.5

OPTION TWO
CAHS 10N Culinary Fundamentals I ............4.0
CAHS 10NL Culinary Fundamentals I Laboratory...6.5

Required Courses:
CAHS 20A Culinary Fundamentals II A ..........3.5
CAHS 20B Culinary Fundamentals II B ..........3.5
CAHS 20C Culinary Fundamentals II C ..........3.5
CAHS 21 Meat Analysis...........................2.0
CAHS 30A Restaurant Operations ................5.0
CAHS 30B Restaurant Operations ...............5.0

Note: CAHS 10A-B/N-NL, 20A-B-C, 30A-B and 40W must be taken in sequence

CAHS 40W Work Experience* ..................5.0
*To be taken in the student's final semester and by consent of the instructor

Choose one of the following required courses
PSYC 26 Applied Psychology......................3.0
LBCS 96C Labor Relations in the Modern American .3.0

PLUS: Students are required to take 3 units of the following courses:
CAHS 60A Sous Vide Cooking.....................1.0
CAHS 60B Classic & Modern Sauces ..............1.0
CAHS 60D Advanced Pantry/Cold Kitchen
Preparations .....................................1.0
CAHS 60E Charcuterie, Forecemeats, and Pates ....1.0
CAHS 60F Principles of Food Carving............1.0
CAHS 60G Global Cuisines: France ..............1.0
CAHS 60H Global Cuisines: Italy ...............1.0
CAHS 60J Global Cuisines: United States .......1.0
CAHS 60L Advanced Pastry Doughs, Batters,
and Creams .......................................1.0
CAHS 60M Chocolate and Confections ..........1.0
CAHS 60N Mousses: Cakes and Desserts .........1.0
CAHS 60O Wedding Cakes........................1.0
CAHS 60P Plated Desserts: Presentations &
Techniques .......................................1.0
CAHS 53A Cuisines of Mexico: Oaxaca ..........3.0

Total: ........................................63.0 – 63.5

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 can apply for a Certificate of Completion from the Accrediting Commission of the American Culinary Federation (ACF). Please see Program Advisor for more information regarding the certificate. For more information about this agency, see the "Overview of the College" section of this Catalog.

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 Stater 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.

Prerequisites:
- Applicants must have completed ESL 150 or placed in ESL 160; or completed ENGL 91 or ENGL 86 and/or placed into ENGL 93 or ENGL 88; or completed ENGL 1A at CCSF or its equivalent at another college.
- A 2.0 grade point average on prior college or high school transcripts is advised.
- Applicants must be in good physical and mental health.

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 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, kitchen tools, and material fees at an approximate cost of $575.00 (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 208, CAHS 10A, 10B, CAHS 10N/NL, CAHS 30A, 10B and the internship class CAHS 40W.

This program includes extensive hands-on training in the department's
four kitchens, bake shop, quick service cafe, cafeteria, and fine dining restaurant. 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.

**Learning Outcomes**

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

- Practice communication skills, professional behaviors and techniques required to execute superior customer service and exceed guest's expectations
- Apply professional, supervisory and interpersonal skills needed to work with diverse groups and successfully manage food and beverage operations.
- Implement principles of cost control and sound business practices to profitably operate and evaluate food service establishments.
- Apply fundamental front and back-of-house skills in a variety of food service operations.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

There is a separate application form for the CAHS program. Applicants should contact the Culinary Arts and Hospitality Studies department for deadline dates.

**Prerequisites for entry into the CAHS program:** ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B; Math E1 or MATH E3 or MATH 30 or placement in MATH 40

<table>
<thead>
<tr>
<th>Course Required for the Major in Food Service Management</th>
<th>Units</th>
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<tbody>
<tr>
<td>Course ..................................................................</td>
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</tr>
<tr>
<td><strong>Required introductory course:</strong> CAHS 100 Introduction to Hospitality</td>
<td>3.0</td>
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<tr>
<td><strong>Choose one of the following required options:</strong></td>
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<tr>
<td><strong>OPTION ONE</strong></td>
<td></td>
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<tr>
<td>CAHS 10A Culinary Fundamentals I</td>
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<td>CAHS 10B Culinary Fundamentals I</td>
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<td><strong>OPTION TWO</strong></td>
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<tr>
<td>CAHS 10N Culinary Fundamentals I</td>
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<td>CAHS 10NL Culinary Fundamentals I Laboratory</td>
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<td><strong>Required courses:</strong></td>
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<tr>
<td>CAHS 30A Restaurant Operations</td>
<td>5.0</td>
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<tr>
<td>CAHS 30B Restaurant Operations</td>
<td>5.0</td>
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<tr>
<td>CAHS 32 Hospitality Marketing</td>
<td>3.0</td>
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<tr>
<td>CAHS 33 Procurement and Costing</td>
<td>3.0</td>
</tr>
<tr>
<td>CAHS 34 Hospitality Law</td>
<td>3.0</td>
</tr>
<tr>
<td>CAHS 208 Intro to Event and Meeting Planning</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 121 Sanitation Principles and Practices</td>
<td>3.0</td>
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<tr>
<td>SUPV 231 Introduction to Supervision and Management</td>
<td>2.0</td>
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<tr>
<td>BIO 130 Nutrition and Culinary Arts</td>
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<tr>
<td>CMST 11 Basic Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>CAHS 42 Hotel and Restaurant Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>CAHS 40W Work Experience*</td>
<td>5.0</td>
</tr>
<tr>
<td>* CAHS 40W to be taken in student's final semester and by consent of instructor.</td>
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</tbody>
</table>

**Hotel Management Program**

**Introduction.** Students may earn an Associate in Science with a major in Hotel Management. This major is designed to prepare students to work in the rooms division of a hotel or lodging facility. Students spend one semester in the kitchen to help prepare for the Food and Beverage department of a hotel. However, this major does not prepare students for a culinary career.

**Admission and Applications.**

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.

**Prerequisites:**

- Applicants must have completed ESL 150 or placed in ESL 160; or completed ENGL 91 or ENGL 86 or placed into ENGL 93 or ENGL 88; or completed ENGL 1A at CCSF or its equivalent at another college.
- A 2.0 grade point average on prior college or high school transcripts is advised.
- Applicants must be in good physical and mental health.

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 this program. 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.

**Costs.** In addition to the current applicable tuition, fees, books, and other such college expenses, students will need to purchase uniforms,
kitchen tools, and material fees at an approximate cost of $575.00 (a one-time cost).

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. 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. This major prepares students to work in the Rooms Division of a hotel or lodging facility. These classes should be taken with A.S. degree requirements.

Learning Outcomes

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

- Categorize the different departments within a hotel and explain the interactions between them.
- Enhance organizational performance through use of industry specific technology.
- Apply costing principles and trends to profitably operate hospitality establishments.
- Apply the concept and techniques of sanitation, personal hygiene and professional attire to hospitality environments.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

There is a separate application form for the CAHS program. Applicants should contact the Culinary Arts and Hospitality Studies Department for deadline dates.

Prerequisites for entry into the program: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B; Math E1 or MATH E3 or MATH 30 or placement in MATH 40

Courses Required for the Major in Hotel Management

Course...

Required Introductory course
CAHS 100 Introduction to Hospitality...
Choose one of the following required options:
OPTION ONE
CAHS 10A Culinary Fundamentals I...
CAHS 10B Culinary Fundamentals I...
OPTION TWO
CAHS 10N Culinary Fundamentals I...
CAHS 10NL Culinary Fundamentals I Laboratory...
Required Courses:
CAHS 32 Hospitality Marketing...
CAHS 33 Procurement and Costing...
CAHS 34 Hospitality Law...
CAHS 42 Hotel and Restaurant Accounting...
CAHS 43 Principles of Hotel Administration...
CAHS 40W Work Experience*

*To be taken in the student's final semester and with consent of the instructor

BIO 121 Sanitation Principles and Practices...
CMST 11 Basic Public Speaking...
Choose one of the following required courses:
PSYC 26 Applied Psychology...
LBCS 96C Labor Relations in the Modern American...
Choose one of the following required courses:
SUPV 231 Introduction to Supervision and Management...
SUPV 233 Human Resources Management...
Choose one of the following required options:
OPTION ONE
CAHS 30A Restaurant Operations...
and CAHS 30B Restaurant Operations...
OPTION TWO
CAHS 208 Intro to Event and Meeting Planning...

Total:

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 10A. Culinary Fundamentals I (5.5)
Lec-35, Lab-185
PreReq: Admission to the Culinary Arts and Hospitality Studies degree program; ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B; MATH E1 or MATH E3 or MATH 30 or placement in MATH 40
Completion of or concurrent enrollment in: CAHS 10B

Fundamentals of commercial food preparation for hotels and restaurants. Skills for handling of professional kitchen equipment, tools and machinery through practical application. Preparation of breakfast, salads, and sandwiches. Practice of sanitation and safety techniques; kitchen terminology; mathematics related to food cost and measurements; organizational skills, accuracy and speed. CSU

CAHS 10A formerly comprised one half-semester of CAHS 10B.

All sections will charge a material fee of $75.00

CAHS 10B. Culinary Fundamentals I (5.5)
Lec-35, Lab-185
PreReq: Admission to the Culinary Arts and Hospitality Studies degree program; ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B; MATH E1 or MATH E3 or MATH 30 or placement in MATH 40
Completion of or concurrent enrollment in: CAHS 10B

Fundamentals of commercial pastry and baking preparation for hotels, restaurants and bakeries. Skills for handling of professional pastry kitchen equipment, tools and machinery through practical application. Preparation of 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. CSU

CAHS 10B formerly comprised one half-semester of CAHS 10A. All sections will charge a material fee of $75.00

CAHS 10N. Culinary Fundamentals 1 (4)
Lec-70
PreReq: Admission to the Culinary Arts and Hospitality Studies degree program; ESL 150 or ENGL 93 or ENGL 95 or
ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B; MATH E1 or MATH E3 or MATH 30 or placement in MATH 40
Coreq.: CAHS 10N
Fundamentals of commercial food preparation for the hospitality industry. Concepts for handling professional kitchen tools and equipment, food sanitation, safety, kitchen mathematics and terminology. Theory of the preparation of various hot and cold savory dishes and various baked goods. This course is the lecture component for CAHS 10N. CSU
All sections will charge a material fee of \$75.00

CAHS 10NL. Culinary Fundamentals I Laboratory (6.5)
Lab-350
Coreq.: CAHS 10N
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, organizational skills, and kitchen mathematics and terminology. This course is the laboratory component for CAHS 10N. CSU
All sections will charge a material fee of \$75.00

CAHS 20A. Culinary Fundamentals II A (3.5)
Lec-23, Lab-116
Prereq.: CAHS 10A and CAHS 10B or CAHS 10N and CAHS 10NL and completion of or concurrent enrollment in: CAHS 20B and CAHS 20C
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 techniques employing all standard cooking methods. Production is centered around butchery and utilizing related cuts for curing, smoking, sausage making and the art of garde manger - patés, terrines and hors d’œuvres. CSU
All sections will charge a material fee of \$75.00

CAHS 20B. Culinary Fundamentals II B (3.5)
Lec-23, Lab-116
Prereq.: CAHS 10A and CAHS 10B or CAHS 10N and CAHS 10NL and completion of or concurrent enrollment in: CAHS 20A; CAHS 20C
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 techniques employing all standard cooking methods. Production is focused on fine dining restaurant cooking and kitchen management. Line cooking in various stations emphasized. CSU
All sections will charge a material fee of \$75.00

CAHS 20C. Culinary Fundamentals II C (3.5)
Lec-24, Lab-117
Prereq.: CAHS 10A and CAHS 10B or CAHS 10N and CAHS 10NL and completion of or concurrent enrollment in: CAHS 20A; CAHS 20B
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 production lab environment (Industrial kitchen), employing all standard cooking techniques, producing a variety of entrees, starches, vegetables, sauces and a variety of foods from around the world. CSU
All sections will charge a material fee of \$75.00

CAHS 21. Meat Analysis (2)
Lec-35
Prereq.: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B
Advise: Completion of or concurrent enrollment in: CAHS 20A and CAHS 20B and CAHS 20C
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 30A. Restaurant Operations (5)
Lec-43.75, Lab-131.25
Prereq.: CAHS 20A; CAHS 20B; CAHS 20C and completion of or concurrent enrollment in: CAHS 30B
This course focuses on front-of-house restaurant operations, such as food and beverage service, management, menu design and pricing strategies. A key component of the course is intensive hands-on training in the fine dining restaurant. CSU
All sections will charge a material fee of \$75.00

CAHS 30B. Restaurant Operations (5)
Lec-43.75, Lab-131.25
Prereq.: CAHS 20A and CAHS 20B and CAHS 20C and completion of or concurrent enrollment in: CAHS 30A
This course focuses on food service operations such as management, cost control for cafeterias and quick service business models. A key component of the course is intensive hands-on training in the two college food service outlets: the cafeteria and quick service outlets. CSU
All sections will charge a material fee of \$75.00

CAHS 32. Hospitality Marketing (3)
Lec-52.5
Prereq.: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B
Fundamentals of marketing in the hospitality industry, including research, sales, advertising, public relations, social media and other concepts related to hospitality marketing. CSU
Offered spring semesters

CAHS 33. Procurement and Costing (3)
Lec-52.5, field trips
Prereq.: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B and MATH E1 or MATH E3 or MATH 30 or placement in MATH 40 or higher
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-52.5
Prereq.: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B
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

**Offered Spring semesters**

**CAHS 35. Hotel Front Office Operations (3)**
Lec-35, Lab-52.5, field trips
Prereq.: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B
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

**Offered Fall semesters**

**CAHS 40W. Work Experience (5)**
Lec-17.5, work-240 (total hrs)
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 instructor/coordinator
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-52.5
Prereq.: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B
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-52.5, field trips
Comprehensive survey of operating system and components of a hotel-resort facility, including front office, housekeeping, food and beverage, sales and marketing, accounting, property maintenance, human resources management. Describes management administration, concepts, principles, hotel operations as a major industry. Introduction to how revenue management, social media marketing, reputation management, Smith Travel Report and profit and loss statements show the success or failure of a hotel. CSU

**Requested Classification Credit/Degree Applicable**

**CAHS 53A. Cuisines of Mexico: Oaxaca (3)**
Lec-17.5, Lab-105, field trips
Prereq.: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B
Advise: CAHS 10A or CAHS 10 or CAHS 10Q or (CAHS 10N and CAHS 10NL) or culinary industry experience
An advanced culinary course that familiarizes the student with authentic cuisine of Oaxaca, Mexico. Students will explore the history and use of indigenous ingredients, local cooking methods, techniques, and terminology related to Oaxacan cuisine. CSU

**CAHS 60A. Sous Vide Cooking (1)**
Lec-17.5
Prereq.: (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL); Completion of or concurrent enrollment in: CAHS 20A or CAHS 20B or CAHS 20C
Lecture and demonstration of the history, trends, and applications of sous vide cooking. CSU

**Offered Spring semesters**

**CAHS 60B. Classic & Modern Sauces (1)**
Lec-17.5
Prereq.: (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL); Completion of or concurrent enrollment in: CAHS 20A or CAHS 20B or CAHS 20C
Lecture and demonstration of the history, trends, and techniques of classic and modern sauce-making. CSU

**Offered Fall semesters**

**CAHS 60D. Advanced Pantry/Cold Kitchen Preparations (1)**
Lec-17.5
Prereq.: (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL); Completion of or concurrent enrollment in: CAHS 20A or CAHS 20B or CAHS 20C
Advanced techniques used in the pantry/cold kitchen including: salads, cold soups, sandwiches, pickles, appetizers and hors d’oeuvres. CSU

**Offered on occasion**

**CAHS 60E. Charcuterie, Force meats, and Pates (1)**
Lec-17.5
Prereq.: (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL); Completion of or concurrent enrollment in: CAHS 20A or CAHS 20B or CAHS 20C
Basic techniques including smoking and curing, for creating charcuterie, sausages and pates. CSU

**Offered on occasion**

**CAHS 60F. Principles of Food Carving (1)**
Lec-17.5
Prereq.: (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL); Completion of or concurrent enrollment in: CAHS 20A or CAHS 20B or CAHS 20C
Lecture and demonstration of the basic techniques for carving showpieces from fruit, tallow, and ice. CSU

**Offered on occasion**

**CAHS 60G. Global Cuisines: France (1)**
Lec-18
Prereq.: CAHS 10 or CAHS 10Q or (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL) or CAHS 20
An advanced culinary course including lecture on the history, technique, ingredients, and current trends of French cuisine, and demonstration of techniques for production. CSU

**Offered Fall semesters**

**CAHS 60H. Global Cuisines: Italy (1)**
Lec-18
Prereq.: CAHS 10 or CAHS 10Q or (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL) or CAHS 20
An advanced culinary course including lecture on the history, technique, ingredients, and current trends of Italian cuisine. CSU

**Offered Fall semesters**
CAHS 60J. Global Cuisines: United States (1)
Lec-18
Prereq.: (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL)
Coreq.: CAHS 20A or CAHS 20B or CAHS 20C
An advanced culinary course including lecture and demonstration of the history, techniques, ingredients, and current trends of United States cuisine. CSU
*Offered Fall semesters*

CAHS 60L. Advanced Pastry Doughs, Batters, and Creams (1)
Lec-17.5
Prereq.: CAHS 10 or CAHS 10Q or (CAHS 10A and CAHS 10B) or
(CAHS 10N and CAHS 10NL) or CAHS 20
Lecture and demonstration on history and techniques for production of tart doughs, choux paste, puff pastry, cookie doughs, creams and curds and the application of these elements in finished desserts. CSU
*Offered only in Summer semesters*

CAHS 60M. Chocolate and Confections (1)
Lec-17.5
Prereq.: CAHS 10 or CAHS 10Q or (CAHS 10A and CAHS 10B) or
(CAHS 10N and CAHS 10NL) or CAHS 20
Lecture and demonstration on the history of chocolate, chocolate tempering, and the production process for making ganaches, molded truffles and chocolate decor. Techniques for producing assorted confections and candies. CSU
*Offered Spring semesters*

CAHS 60N. Mousses: Cake and Desserts (1)
Lec-17.5
Prereq.: CAHS 10 or CAHS 10Q or (CAHS 10A and CAHS 10B) or
(CAHS 10N and CAHS 10NL) or CAHS 20
Lecture and demonstration on the production process for creating mousse-based desserts and “entremet” cakes. CSU
*Offered Fall semesters*

CAHS 60O. Wedding Cakes (1)
Lec-17.5
Prereq.: CAHS 10 or CAHS 10Q or (CAHS 10A and CAHS 10B) or
(CAHS 10N and CAHS 10NL) or CAHS 20
Lecture and demonstration on wedding cake production including pricing, sizing, design considerations, techniques for assembly, and delivery. Preparation and use of sponge cakes, fillings, buttercreams, fondant, royal icing, decorations, and dummy cakes. Includes discussion on the history of wedding cakes. CSU
*Offered on occasion*

CAHS 60P. Plated Desserts: Presentations/Techniques (1)
Lec-18
Prereq.: CAHS 10 or CAHS 10Q or (CAHS 10A and CAHS 10B) or
(CAHS 10N and CAHS 10NL) or CAHS 20
Lecture and demonstration on production of restaurant-style plated desserts and desserts for buffet presentations. Emphasis on current trends, including use of seasonal and local produce, menu development and planning, assembly techniques, plating and buffet design and execution. CSU
*Offered Fall semesters*

CAHS 100. Introduction to Hospitality (3)
Lec-52.5
Prereq: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B
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. CSU

CAHS 205. Introduction to Wine (3)
Lec-52.5
Prereq.: Students must be 21 to enroll
An introduction to the history of wine, major wine regions and production of grapes along with basic techniques of sensory evaluation of wines, with emphasis on the major grape varieties and their varying Old and New World expressions. CSU
*Offered Spring semesters*

CAHS 208. Intro to Event and Meeting Planning (4)
Lec-35, Lab-105, field trips
Prereq.: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B
Through lectures and industry guest speakers this class explores the fundamentals of what it takes to start a food business such as truck, pop up or restaurant. Topics covered include components of a business plan, lease or purchase negotiations, design and build out of a space, staffing, permits and licenses, how to plan for profitability and more. CSU
*Offered Fall semesters*

CAHS 222. Beverage Management (3)
Lec-52.5, field trips
Prereq.: ESL 150 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ESL 160 or ENGL 96 or ENGL 88B
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 beverage lists, costing, bar design and equipment, hiring, management, and the fundamentals of mixology. CSU
*Offered Fall semesters*

CAHS 244. Foods and Fitness (3)
Lec-52.5, Lab-17.5, field trips
Survey of nutrient needs in different stages of the life, including food and meal patterns appropriate for specialized dietary needs, current controversies surrounding common health problems and dietary interrelationships. Analysis of weight control dietary regimes and nutritional assessment of food intake for optimum health. CSU
*Offered Fall semesters*

CAHS 245. Introduction to Food Preparation for Home Cooks (3)
Lec-35, Lab-52.5
Introduction to hands-on food preparation techniques with emphasis on function and interaction of ingredients. Course also includes nutrition meal planning, cost effective seasonal food selection, purchasing, storage, preservation concepts, safety, sanitation, elementary nutrition and standards for sensory evaluation. CSU
*Offered on occasion*
CAHS 246. Special Occasion Cooking (3)
Lec-35, Lab-52.5
Special occasion menu planning and preparation including principles and procedures involved in food selection, preparation, storage and use of specialized cooking equipment. Students prepare and serve complete menus for special occasions, ethnic, family celebrations and holidays. Wine and food pairings, specialty plating, table decoration and garnishing also included. CSU
Offered Spring semesters

CAHS 247. Food and Culture (2)
Lec-17.5, Lab-52.5, 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. UC/CSU
This course may be offered through International Education in various countries.
Offered on occasion

Noncredit Programs

The noncredit programs provide both short-term and one-year certificates in introduction to culinary fundamentals, culinary and service skills, and baking and pastry. These programs are designed for entry into the labor market.

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 at the Downtown Center or at facilities at the Chinatown/North Beach center. These courses prepare students for entry-level work in restaurant and hotel kitchens and dining rooms.

Procedures for noncredit enrollment:
1. File a CCSF noncredit student application either online or at the Downtown or Chinatown/North Beach centers.
2. Meet with a counselor for program information, placement test dates, and instructions on how to enroll.
3. Take the following placement tests (if you have not yet taken any ESL or TRST courses):
   • Noncredit English (CASAS) or Noncredit ESL, and
   • Noncredit math test (CASAS).
   CASAS testing is available at Downtown, John Adams, and Southeast campuses. Non credit ESL testing is available at all City College campuses except Southeast and Evans. The following link can be used to find the noncredit testing schedule: http://www.ccsf.edu/NEW/en/future-students/future_noncreditsstudents.html
4. Bring testing information to a counselor to receive enrollment instructions.
5. Enrollment will begin the first day of noncredit instruction.
For more information about our noncredit programs, please call: 415.239.3152 or visit www.ccsf.edu/cahs

Culinary Arts Basic Training Noncredit Certificate
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.

Learning Outcomes

Upon completion of this program, students will be able to:
• Describe and practice proper food safety and sanitation at an introductory level, including maintaining personal hygiene.
• Use industry-specific tools, equipment, and technology, employing beginning-level work skills in a culinary environment.
• Apply basic culinary knowledge and terminology needed to be employed in a food service establishment.
Prereq.: ESLN 3600 or TRST 2322 or placement in ESLN 3700 or TRST 3331; and TRST 2421 or placement in TRST 3421
Successful completion of the course with the grade of “C” or better, and a minimum of 80% attendance.
The minimum time for completion of this certificate is one semester. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Certificate of Completion in Culinary Arts Basic Training
Course .................................................. Hours
Required courses:
CAST 9000 Introduction to Culinary Fundamentals .250.0
BOSS 3501 Customer Service Skills ................... 15.0
Total: .................................................. 265.0

Culinary and Service Skills Training Noncredit Certificate

This noncredit certificate program provides short-term culinary and service skills training for entry into the labor market.

Learning Outcomes

Upon completion of this program, students will be able to:
• Describe and practice proper food safety, sanitation and personal hygiene.
• Identify, discuss and apply principles of recipe scaling, food costing, menu pricing and POS systems in restaurant cost controls.
• Identify professional tools, equipment, materials and ingredients; demonstrate their preparation and service in a safe and proper manner.
• Identify and apply practices and principles for working in a professional restaurant kitchen and dining room.

A certificate will be awarded after successful completion of both courses with the grade of “C” or better, and a minimum of 80% attendance.
The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in Culinary and Service Skills Training
Course .................................................. Hours
Required Courses
CSST 9660 Food Technology and Dining
Services-Section I ...................................... 510.0
CSST 9661 Food Preparation and Dining
Services-Section II ..................................... 510.0
Total: .................................................. 1020.0
### Baking and Pastry Noncredit Certificate

The noncredit certificate programs provide 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 and non-professionals interested in refining their skills.

#### Learning Outcomes

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

- Work in a safe and sanitary manner
- Employ basic kitchen math including recipe costing and sizing.
- Identify and properly utilize professional bakery tools and equipment.
- Work in a professional bakery and/or baking department.

A certificate will be awarded after successful completion of both courses with the grade of "C" or better, and a minimum of 80% attendance.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

#### Courses Required for the Noncredit Certificate in Baking and Pastry

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSST 9650 Introduction to Baking and Pastry</td>
<td>510.0</td>
</tr>
<tr>
<td>CSST 9651 Advanced Baking and Pastry</td>
<td>510.0</td>
</tr>
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<td><strong>Total</strong></td>
<td><strong>1020.0</strong></td>
</tr>
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</table>

#### Announcement of Courses

**Noncredit Courses:**

**CABT 9000. Introduction to Culinary Fundamentals (250 hrs)**

**Prereq.:** ESLN 3600 or TRST 2322 or placement in ESLN 3700 or TRST 3331; and, TRST 2421 or placement in TRST 3421

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.

**CSST 9650. Introduction to Baking and Pastry (510 hrs)**

**Advise:** ESLN 3600 or TRST 2322 or placement in ESLN 3700 or TRST 3331; and, TRST 2421 or TRST 3421

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, adjoining coffee shop, student meal, and special events both on and off campus.

**All sections will charge a material fee of $75.00**

**CSST 9651. Advanced Baking and Pastry (510 hrs)**

**Prereq.:** CSST 9650

**Advise:** ESLN 3600 or TRST 2322 or placement in ESLN 3700 or TRST 3331; and, TRST 2421 or TRST 3421

Students will develop and improve upon the basic skills and common techniques used in the baking and pastry industry. Topics include: meringues, petit fours and miniatures, mousses and creams, frozen desserts, chocolate and confections, fancy and display cakes, yeast-raised products using preferments, baker's math, ingredient functionality, troubleshooting.

**All sections will charge a material fee of $75.00**

**CSST 9660. Food Technology and Dining Services-Section I (510 hrs)**

**Advise:** ESLN 3600 or TRST 2322 or placement in ESLN 3700 or TRST 3331; TRST 2421 or placement in TRST 3421

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.

**All sections will charge a material fee of $75.00**

**CSST 9661. Food Preparation and Dining Services-Section II (510 hrs)**

**Prereq.:** CSST 9660

**Advise:** ESLN 3600 or TRST 2322 or placement in ESLN 3700 or TRST 3331; TRST 2421 or ; placement in TRST 3421

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.

**All sections will charge a material fee of $75.00**

**BOSS 3501. Customer Service Skills (15 hrs)**

**Advise:** WOPR 9991 or equivalent, COMP 9921 or equivalent, ESL Level 6+

Teaches specific skills to effectively deal with customers and clients in a variety of different situations. For the front-line employee who is the first point of contact with customers.

**Offered Fall semesters**

#### Custodial

See Automotive/Motorcycle, Construction, and Building Maintenance

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**Dental Assisting**

**Office:** Cloud 304F  
**Phone Number:** (415) 239-3479  
**Web Site:** www.ccsf.edu/dad

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**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 RDAEF.

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. For more information about this agency, see the “Overview of the College” section of this Catalog.

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. Applications are required to complete the following courses with a C or higher prior to applying to the Dental Assisting Program:
   - ENGL 91 or ENGL 86 or ESL 150 or placement in ENGL 92 or 95 or 88 or ESL 160
   - BIO 9 or ANAT 14 or ANAT 25 or PHYS 1 or PHYS 12
   - Typing skill of 45 wpm or better. 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.

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 Examinations (RDA). 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 program, 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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Dental Assisting

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>First Semester:</td>
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<td>DENT 51 Applied Dental Science 1</td>
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<tr>
<td>DENT 55A Dental Roentgenography</td>
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<tr>
<td>DENT 62 The Dental Assistant in Practice</td>
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<td>Second Semester:</td>
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<td>DENT 55B Dental Roentgenography</td>
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<td>DENT 57 Dental Office Management</td>
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<td>Third Semester:</td>
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<tr>
<td>DENT 52 Dental Materials and Procedures</td>
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<tr>
<td>DENT 53 Introduction to Chairside Assisting</td>
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<tr>
<td>Fourth Semester</td>
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<tr>
<td>DENT 54 Applied Dental Science II</td>
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<td>DENT 67 Advanced Dental Procedures</td>
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<tr>
<td>DENT 70 Clinical Chairside Assisting</td>
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<tr>
<td>DENT 110A Coronal Polish</td>
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<td>Total:</td>
<td>33.5</td>
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</tbody>
</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.
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:

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. Applications are required to complete the following courses with a C or higher prior to applying to the Dental Assisting Program:
   - ENGL 91 or ENGL 86 or ESL 150 or placement in ENGL 92 or 95 or 88 or ESL 160
   - BIO 9 or ANAT 14 or ANAT 25 or PHYS 1 or PHYS 12
   - Typing skill of 45 wpm or better. 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.

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**Dental Assisting Certificate**

**Learning Outcomes**

Upon completion of this program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Credit Toward Graduation.** All credit that students earn in obtaining the Certificate of Achievement in Dental Assisting may also be applied toward satisfaction of the requirements for graduation from the College.

**Courses Required for the Certificate of Achievement in Dental Assisting**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>DENT 51 Applied Dental Science I</td>
<td>4.0</td>
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<tr>
<td>DENT 52 Dental Materials and Procedures</td>
<td>3.0</td>
</tr>
<tr>
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<td>DENT 57 Dental Office Management</td>
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<tr>
<td>DENT 67 Advanced Dental Procedures</td>
<td>4.0</td>
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<tr>
<td>DENT 70 Clinical Chairside Assisting</td>
<td>7.0</td>
</tr>
<tr>
<td>DENT 110A Coronal Polish</td>
<td>0.5</td>
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<tr>
<td>Total</td>
<td>33.5</td>
</tr>
</tbody>
</table>

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**Announcement of Courses**

**Credit, Degree Applicable Courses:**

- **DENT 51. Applied Dental Science I (4)**
  Lec-52.5, Lab-52.5

  **Prerequisites:** ENGL 91 or ENGL 86 or ESL 150 or Placement in ENGL 88 or 95 or ESL 160; BIO 9 or ANAT 14 or ANAT 25 or PHYS 12; PHYS 1; Completion of or Concurrent Enrollment in: DENT 55A and DENT 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/recordig vital signs, cavity detector, etc. Sterilization/disinfection, infection control procedures and infectious disease process. Lab fee is required. CSU

Offered Fall semesters

DENT 52. Dental Materials and Procedures (3)
Lec-35, Lab-52.5
Prereq.: Completion of or concurrent enrollment in: DENT 51 and DENT 55A and DENT 62
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 transfer. Lab fee is required. CSU

Offered Fall semesters

DENT 53. Introduction to Chairside Assisting (3)
Lec-35, Lab-52.5
Prereq.: Completion of or concurrent enrollment in: DENT 51 and DENT 55A and DENT 62
Coreq.: DENT 52

Instruction in the role and functions of chairside assistant, such as preparing the operator, placement of topical agents, oral evacuation, instrument identification and grasps/transfers, hand and rotary instrument identification and maintenance, placement and removal of rubber dam and matrix retainers, placement of sedative restorations, fabrication of acrylic temporary crowns, and restoration, prosthodontics and endodontics armamentarium, tray set ups and procedures. Lab fee is required. CSU

Offered Fall semesters

DENT 54. Applied Dental Science II (2)
Lec-35
Prereq.: DENT 51 and DENT 52 and DENT 53 and DENT 55A and DENT 62; Completion of or concurrent enrollment in: DENT 55B and DENT 57
Coreq.: DENT 67 and DENT 70 and DENT 110A

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. California RDA Law and Ethics. CSU

Offered Spring semesters

DENT 55A. Dental Roentgenography (2)
Lec-17.5, Lab-52.5
Prereq.: Completion of or concurrent enrollment in: DENT 51 and DENT 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 relationship of dental anatomy and facial structures to the exposure and mounting of films. Lab Fee is required. CSU

Offered Fall semesters

DENT 55B. Dental Roentgenography (2)
Lec-17.5, Lab-52.5
Prereq.: DENT 51 and DENT 55A and DENT 62
Coreq.: DENT 57

Advanced techniques of dental radiography, anatomical landmarks, dental anatomy pertaining to dental radiography, exposure and processing faults. Emphasis is on evaluation of the quality of the films both intra and extra oral. Experiences in exposing full mouth radiographs for diagnosis by dentists. Processing and maintaining automatic processors. Knowledge of panoramic & digital techniques and other related radiographic equipment. Lab Fee is required. CSU

Offered Spring semesters

DENT 57. Dental Office Management (3)
Lec-52.5
Prereq.: DENT 51 and DENT 55A and DENT 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 computer to perform basic dental office management. CSU

Offered Spring semesters

DENT 62. The Dental Assistant in Practice (3)
Lec-35, Lab-52.5, field trips
Prereq.: Completion of or concurrent enrollment in: DENT 51 and DENT 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

Offered Fall semesters

DENT 67. Advanced Dental Procedures (4)
Lec-52.5, Lab-52.5
Prereq.: DENT 51 and DENT 52 and DENT 53 and DENT 55A and DENT 62; Completion of or concurrent enrollment in: DENT 55B and DENT 57
Coreq.: DENT 54 and DENT 70 and DENT 110A

Instruction in the specialties of dentistry including advance endodontics, periodontics, orthodontics, oral surgery, removable prosthodontics, and pediatric dentistry as well as the armamentarium required for each. Development of preclinical skills in the expanded functions required of the Registered Dental Assistant. Students are required to meet standards of competency for all required tasks including coronal polishing and ultrasonic removal of cement from ortho bands. Lab fee is required. CSU

Offered Spring semesters

DENT 70. Clinical Chairside Assisting (7)
Lec-42.5, Lab-10, work-264 P/NP only
Prereq.: Current certification in Cardiopulmonary or American Red Cross for healthcare provider; and completion of or concurrent enrollment in: DENT 54, and DENT 55B and DENT 57 and DENT 67

Clinical experiences on delivery of direct patient care, critical thinking

Offered Spring semesters

DENT 110A. Coronal Polish (.5)
Lec-7, Lab-8 P/NP available
Prereq: Current Registered Dental Assistant or eligible for the RDA Examination
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

Offered Spring semesters

Disabled Students Courses
Office: Rosenberg Library 323
Phone Number: (415) 452-5481
Web Site: www.cccsf.edu/dsp

Announcement of Courses
Credit, Degree Applicable Courses:

DSPS 20. Adapted Fitness and Wellness (1)
Lab-35 P/NP available
An introduction to physical fitness and wellness for students with disabilities. Emphasis is placed on creating a modified exercise program to increase physical activity and cardiovascular conditioning. Course includes exercises such as walking, stretching, wheelchair movement, body weight movements and stress reduction techniques to enhance general wellness. UC/CSU

Offered on occasion

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-17.5, Lab-52.5 P/NP only
Coreq: Enrollment in at least one other CCSF credit 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-52.5 P/NP only
Coreq: Enrollment in at least one other CCSF credit course
An individualized course 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 in using the strategies on assignments from their classes.

DSPS Q. Main Idea Strategies for Reading and Writing (1)
Lec-17.5 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.

Offered on occasion

DSPS S. Strategies for Problem Solving (2)
Lec-35 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.

Offered on occasion

DSPS T. Diagnostic Learning Essentials (.5)
Lab-26.25 P/NP only
Coreq: Enrollment in at least one other CCSF credit course
An individualized course 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 in using the strategies on assignments from their classes.

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 4023. Job Search Skills (72-108 hrs)
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 mild acquired brain injury learn strategies to improve attention, memory, organization, planning, reasoning, and communication in a supportive group setting. Classroom tasks include following directions, problem-solving, time management, verbal and written skills. Emphasis is placed on student responsibility, reliability, goal-setting, and organization.

DSPS 4033. Stroke - Communication (45-54 hrs)
For students experiencing receptive and/or expressive language difficulty (aphasia) resulting from a stroke or other acquired brain impairment. Class focuses on improving overall, functional communication skill in a group setting. Exercises include listening, speaking,
reading, writing, and structured conversation. May also be useful to caregivers.

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 4040. Disability and Employment: Independent Vocational Exploration (20 hrs)
Advice: ESLN 3800 or TRST 3346
For individuals interested in vocational rehabilitation process to secure competitive non-supported employment without assistance of a job developer or coach. Emphasis is on defining career options based on functional abilities and limitations. Topics include work-life balance, hiring discrimination laws, benefits planning and negotiation of workplace accommodations. Course utilize assessment tools and research of resources to help explore local labor market trends and develop a career path.

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".

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.

DSPS 4214. American Sign Language - DSPS (35 hrs)
A beginning course in American Sign Language designed for students with disabilities or family/friends of individuals with hearing loss. Students learn how to communicate in everyday activities. Coursework includes an introduction to Deaf Culture, expressive and receptive fin- gerspelling, vocabulary development, and grammatical structures.

DSPS 4222. Breath, Sound, and Motion for Well-being (35-44 hrs)
Reinforcement of healthy living choices. An introduction to the connections of breath, voice, body, and mind connections using movement. Practicing self-empowerment and relaxation techniques for overall well-being. Additional modalities explored for strength building, both physically and mentally, with an overall goal of increasing self enjoyment of life. Designed to be accessible for students with and without disabilities.

Adapted for accessibility, DSPS Department: Health and Wellness

DSPS 4305. High School Level Learning Strategies (105 hrs)
Advice: Concurrent enrollment in a TRST high school class (TRST 1321 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.

DSPS 4414. Accessible Arts and Crafts - Essentials (16-30 hrs)
Designed for students with 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 introduced as needed.

Offered on occasion

DSPS 4417. Accessible Theater Arts - Essentials (16-30 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.

Offered on occasion

DSPS 4422. Digital Literacy (27 hrs)
Course designed for students with disabilities. Explore fundamental skills to begin to be digital citizens and responsibly use technology to find, evaluate, organize, create, and share information.

DSPS 4423. Preparation for Job Search (43-52 hrs)
This class emphasizes exploration of individual skills and interests to lay the groundwork needed to find and keep employment. Includes time management, accessing community resources, exploring work options, developing communication skills and appropriate work behaviors. Course designed for students with disabilities.

DSPS 4428. Financial Literacy (27 hrs)
Course designed for students with disabilities. Students explore fundamental information and develop basic skills necessary to more independently manage financial resources and financial well-being related to employment including basic budgeting, banking, and problem solving.

DSPS 4435. Accessible Computer Laboratory - Essentials (25-30 hrs)
A laboratory course designed for students with disabilities. Individualized instruction 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.

Offered on occasion

Earth Sciences
Office: Science 43
Phone Number: (415) 452-7014
Web Site: www.ccsf.edu/Earth

Announcement of Curricula
Degree Curricula

Environmental Studies Major (AS)
CCSF's Environmental Studies major is designed to demonstrate the interdisciplinary nature of the field and to provide students with a strong foundation in the natural and social sciences in preparation for transfer to a bachelor's degree program.

Although Environmental Studies majors should be able to complete most or all of their lower division preparation at CCSF before transfer, they should meet with a counselor to confirm their program of study and the specific requirements of the transfer institution.
Through the required units for the Environmental Studies major, students will apply core principles and methods across disciplines to explore how the environment influences and is influenced by human institutions. Students will be able to analyze scientific, economic, political, and societal factors impacting environmental and natural resource problems and both critically evaluate and propose sustainable solutions. The major also provides opportunities for experiential learning through laboratory work and field investigations.

**Learning Outcomes**

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

- Apply concepts, models, and quantitative techniques from mathematics and the natural and social sciences to solve complex problems related to the natural world and society.
- Apply tools, practices, and quantitative reasoning to collect, analyze, and interpret environmentally relevant data both in laboratory and field settings.
- Analyze, interpret, and evaluate quantitative and qualitative evidence regarding the causes and consequences of human impacts on the environment and their implications for societal welfare.
- Apply concepts and models from scientific, economic, and sociopolitical disciplines to both critically evaluate and propose sustainable solutions to environmental degradation and resource depletion.
- Quantify and evaluate personal impacts on the environment and integrate and apply sustainable solutions to their own lifestyle and career choices.

See major requirements at the intended transfer institution to choose the appropriate course(s) when options are given.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the Major in Environmental Studies**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 3I/GEOG 3I/SUST 3I Introduction to Environmental Science</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Choose one of the following biological science courses:</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 11 The Science of Living Organisms</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 100A General Biology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 20 Introduction to Ecology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 19 Ecology</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Choose one of the following chemistry courses:</strong></td>
<td></td>
</tr>
<tr>
<td>CHEM 40 Introduction to Chemical Principles</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM 10A General College Chemistry</td>
<td>6.0</td>
</tr>
<tr>
<td><strong>Choose one of the following earth science course combinations:</strong></td>
<td></td>
</tr>
<tr>
<td>GEOG 1 Physical Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>and GEOG 1L Physical Geography Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOL 10 Physical Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>and GEOL 10L Physical Geology Laboratory</td>
<td>2.0</td>
</tr>
<tr>
<td>GEOL 30 Environmental Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>and GEOL 30L Environmental Geology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Choose one of the following math courses:</strong></td>
<td></td>
</tr>
<tr>
<td>ECON 5 Introductory Statistics for Economics, Business and Social Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 80 Probability and Statistics</td>
<td>4.0</td>
</tr>
<tr>
<td>PSYC 5 Statistics for Behavioral Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 100A Short Calculus I</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Choose two of the following social science courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1 Principles of Macroeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 3 Principles of Microeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 4 Cultural Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 7 Economic Geography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Choose 6 units from the following courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 33 Introduction to Conservation Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 100B General Biology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 225/SUST 225 Environmental Toxicology</td>
<td>3.0</td>
</tr>
<tr>
<td>CHEM 101B General College Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>ENRG 3 Introduction to Alternative Energy</td>
<td>3.0</td>
</tr>
<tr>
<td>ENRG 3L Introduction to Alternative Energy Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOG 41A Climate Change</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOG 110 Introduction to GIS</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 53 Health in Society</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 221 Health and Social Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 10 Conceptual Physics</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 10L Conceptual Physics Laboratory</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Any of the above earth science, mathematics, biology, or social science options not already completed.

Total: .......................... 30.0 – 37.0

**Geography Major (AA-T)**

Geographers study the relationships among places, natural systems, society and cultural activities and the interdependence of these from the spatial perspective.

Geographers today are active in the examination and planning of our communities and the development of our human landscapes along with the study of global warming, deforestation, pollution, and a variety of other environmental quandaries.

This Associate in Arts in Geography for Transfer (AA-T) is specifically designed to prepare students for transfer to a CSU geography program at the upper division level. It may also be appropriate for transfer to other four-year institutions. To accomplish this goal, majors will complete transferable lower-division courses in geography and related fields. Geography 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.

Through the core classes of the AA-T in Geography, students will gain the knowledge necessary to investigate problems and ideas presented in upper division geography 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.

**Learning Outcomes**

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

- Interpret spatially distributed data and draw valid conclusions by using maps, graphs and/or Geographic Information Systems (GIS)
• Evaluate core concepts in cultural and physical geography and apply them to contemporary events and issues.
• Compare and contrast the general biophysical and sociocultural differences and similarities among world regions.
• Communicate geographic information effectively in oral, written, and graphic form.

Degree Requirements: Students who wish to earn the Associate in Arts in Geography for Transfer 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 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. 

See major requirements at the intended transfer institution to choose the appropriate courses when options are given and to ensure complete coverage.

Assuming students start this AA-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AA-T in Geography

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>GEOG 1 Physical Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 1L Physical Geography Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOG 4 Cultural Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 3 World Regional Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 110 Introduction to GIS</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose 2 of the following courses:</td>
<td></td>
</tr>
<tr>
<td>GEOG 7 Economic Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 111 GIS Analysis and Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 112 GIS Software Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL 10 Physical Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 3 Introduction to Social and Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended additional coursework</td>
<td></td>
</tr>
<tr>
<td>OCAN 1 Oceanography</td>
<td>3.0</td>
</tr>
<tr>
<td>OCAN 1L Oceanography Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>GEOL 3/BIO 31/SUST 31 Introduction to Environmental Science</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL 41A Climate Change</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOL 91 Geoscience Work Experience</td>
<td>0.5-3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>19.0</td>
</tr>
</tbody>
</table>

Geology Major (AS-T)

Geology is the study of the materials of which the Earth is made (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 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. This Associate of Science Transfer in Geology is specifically designed to prepare students for transfer to a CSU geology program at the upper division level. It may also be appropriate for transfer to other four-year institutions. To accomplish this goal, majors will complete transferable lower-division courses in geology, math, and chemistry.

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 transfer major is suitable for students planning to transfer into programs in the geology, oceanography, earth sciences, and environmental sciences.

Through the core classes of the AS-T in Geology, 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.

Learning Outcomes

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

• Collect, analyze, and interpret data.
• Apply scientific inquiry and investigation of evidence as well as a synthesis of ideas from multiple disciplines including physics, chemistry, biology, and geology to formulate and critically evaluate scientific arguments, especially as relates to geologic phenomena.
• Apply basic field skills and techniques such as making observations, recognizing geologic clues and evidence, taking field notes, understanding the difference between observations and interpretations, and using and annotating maps.
• Evaluate how humans impact earth processes and how earth processes impact humans in a multitude of ways including economically, politically, socially, and environmentally.

Degree Requirements: Students who wish to earn the Associate in Science in Geology 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 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.

Assuming students start this AS-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AS-T in Geology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>GEOL 10 Physical Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL 10L Physical Geology Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>GEOL 11 Historical Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL 11L Historical Geology Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>CHEM 101A General College Chemistry</td>
<td>6.0</td>
</tr>
<tr>
<td>CHEM 101B General College Chemistry</td>
<td>5.0</td>
</tr>
</tbody>
</table>
MATH 110A Calculus I ........................................ 5.0  
MATH 110B Calculus II ..................................... 5.0  
**RECOMMENDED:** One of the following physics courses  
PHYC 4A Classical Mechanics for Scientists and Engineers ................................. 3.0  
PHYC 4AL Mechanics Laboratory for Scientists and Engineers .......................... 1.0  
PHYC 4B Electromagnetism for Scientists and Engineers ................................... 3.0  
PHYC 4BL Electromagnetism Laboratory for Scientists and Engineers .................. 1.0  
or PHYC 2A Introductory Physics ........................................ 3.0  
PHYC 2AL Introductory Physics Laboratory ............................................. 1.0  
PHYC 2B Introductory Physics .................................................. 1.0  
PHYC 2BL Introductory Physics Laboratory ............................................. 1.0  
* NOTE: Students who want to increase their opportunities should choose Physics 4A/B series instead of 2A/B (especially if they plan to major in geochemistry or geophysics).  
**RECOMMENDED:** One or more of the following course options for specialization:  
GEOL 21A San Francisco Coastal Geology ................................... 0.5  
GEOL 21B San Francisco Geology ............................................... 0.5  
GEOL 21C The San Andreas Fault System ........................................ 0.5  
OCAN 1 Oceanography .................................................. 3.0  
GEOL 30 Environmental Geology ............................................. 3.0  
**Recommended additional activities:**  
Enroll in the Earth Sciences Club  
Become part of the Earth Sciences Mentoring Program (see Department website for details).  
Total: .............................................. 30.0  

**Oceanography Major (AS)**

The oceanography major is designed to clearly demonstrate the breadth of expertise required by Oceanographers and to prepare students for the advanced courses and projects that lie ahead should they transfer to a bachelor's major in oceanography at a four-year college. The ocean plays a central role in physical, biological, chemical, and geological processes on earth. As such, a degree in oceanography requires an understanding of the interactions between the biosphere, hydrosphere, lithosphere, and atmosphere.

Oceanography courses are recommended for anyone interested in better understanding and living with the natural water bodies around us, in understanding global climate system, and in making informed decisions on matters pertaining to interactions between natural Earth processes and society.

Oceanography, an interdisciplinary science, requires expertise in chemistry, physics, biology, geology, mathematics, computer science, and critical thinking. It requires skill in problem solving, analysis, scientific inquiry, and communication. Students completing the Associate in Science in Oceanography will be prepared for upper division studies in oceanography and for transfer to an oceanography program at a four-year college. To accomplish this goal, majors will complete transferable lower-division courses in oceanography, biology, math, chemistry, and physics.

Oceanography 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 Oceanography major is suitable for students planning to transfer into programs in marine science, oceanographic and atmospheric sciences, oceanography, earth sciences, and environmental sciences. Note: because of the diversity within this discipline, students will narrow their focus once they get to their transfer institution (to biological oceanography, geological oceanography, physical oceanography, or chemical oceanography). We cannot provide coverage for all these areas of focus in this one major and don't intend to. Please seek advice to determine if there are additional courses you should take for your particular major.

Through the core units of the oceanography major, students will gain the scientific knowledge necessary to investigate problems and ideas presented in upper division oceanography 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.

**Learning Outcomes**

Upon completion of this program, 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 oceanographic 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 oceanographer;” especially as relates to oceanographic 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 as relates to oceanographic phenomena.
- Recognize the interdisciplinary nature of science and synthesize ideas from physics, chemistry, biology, and geology to evaluate oceanographic phenomena.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the Major in Oceanography**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCAN 1 Oceanography</td>
<td>3.0</td>
</tr>
<tr>
<td>OCAN IL Oceanography Lab</td>
<td>2.0</td>
</tr>
<tr>
<td>CHEM 101A General College Chemistry</td>
<td>6.0</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>5.0</td>
</tr>
<tr>
<td>PHYC 4A Classical Mechanics for Scientists and Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 4AL Mechanics Laboratory for Scientists and Engineers</td>
<td>1.0</td>
</tr>
</tbody>
</table>
PHYC 4B Electromagnetism for Scientists and Engineers .......................... 3.0
PHYC 4BL Electromagnetism Laboratory for Scientists and Engineers ............. 1.0

Choose one of the following courses:
CHEM 101B General College Chemistry ......................... 5.0
MATH 110C Calculus III .................................. 5.0

Choose one of the following course combinations:
GEOL 10 Physical Geology ........................................ 3.0
and GEOL 10L Physical Geology Lab ............................ 2.0
BIO 100A General Biology ................................... 5.0
and BIO 100B General Biology ................................ 5.0

NOTE: Students who want to major in biological oceanography should take the BIO 100A + B option instead of geology.

Recommended additional 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

Total: ......................................................... 39.0 – 46.0

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 program, students will be able to:

- 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 GIS projects.
- Draw upon the underlying theory behind GIS technology (including projections and spatial databases) to effectively apply appropriate technology to meet project needs.

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.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Geographic Information Systems (GIS)

Course Required courses:
GEOG 110 Introduction to GIS ......................... 3.0

GEOG III GIS Analysis and Modeling ......................... 3.0
GEOG II GIS Software Technology ......................... 3.0
Total: ......................................................... 9.0

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.

Credit, Degree Applicable Courses:

Geography

GEOG 1. Physical Geography (3)
Lec-52.5, 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. UC/CSU
C-ID GEOG 110; C-ID GEOG 115 (GEOG1 + GEOG IL)

GEOG 1L. Physical Geography Laboratory (1)
Lab-52.5, 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. UC/CSU
C-ID GEOG 111; C-ID GEOG 115 (GEOG 1 + GEOG IL)

GEOG 3. World Regional Geography (3)
Lec-52.5
A survey of the world’s major geographic regions through their physical, cultural, demographic, political, and economic characteristics. This course emphasizes geographic factors related to demographic, environmental, and political transformations. UC/CSU
C-ID GEOG 125

GEOG 4. Cultural Geography (3)
Lec-52.5, 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. UC/CSU
C-ID GEOG 120
Offered Fall semesters

GEOG 7. Economic Geography (3)
Lec-52.5, field trips
An introduction to economic geography. Topics include patterns and processes of urbanization, industrialization, and the interlinked global economy. Contemporary issues such as international business and changing patterns of manufacturing in the United States. UC/CSU
Offered Spring semesters

GEOG 31. Introduction to Environmental Science (3)
Lec-52.5, field trips
P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
An examination of the scientific evidence informing our understanding of the natural world.
standing of the causes and consequences of human impacts on the environment. Application of tools, principles, and quantitative reasoning from natural sciences, social sciences, and engineering technology to study and evaluate sustainable solutions to environmental degradation and resource depletion. UC/CSU
GEOG 31L = BIO 31L = SUST 31

GEOG 31L. Environmental Science Laboratory (1)
Lab-52.5, field trips P/NP available
Prereq.: Completion of or concurrent enrollment in: BIO 31 or GEOG 31 or SUST 31
An introduction to tools and techniques used by environmental scientists to investigate human impacts on the environment in lab and/ or field settings. Application of qualitative and quantitative concepts and models to evaluate environmental problems and their proposed solutions. UC/CSU
BIO 31L = GEOG 31L = SUST 31

GEOG 41A. Climate Change (1)
Lec-17.5
An introduction to the science of climate change. Topics include basic processes of weather and climate, methods for studying past and current climate, models for climate change projects, and natural and human-induced processes of climate change. UC/CSU
Offered on occasion

Geographic Information Systems

GEOG 110. Introduction to GIS (3)
Lec-43.75, Lab-26.25
Advise: 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 ArcViewTM version 9 or ArcExplorerTM. UC/CSU
C-ID GEOG 155

GEOG 111. GIS Analysis and Modeling (3)
Lec-43.75, Lab-26.25
Prereq.: GIS 110 or GEOG 110
Foundational course of GIS software. GIS database design, data collection, sophisticated analysis, 3D modeling, production of professional maps. Hands-on training using industry-standard GIS software by ESRI. Introduces Global Positioning Systems (GPS) as they relate to GIS. CSU
Offered Spring semesters

GEOG 112. GIS Software Technology (3)
Lec-43.75, Lab-26.25
Prereq.: GIS 110 or GEOG 110
Hands-on training in the advanced application of GIS technology. Modeling, linear referencing data model, software customization using ESRI’s ModelBuilderTM platform and Python programming language, web GIS using Google MapTM and KMLTM mash-up technology. CSU
Offered Fall semesters

Geology

GEOG 10. Physical Geology (3)
Lec-52.5, field trips
Advise: MATH 55 and 60; or ET 108B; and completion of or concurrent enrollment in ENGL 96
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. UC/CSU
C-ID GEOG 100L C-ID GEOG 101 (GEOL 10 + GEOL 10L)

GEOG 10L. Physical Geology Lab (2)
Lec-17.5, Lab-52.5, field trips
Prereq.: completion/concurrent enrollment in GEOL 10
Advise: ((MATH 55 and MATH 60) or ET 108A)) and ENGL 96 or placement in ENGL 1A
The study of Earth’s history and the methods and tools used in its interpretation. Includes topics such as the formation and growth of continents, the creation and destruction of ocean basins, and the evolution of life on Earth as represented by the fossil record. Emphasis on the geologic and life history of North America. UC/CSU
C-ID GEOG 100L C-ID GEOG 101 (GEOL 10 + GEOL 10L)

GEOG 11. Historical Geology (3)
Lec-52.5, field trips
Advise: ((MATH 55 and MATH 60) or ET 108A)) and ENGL 96 or placement in ENGL 1A
The study of Earth’s history and the methods and tools used in its interpretation. Includes topics such as the formation and growth of continents, the creation and destruction of ocean basins, and the evolution of life on Earth as represented by the fossil record. Emphasis on the geologic and life history of North America. UC/CSU
C-ID GEOG 110
Offered Spring semesters

GEOG 11L. Historical Geology Lab (1)
Lab-52.5, field trips
Prereq.: Completion of or concurrent enrollment in GEOL 11
This laboratory course emphasizes hands-on skill development in the techniques of historical geological investigation. Topics include the principles of relative and absolute dating, plate tectonic reconstruction, interpreting stratigraphic relationships, paleoclimatology, and the identification and use of fossils, rocks, minerals and other evidence of Earth’s physical and biological evolution. UC/CSU
C-ID GEOG 110L
Offered Spring semesters

GEOG 21A. San Francisco Coastal Geology (.5)
Lec-3, Lab-17.5, field trips P/NP only
Field class that introduces students to geological processes at work along the San Francisco Pacific coastline, emphasizing scientific field work, coastal erosion, human interactions with the coastline, sand formation and migration, and geologic history of the coastline. Field work requires hiking across uneven terrain and up and down hills. CSU
Offered on occasion

GEOG 21B. San Francisco Geology (.5)
Lec-3, Lab-17.5, field trips P/NP only
Field class that introduces students to geological processes at work in the city of San Francisco, emphasizing scientific field work surface and rock types, topographic features and their formation, geologic hazards, and geologic history. Field work requires hiking across uneven terrain and up and down hills. CSU
Offered on occasion
GEOL 21C. The San Andreas Fault System (.5)
Lec-3, Lab-17.5, field trips P/NP only
Field class that introduces students to geological processes at work within the San Andreas fault system, emphasizing scientific field work, the physical, biological, and historical impacts of earthquakes, fault formation and evolution, and geologic history of local faults. Field work requires hiking across uneven terrain and up and down hills. CSU
Offered on occasion

GEOL 30. Environmental Geology (3)
Lec-52.5, field trips
Advise: (MATH 55 and MATH 60) or ET 108A Completion of or concurrent enrollment in: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
The scientific study of human interaction with Earth’s near-surface environment. Topics include hazardous Earth processes, natural resources, climate and climate change, and the impacts of human population growth and pollution on environmental sustainability. UC/CSU
C-ID GEOL 130; C-ID GEOL 131 (GEOL 30 + GEOL 30L)
Offered Fall semesters

GEOL 30L. Environmental Geology Lab (1)
Lab-52.5, field trips
Prereq: Completion of or concurrent enrollment in: GEOL 30
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 human interactions with Earth’s near-surface environment (hydroosphere, atmosphere, soil systems and land forms). UC/CSU
C-ID GEOL 130L; C-ID GEOL 131 (GEOL 30 + GEOL 30L)
Offered Fall semesters

GEOL 91. Geoscience Work Experience (.5-3)
Work- 30-225 (total hrs) P/NP available
Max. Credit: 9 units
Internship in geoscience-related settings (such as laboratory, museum, park, geotechnical firm, government agency, or CCSF department) under the supervision of a qualified professional. The student will need to arrange the internship and then contact the department to enroll in this class. Suggestions and strategies are on the CCSF Earth Science website. CSU

Oceanography
OCAN 1. Oceanography (3)
Lec-52.5, field trips
Advise: MATH 55 and 60; or ET 108B; and completion of or concurrent enrollment in ENGL 96
Introduction to the major physical, biological, chemical, and geological processes at work in the oceans with emphasis on measuring and analyzing data pertaining to San Francisco Bay and the Pacific Coast including the interactions of seafloor features, weather systems, currents, tides, swell, coastal processes, seawater chemistry and physics, and biological communities. UC/CSU

Economics
Announcement of Curricula
Degree Curricula
Economics Major (AA-T)
The AA-T in Economics offers students a comprehensive lower division program in economics. The AA-T prepares students who wish to transfer and pursue a baccalaureate degree in Economics, particularly at California State University campuses.

Learning Outcomes
Upon completion of this program, students will be able to:

• Identify, analyze, apply, and evaluate basic economic concepts, principles, and methods.
• Identify and analyze important economic problems and issues, and identify, analyze, apply, compare, and evaluate important economic models and theories and relevant policy alternatives.
• Describe and analyze U.S. economic development and important economic institutions in social, cultural, political, and international contexts, including areas such as race, ethnicity, gender, and sexual orientation, and identify, analyze, apply, and evaluate alternative theories and related policy recommendations.
• 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.
• Meet the requirements for transfer to pursue a baccalaureate degree in Economics, particularly at California State University campuses.

Degree Requirements: Students who wish to earn the Associate in Arts in Economics 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 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.
Assuming students start this AA-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.
Courses Required for the AA-T in Economics

<table>
<thead>
<tr>
<th>Course</th>
<th>Required courses</th>
<th>Course</th>
<th>Required courses</th>
<th>Course</th>
<th>Required courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1</td>
<td>Principles of Macroeconomics</td>
<td>3.0</td>
<td>ECON 3</td>
<td>Principles of Microeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following Statistics options:</td>
<td>ECON 5</td>
<td>Introductory Statistics for Economics, Business and Social Sciences</td>
<td>5.0</td>
<td>MATH 80</td>
<td>Probability and Statistics</td>
</tr>
<tr>
<td>PSYC 5</td>
<td>Statistics for Behavioral Sciences</td>
<td>5.0</td>
<td>* ECON 5 is recommended.</td>
<td>Choose one of the following Calculus options:</td>
<td>MATH 110A</td>
</tr>
<tr>
<td>* Students intending to pursue graduate study in Economics are encouraged to take MATH 110A, MATH 110B, MATH 110C, MATH 115, and MATH 120 and 125 or MATH 130.</td>
<td>Choose ONE of the following elective courses (List A):</td>
<td>MATH 100B</td>
<td>Calculus II</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACCT 1</td>
<td>Financial Accounting</td>
<td>5.0</td>
<td>ACCT 2</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td></td>
<td>Choose ONE of the following elective courses (List B):</td>
<td>ECON 6</td>
<td>International Economics</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ECON 15</td>
<td>Political Economy</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ECON 20</td>
<td>LGBT Economics</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ECON 25</td>
<td>Women in the Economy</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ECON 30</td>
<td>Economics of the African American Community</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Announcement of Courses

(See also courses in “Business Administration” and “Business.”)

Credit, Degree Applicable Courses:

ECON 1. Principles of Macroeconomics (3) Lec-52.5 P/NP available Prereq.: MATH 40 or demo of exit skills; or placement in MATH 60 Advise: 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. UC/CSU C-ID ECON 202

ECON 3. Principles of Microeconomics (3) Lec-52.5 P/NP available Prereq.: MATH 40 or placement in MATH 60 or other demonstration of exit skills Advise: ECON 1 and MATH 60 or placement in MATH 90 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. UC/CSU C-ID ECON 201

ECON 5. Introductory Statistics for Economics, Business and Social Sciences (5) Lec-87.5 P/NP available Prereq.: MATH 60 or 92, or placement into MATH 90 or higher, or other demonstration of MATH 60 or 92 exit skills Application of statistical methods and interpretation of statistical findings to facilitate decision-making in Economics, Business, Political Science and other Social Sciences. Data sources, types and interpretation; descriptive statistics; probability theory; discrete and continuous probability distributions; sampling distributions; confidence intervals; hypothesis tests; nonparametric statistics; simple linear regression analysis; computer-based statistical analysis. UC/CSU

ECON 6. International Economics (3) Lec-52.5 Introductory 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. UC/CSU

ECON 15. Political Economy (3) Lec-52.5 P/NP available Integrates economic analysis with the institutional and political structure of society. Basic principles, terminology and methods of political economy; alternative theories of economic growth and instability, income determination and poverty; consumerism and the role of class, race and gender in modern globalized economic systems; alternatives to the free market. UC/CSU Offered on occasion

ECON 20. LGBT Economics (3) Lec-52.5 P/NP available LGBT economic roles in the U.S. and world economies, including varying experiences of sexual minorities by class, race, gender and ethnicity. This course is designed to introduce the principles of economic analysis in the study of the roles of LGBT people in American and world cultures. Examines markets and government policies for heteronormative biases; role of homophobia and sexism in economic inequality and discrimination for LGBT people and those out of the gender binary; public policy regarding LGBT people’s work and incomes. UC/CSU Offered on occasion

ECON 25. Women in the Economy (3) Lec-52.5 P/NP available Women’s roles in the U.S. economy, including varying experiences related to race, ethnicity, sexuality, and class. Women’s occupations and earning; unpaid household activities; experiences of women from three American cultures; related public policy. Applies and contrasts mainstream economic and political economy theories of gender inequality. UC/CSU Offered on occasion

ECON 30. Economics of the African American Community (3) Lec-52.5 P/NP available An introduction to the principles of Black political economy. Topics will include: Black employment, employment discrimination, Black capitalism, the Black underclass, homelessness, and community eco
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, craftspersons, 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 technicians. 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)
The Associate in Science Degree in Engineering offers students the skills to design functional products and systems based on a foundation 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 technologists.

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 community college engineering schools and departments.

Learning Outcomes
Upon completion of this program, students will be able to:

- Employ problem solving skills in basic engineering, physics, and chemistry topics.
- Calculate math skills through differential equations.
- Develop engineering analyses, reports and presentations using applicable software.
- Analyze and interpret general scientific and engineering information.
- Design experiments and numerical simulations.

Consult the catalog for specific requirements and courses available to satisfy the graduation requirements for the Associate in Science Degree.

So as to not duplicate course work, it is recommended that you try to satisfy the requirements of your targeted transfer institution(s) as well as those of City College.

If you wish to substitute another class because of specific requirements of your targeted transfer institution(s) you will attend, consult with an Engineering Department Advisor.

NOTE: Four-year universities may have additional course requirements for completion of lower division. Consult the Transfer Center or an Engineering Advisor for additional information. Other technical courses that typically transfer in engineering include CHEM 101B; ENGN 24, 36, 37, 45; MATH 115, 120, 130; PHYC 4D and 4DL.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Engineering

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 10A Introduction to Engineering: The Profession</td>
<td>2.0</td>
</tr>
<tr>
<td>ENGN 10B Introduction to Engineering: Software Tools and Design</td>
<td>2.0</td>
</tr>
<tr>
<td>MATH 110A Calculus I</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Choose one of the following Chemistry courses:

- CHEM 101A General College Chemistry                                  | 6.0   |
- CHEM 103A General Chemistry for Engineering                         | 5.0   |

Subsequent Semesters Additional Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 20 Introduction to Circuit Analysis</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGN 20L Introduction to Circuit Analysis Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>ENGN 38 Introduction to Programming Concepts and Methodologies for Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 110B Calculus II</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 110C Calculus III</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 125 Differential Equations</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 4A Classical Mechanics for Scientists and Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 4AL Mechanics Laboratory for Scientists and Engineers</td>
<td>1.0</td>
</tr>
<tr>
<td>PHYC 4B Electromagnetism for Scientists and Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 4BL Electromagnetism Laboratory for Scientists and Engineers</td>
<td>1.0</td>
</tr>
<tr>
<td>PHYC 4C Waves and Thermodynamics for Scientists and Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 4CL Waves and Thermodynamics Laboratory for Scientists and Engineers</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Total: .............................................................................. 46.0 – 47.0

Biotechnology Major (AS)
The Biotechnology Program of the Engineering and Technology Department, offers students specialized training for employment as bio-technicians engaged in research and development, and a variety of biomanufacturing disciplines. 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 suc
cessful completion of the curriculum, students receive the Associate in Science degree with Biotechnology as the Major. Explore careers in biotechnology here: https://www.biotech-careers.org

Training in the Major. The Biotechnology major focuses on hands-on skills need to work in the biotechnology industry. In addition to training in basic chemistry and biology, and molecular and cell biology, students are trained in a variety of current biotechnology techniques. Students have the option of doing an internship, along with career development training tailored to the biotechnology industry.

Employment. Students who complete the curriculum satisfactorily are qualified for positions in quality control, research and development, and biomanufacturing technicians in research labs and biotechnology companies.

Four-year Degree Preparation. The Biotechnology AS degree prepares students to transfer to the Bachelor of Science in Biomanufacturing programs at Solano and Mira Costa Community Colleges. Students who wish to transfer to a biology program at UC/CSU can apply some transfer-level chemistry and biology courses toward the Biotechnology AS degree. UC/CSU transfer students will need to take additional courses after completion of the Biotechnology AS degree. The Biotechnology AS degree articulates with the Biotechnology program at Northeastern University. Contact the Biotechnology Program Coordinator for more information about transferring to UC/CSU and the articulation agreement with Northeastern University.

Learning Outcomes

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

- Create an accurate record of laboratory work, and use effective written and oral skills to communicate results and analyses of experiments.
- Design, perform, and analyze experiments on nucleic acids, proteins, and cell physiology.
- Explain basic molecular and cell biology principles as they relate to biotechnology.
- Use principles of good laboratory etiquette and professionalism to work effectively in the biotechnology industry.
- Evaluate how ethical concerns influence the biotechnology industry.

Assuming a student starts this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Biotechnology

Course .......................................................Units

Required Math courses:
BTEC 108A Practical Mathematics for Laboratory Science* 3.0
ET 108B Practical Mathematics II* 3.0
* BTEC 108A can be replaced with an equivalent or more advanced math course.

* ET108B can be replaced by an equivalent or more advanced math course.

Choose one of the following required Biology courses:
BIO 11 The Science of Living Organisms 4.0
BIO 100A General Biology 5.0

Choose one of the following required Chemistry courses:
CHEM 32 Introduction to Medical Chemistry 4.0
CHEM 101A General College Chemistry 6.0

Choose one of the following communication courses:
BTEC 107 Language Skills for Technicians 3.0
CMST 6 Workplace Communication 3.0
CMST 11 Basic Public Speaking 3.0
CMST 1A Elements of Public Speaking 3.0

Choose 24 units from the following Technical Elective courses:
BTEC 5 Briefings in Biotechnology 1.0
BTEC 10 Research Skills for Career Opportunities in Biology 2.0
BTEC 12A GLP and GMP Principles 1.0
BTEC 14A Biotechnology Laboratory Techniques 2.0
BTEC 14B Biotechnology Internship Support 4.0
BTEC 15 Career Exploration in Bioscience 2.0
BTEC 21A Mammalian Cell Culture 2.0
BTEC 21B Fluorescent Cell Technology 2.0
BTEC 21C Stem Cell Technology 3.0

BTEC 22 Enzyme Linked Immunosorbent Assay (ELISA) 1.0
BTEC 23 Western Blotting Techniques 1.0
BTEC 24 Introduction to PCR 1.0
BTEC 25 Analytical PCR Technology 1.0
BTEC 93 Biotechnology Work experience 1.0
BTEC 102 Bioreactor Technology 2.5
BTEC 103 Protein Purification 2.5
BTEC 115 Recombinant DNA Biotechnology 5.0
BTEC 120 Cell Biotechnology 5.0
CHEM 101B General College Chemistry 5.0
BIO 100B General Biology 5.0

Total: 41.0 – 44.0

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 and 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)

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 program, students will be able to:

- Apply current technology to emerging applications of mathematics, science, and engineering.
- Employ circuit analysis and design, associated software, analog and digital electronics, and microcomputers to problem solving in an electronic systems technology environment.
- Apply knowledge of physics and hands-on competence to electronics circuits in a rigorous mathematical environment.
- Communicate digital and analog circuit designs effectively in a group environment.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

### Courses Required for the Major in Electronic Engineering Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Required courses (recommended to be completed in First Semester):</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 10A Introduction to Engineering:</td>
<td></td>
</tr>
<tr>
<td>The Profession</td>
<td>2.0</td>
</tr>
<tr>
<td>ET 50 Technical Mathematics</td>
<td>4.0</td>
</tr>
<tr>
<td>ET 104 Introduction to Engineering Drawing and Manufacturing</td>
<td>2.0</td>
</tr>
<tr>
<td>ELEC 101 Electronics I: Essentials of Electronics</td>
<td></td>
</tr>
<tr>
<td>Measurements and Passive Circuits</td>
<td>2.5</td>
</tr>
<tr>
<td>PHYC 2A Introductory Physics</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 2AL Introductory Physics Laboratory</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Required specialization courses:**

- **PHYC 2B Introductory Physics.**
- **PHYC 2BL Introductory Physics Laboratory.**
- **MATH 100A Short Calculus I.**
- **CMST 12 Fundamentals of Oral Communication.**
- **ELEC 102A Electronics II: Active Analog Circuits and Practical Applications.**
- **ELEC 102B Electronics II: Digital Circuits and Practical Applications.**
- **ELEC 103A Electronics III: Analog Circuits and Practical Applications.**
- **ELEC 103B Electronics III: Digital Circuit Interfaces and Programming.**
- **ELEC 104A Electronics IV: Wireless Analog and Digital Communication Systems.**
- **ELEC 104B Electronics IV: Microcontroller Interfaces and Programming.**

**Choose 4 units of Technical Electives:**

Choose Technical Electives from Engineering (ENGN) and/or Computer Networking and Information Technology (CNIT) courses. Please consult an engineering advisor to ensure your choices match your academic goals. You may request to substitute courses not on the above list if you get approval of an engineering advisor. These could include mechanical courses, engineering courses, or courses in other departments.

**Total:** 43.5

### Mechanical Engineering Technology Major (AS)

The Major in Mechanical Engineering Technology offers students specialized training for employment as engineering technicians engaged
in research, design, operation, maintenance, 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 program, students will be able to:

- Apply and adapt current knowledge to emerging applications of mathematics, science, engineering, and technology.
- Perform technical calculations and solve technical problems commonly encountered in mechanical engineering technology careers.
- Function competently in a laboratory environment; making measurements safely operating technical equipment, critically analyzing and interpreting experimental results, and properly reporting on experimental results, including their potential for improvement.
- Identify, analyze, formulate and solve technical engineering problems by applying modern tools, including scientific calculators, computers, and appropriate software.
- Apply technical and communication skills to work 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.

In almost all cases, more advanced physics, mathematics, or technical courses covering the same areas can be substituted for the required courses listed. This is ideal if you are on the transfer path and would also like to earn an AS Degree. Please contact the Department Chair to evaluate any substitutions.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the Major in Mechanical Engineering Technology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 10A Introduction to Engineering</td>
<td>2.0</td>
</tr>
<tr>
<td>ET 50 Technical Mathematics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Required core courses:**

**Electives -- choose 3 of the following courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 10A Introduction to Engineering</td>
<td>2.0</td>
</tr>
<tr>
<td>ET 50 Technical Mathematics</td>
<td>4.0</td>
</tr>
<tr>
<td>ELEC 101 Electronics I: Essentials of Electronics</td>
<td>2.0</td>
</tr>
<tr>
<td>Measurements and Passive Circuits</td>
<td>2.5</td>
</tr>
<tr>
<td>PHYC 2A Introductory Physics</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 2AL Introductory Physics Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>PHYC 2B Introductory Physics</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 2BL Introductory Physics Laboratory</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Choose one of the following Speech options:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 12 Fundamentals of Oral Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>CMST 4 Group Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>CMST 11 Basic Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Choose one of the following concentration OPTIONS:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 180 Introduction to Technical Drawing</td>
<td>1.0</td>
</tr>
<tr>
<td>CAD 181 Introduction to Computer Aided</td>
<td>2.5</td>
</tr>
<tr>
<td>CAD 182 Engineering Detailing in Revit</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**Electives -- choose 3 units from the following courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 180 Introduction to Technical Drawing</td>
<td>1.0</td>
</tr>
<tr>
<td>CAD 181 Introduction to Computer Aided</td>
<td>2.5</td>
</tr>
<tr>
<td>CAD 182 Engineering Detailing in Revit</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**OPTION 2: HVACR and Engineered Plumbing Systems**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 130 Applied Fluid Mechanics for Mechanical Engineering Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>ET 136A HVAC System Fundamentals</td>
<td>2.0</td>
</tr>
<tr>
<td>ET 136B Fundamentals of Air Conditioning and Refrigeration</td>
<td>2.0</td>
</tr>
<tr>
<td>ET 139A Engineering Plumbing Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>ET 139B Plumbing System Design Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>CAD 187 Mechanical, Electrical, and Plumbing (MEP) Building Information Modeling (BIM) in Revit</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**Electives -- choose 3 units from the following courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 24 Engineering Design Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGN 38 Introduction to Programming Concepts and Methodologies for Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD H0 Manufacturing Processes</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Up to 3 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.

**Total:** 34.5 – 40.0

---

**Engineering-Related Occupations**

**Certificate Curricula**

**General Information**

For further information, contact the Engineering and Technology Department office, Science Hall, Room 148.

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 program, students will be able to:

• Demonstrate a strong understanding about thermodynamic properties of the steam tables; dry air and psychrometric processes involved in air-conditioning cooling and heating systems.
• Calculate air-conditioning cooling and heating load calculations.
• Estimate fan horsepower from airflow quality and pressure drop for ductwork systems and water horsepower from water through pipes.
• Demonstrate the skills of selecting proper air conditioning units, refrigeration components, equipment and pipe sizes for fluid systems in buildings.
• Verify safety devices, record data in logs, and identify any potential problems.

Students may obtain the Certificate of Accomplishment in Heating, Ventilation, Air-Conditioning & Refrigeration by completing the following courses with a grade of “C” or higher. At the start, ET130 should be taken, followed by or concurrent with ET136A, ET136B, and CAD187. Students who have completed ET 135A, B, or C under the previous program will have their coursework honored and should speak to the instructor or department chair to determine the best course of academic study.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Certificate of Accomplishment in Heating, Ventilation, Air-Conditioning and Refrigeration

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 130 Applied Fluid Mechanics for Mechanical Engineering</td>
<td></td>
</tr>
<tr>
<td>ET 136A HVAC System Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>ET 136B Fundamentals of Air Conditioning and Refrigeration</td>
<td>2.0</td>
</tr>
<tr>
<td>CAD 187 Mechanical, Electrical, and Plumbing (MEP) Building Information Modeling (BIM) in Revit</td>
<td>2.5</td>
</tr>
<tr>
<td>Total:</td>
<td>9.5</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 bioprocess technician, media prep technician, pharmaceutical materials specialist, or pharmaceutical manufacturing technician.

Learning Outcomes

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

• Apply knowledge of current Good Manufacturing Practices (cGMP) to complete work in a regulated biomanufacturing facility.
• Employ standard operating procedures to culture bacteria, yeast, and mammalian cells.
• Perform basic mathematical operations as applied to biomanufacturing.
• Apply knowledge of molecular and cellular biology to the biomanufacturing process.
• Use industry standard techniques to produce protein therapeutics in a biomanufacturing facility.

The biomanufacturing certificate program is open to anyone. It is recommended that students with no previous college biology and chemistry coursework first take the Bridge to Biosciences Program (BTEC 10, 107, 108A). Following the Bridge to Bioscience Program, students should enroll in Bio 11 and Chem 32.

Minimum time for completion is one semester. Completion time will vary based on student preparation and number of units or classes completed per semester.

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>4.0</td>
</tr>
<tr>
<td>CHEM 32 Introduction to Medical Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>BTEC 12A GLP and GMP Principles</td>
<td>1.0</td>
</tr>
<tr>
<td>BTEC 21A Mammalian Cell Culture</td>
<td>2.0</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>Total:</td>
<td>16.0</td>
</tr>
</tbody>
</table>

Biotechnology Certificate

The biotechnology certificate program is designed to prepare students to work in a research lab or biotech company as a technician.
in research and development, or manufacturing of biotechnology reagents. This program is designed for students who have a strong grasp of algebra, biology, and chemistry from previous college coursework. The Bridge to Bioscience provides the needed training to start in the Biotechnology Certificate Program.

**Learning Outcomes**

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

- Create an accurate record of laboratory work, and communicate results and analysis of experiments.
- Design and analyze basic experiments on nucleic acids, proteins, and cell physiology.
- Perform experiments using industry standard techniques to analyze nucleic acids, proteins, and cell physiology.
- Summarize current scientific and ethical concepts in biotechnology.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Biotechnology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 120 Cell Biotechnology</td>
<td>2.0</td>
</tr>
<tr>
<td>BTEC 215 Analytical PCR Technology</td>
<td>1.0</td>
</tr>
<tr>
<td>BTEC 24 Introduction to PCR</td>
<td>1.0</td>
</tr>
<tr>
<td>BTEC 115 Recombinant DNA Biotechnology</td>
<td>5.0</td>
</tr>
<tr>
<td>BTEC 120 Cell Biotechnology</td>
<td>5.0</td>
</tr>
<tr>
<td>**Total:</td>
<td><strong>15.0</strong></td>
</tr>
</tbody>
</table>

**Biotechnology Lab Assistant Certificate**

The biotech industry has grown tremendously over the past several years. This growth has generated an increasing number of interesting and challenging entry-level jobs. There is now a large demand for workers who are qualified for these positions. This 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. The Biotechnology Lab 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 for entry into the Program. Students will gain valuable work experience in an internship in a bioscience laboratory.

**Learning Outcomes**

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

- Perform basic mathematical calculations commonly used in the biosciences.
- Execute laboratory techniques commonly used in the biotechnology industry and other biosciences.
- Apply knowledge of cGMP (current Good Manufacturing Practices) and GLP (Good Laboratory Practices) to complete work in a regulated biotechnology operation.
- Follow laboratory protocols and verbal instructions to perform common techniques in a bioscience laboratory.
- Demonstrate strong job search skills for jobs in the bioscience industry.

The requirements for the certificate are completion of the following courses with a grade of “C” or higher.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**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>BTEC 10 Research Skills for Career Opportunities in Biology</td>
<td>2.0</td>
</tr>
<tr>
<td>BTEC 107 Language Skills for Technicians</td>
<td>3.0</td>
</tr>
<tr>
<td>BTEC 108A Practical Mathematics for Laboratory Science</td>
<td>3.0</td>
</tr>
<tr>
<td>BTEC 12A GLP and GMP Principles</td>
<td>1.0</td>
</tr>
<tr>
<td>BTEC 14A Biotechnology Laboratory Techniques</td>
<td>2.0</td>
</tr>
<tr>
<td>BTEC 14B Biotechnology Internship Support</td>
<td>4.0</td>
</tr>
<tr>
<td>BTEC 15 Career Exploration in Bioscience</td>
<td>2.0</td>
</tr>
<tr>
<td>**Total:</td>
<td><strong>17.0</strong></td>
</tr>
</tbody>
</table>

**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 this program, students will be able to:

- Utilize proper aseptic technique in laminar flow hood and laboratory bench.
- Apply skills in culturing and maintaining mammalian cells including stem cells.
- Formulate and apply knowledge of fluorescent markers and stains in cell biology research.
- Evaluate and apply methods of quantifying and analyzing cellular proteins and nucleic acids.
- Apply knowledge of industry regulations and processes.

The Stem Cell Technology certificate is designed for students that have a strong grasp of algebra, biology, and chemistry from previous academic or work experience. The following courses (or the equivalent) are strongly recommended: One semester of elementary algebra or completion of a higher level math class, two semesters of general chemistry and one semester of general biology.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**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>2.0</td>
</tr>
<tr>
<td>BTEC 21B Fluorescent Cell Technology</td>
<td>2.0</td>
</tr>
<tr>
<td>BTEC 21C Stem Cell Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>BTEC 12A GLP and GMP Principles</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Choose at least 2 units of the following course or course combinations:
- BTEC 120 Cell Biotechnology ............. 5.0
- BTEC 22 Enzyme Linked Immunosorbent Assay (ELISA) .................. 1.0
- and BTEC 23 Western Blotting Techniques ........... 1.0

Choose at least 2 units from the following course or course combinations:
- BTEC 115 Recombinant DNA Biotechnology ............. 5.0
- BTEC 24 Introduction to PCR ................... 1.0
- and BTEC 25 Analytical PCR Technology ........... 1.0

Recommended additional coursework:
- BTEC 5 Briefings in Biotechnology .................. 1.0

Total: ............................................. 12.0

### 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 program, 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 measurement, pump and fan performance characteristics and flow of real fluids in open and closed conduits.
- Employ standard practices in fire protection system design.

Students may obtain the Certificate of Accomplishment in Engineered Plumbing Systems by completing the following courses with a grade of “C” or higher. ET130, ET139A, ET139B, and CAD187 may be taken in any order. Students who have completed ET 139C under the previous program should speak to the instructor or department chair to determine the best course of academic study. Students with previous experience in this field may petition to waive or substitute requirements as approved by the Department Chair.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units completed per semester.

#### 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 130 Applied Fluid Mechanics for Mechanical Engineering Technology</td>
<td>3.0</td>
</tr>
<tr>
<td>ET 139A Engineering Plumbing Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>ET 139B Plumbing System Design Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>CAD 187 Mechanical, Electrical, and Plumbing (MEP) Building Information Modeling (BIM) in Revit</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>11.5</td>
</tr>
</tbody>
</table>

### Basic Electronics Certificate

The Certificate in Basic Electronics includes instruction in the fundamental principles of electronics. Students will be able to apply this

#### Learning Outcomes

Upon completion of this program, students will be able to:
- Analyze scientific, political, social, and/or historical evidence underlying environmental and resource issues.
- Compare the pivotal role that energy occupies in modern society and the ongoing tension between sustainability and energy provisioning and management.
- Appraise the science and/or impacts of common and alternative energy sources.
- Evaluate proposed solutions to environmental and resource issues especially for their integration of environmental, economic and/or social goals.
- Apply principles and practices of sustainability to personal lifestyle choices and chosen professions.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

#### Courses Required for the Certificate of Accomplishment in Sustainability

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENRG 3 Introduction to Alternative Energy</td>
<td>3.0</td>
</tr>
<tr>
<td>ENRG 3L Introduction to Alternative Energy</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 26 Habitat Restoration Field Studies</td>
<td>1.0</td>
</tr>
<tr>
<td>BIO 21J Agroecology</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOG 1 Physical Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 4 Cultural Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 7 Economic Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 41A Climate Change</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOL 30 Environmental Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL 30L Environmental Geology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>BTEC 5 Briefings in Biotechnology</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Total: ............................................. 14.0

### 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

Upon completion of this program, students will be able to:
- Analyze scientific, political, social, and/or historical evidence underlying environmental and resource issues.
- Appraise the science and/or impacts of common and alternative energy sources.
- Evaluate proposed solutions to environmental and resource issues especially for their integration of environmental, economic and/or social goals.
- Apply principles and practices of sustainability to personal lifestyle choices and chosen professions.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

#### Courses Required for the Certificate of Accomplishment in Sustainability

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<tr>
<th>Course</th>
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<tbody>
<tr>
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<td>3.0</td>
</tr>
<tr>
<td>ENRG 3L Introduction to Alternative Energy</td>
<td>3.0</td>
</tr>
<tr>
<td>SUST 91 Applied Research in Sustainability</td>
<td>2.0</td>
</tr>
<tr>
<td>GEOL 30 Environmental Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 26 Habitat Restoration Field Studies</td>
<td>1.0</td>
</tr>
<tr>
<td>BIO 21J Agroecology</td>
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<tr>
<td>GEOG 1 Physical Geography</td>
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<tr>
<td>GEOG 4 Cultural Geography</td>
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<td>GEOG 7 Economic Geography</td>
<td>3.0</td>
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<td>GEOG 41A Climate Change</td>
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<tr>
<td>GEOL 30 Environmental Geology</td>
<td>3.0</td>
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<tr>
<td>GEOL 30L Environmental Geology Laboratory</td>
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<tr>
<td>BTEC 5 Briefings in Biotechnology</td>
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Total: ............................................. 14.0

### Basic Electronics Certificate

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#### Learning Outcomes

Upon completion of this program, students will be able to:
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- Appraise the science and/or impacts of common and alternative energy sources.
- Evaluate proposed solutions to environmental and resource issues especially for their integration of environmental, economic and/or social goals.
- Apply principles and practices of sustainability to personal lifestyle choices and chosen professions.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

#### Courses Required for the Certificate of Accomplishment in Sustainability

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<td>BIO 26 Habitat Restoration Field Studies</td>
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<tr>
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<tr>
<td>GEOG 4 Cultural Geography</td>
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<tr>
<td>GEOL 30L Environmental Geology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>BTEC 5 Briefings in Biotechnology</td>
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</tr>
</tbody>
</table>

Total: ............................................. 14.0

### Sustainability Certificate

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#### Learning Outcomes

Upon completion of this program, students will be able to:
- Analyze scientific, political, social, and/or historical evidence underlying environmental and resource issues.
- Appraise the science and/or impacts of common and alternative energy sources.
- Evaluate proposed solutions to environmental and resource issues especially for their integration of environmental, economic and/or social goals.
- Apply principles and practices of sustainability to personal lifestyle choices and chosen professions.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

#### Courses Required for the Certificate of Accomplishment in Sustainability

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENRG 3 Introduction to Alternative Energy</td>
<td>3.0</td>
</tr>
<tr>
<td>ENRG 3L Introduction to Alternative Energy</td>
<td>3.0</td>
</tr>
<tr>
<td>SUST 91 Applied Research in Sustainability</td>
<td>2.0</td>
</tr>
<tr>
<td>GEOL 30 Environmental Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 26 Habitat Restoration Field Studies</td>
<td>1.0</td>
</tr>
<tr>
<td>BIO 21J Agroecology</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOG 1 Physical Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 4 Cultural Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 7 Economic Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 41A Climate Change</td>
<td>1.0</td>
</tr>
<tr>
<td>GEOL 30 Environmental Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL 30L Environmental Geology Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>BTEC 5 Briefings in Biotechnology</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Total: ............................................. 14.0
knowledge and understanding to perform tests, troubleshooting and repair of analog and digital electronic circuits and instruments. Program provides instruction 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 this program, students will be able to:

- Construct electronic circuits from schematics.
- Employ industry accepted procedures with typical electronic test and measurement equipment to verify circuit performance.
- Perform calculations as related to circuit components and parameters.
- Integrate discrete and IC components into functioning end products.
- Resolve schematic and build errors.

A minimum of two of the courses required for the Certificate of Accomplishment in Basic Electronics must be taken at City College of San Francisco.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Basic Electronics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 50 Technical Mathematics</td>
<td>4.0</td>
</tr>
<tr>
<td>ELEC 101 Electronics I: Essentials of Electronics Measurements and Passive Circuits</td>
<td>2.5</td>
</tr>
<tr>
<td>ELEC 102A Electronics II: Active Analog Circuits and Practical Applications</td>
<td>2.5</td>
</tr>
<tr>
<td>ELEC 102B Electronics II: Digital Circuits and Practical Applications</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>11.5</td>
</tr>
</tbody>
</table>

**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 this program, 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 electro-mechanical 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

**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: Analog Circuits and Practical Applications</td>
<td>2.5</td>
</tr>
<tr>
<td>ELEC 103B Electronics III: Digital Circuit Interfaces and Programming</td>
<td>2.5</td>
</tr>
<tr>
<td>ELEC 104A Electronics IV: Wireless Analog and Digital Communication Systems</td>
<td>2.5</td>
</tr>
<tr>
<td>ELEC 104B Electronics IV: Microcontroller Interfaces and Programming</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>10.0</td>
</tr>
</tbody>
</table>

**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 for use in architecture, building science, and building information 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 building drawings are needed.

**Learning Outcomes**

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

- Create architectural drawings using CAD and illustration software programs.
- Employ drawing and illustration skills essential for the architectural, construction and building trades industries.
- Evaluate the software or techniques most effective for three dimensional parametric building design.
- Draw and dimension precisely as per ANSI standards.
- Recognize industry standards and apply them in architectural drawings and documents.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Computer Aided Design (CAD)-Architectural**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 20 Architectural Graphics I</td>
<td>3.0</td>
</tr>
<tr>
<td>BIM 120 Revit Architecture I</td>
<td>3.0</td>
</tr>
</tbody>
</table>
ARCH 214 AutoCAD I ............................... 3.0
Choose 5 units from the following elective courses:
  CAD 184 Structural Building Information Modeling
  (BIM) in Revit .................................... 2.5
  CAD 187 Mechanical, Electrical, and Plumbing (MEP)
  Building Information Modeling (BIM) in Revit ....... 2.5
  CAD 190 Part Modeling in SolidWorks ............... 2.5
Total: ............................................ 14.0

Computer Aided Drafting (CAD) 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 machinists, manufacturers, architects, technicians, and
engineers in industries where high quality technical drawings are needed.

Learning Outcomes
Upon completion of this program, students will be able to:
  • Create drawings using CAD and illustration software programs.
  • Apply drawing and illustration skills essential for employment
    in architectural, engineering, construction and manufacturing
    industries.
  • Evaluate which software or technique is most effective for a
    particular goal.
  • Dimension precisely as per ANSI standards.
  • Evaluate industry standards and their purpose in technical
documents and illustrations.

The minimum time for completion of this certificate is 2 semesters.
Completion time will vary based on student preparation and number
of classes completed per semester.

Courses Required for the Certificate of Accomplishment in
Computer Aided Drafting (CAD)
Course ............................................. Units
Required courses:
  CAD 180 Introduction to Technical Drawing* ........ 1.0
  CAD 181 Introduction to Computer Aided
  Drafting CAD I .................................... 2.5
  CAD 182 Engineering Detailing in Revit ............. 2.5
* Students may substitute the following for CAD 180: Completion of
  ET 104, or demonstration of prior drafting and drawing skills by per-
  forming at satisfactory level on a test.

Choose 3 of the following electives:
  CAD 184 Structural Building Information Modeling
  (BIM) in Revit .................................... 2.5
  CAD 187 Mechanical, Electrical, and Plumbing (MEP)
  Building Information Modeling (BIM) in Revit ....... 2.5
  CAD 190 Part Modeling in SolidWorks ............... 2.5
  CAD 99A 3D Printing & Solid Modeling .............. 1.0
  and CAD 99B Advanced AutoCAD Techniques ...... 1.0
Total: ............................................. 13.0 – 13.5

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 man-
ufacturing apprenticeships or internships.

Learning Outcomes
Upon completion of this program, students will be able to:
  • Perform welding tasks using gas and arc welding equipment.
  • Plan, design, and fabricate basic multi-part prototypes.
  • Operate machine shop and welding equipment safely.

Students must complete each course with a grade of “C” or higher.
The minimum time for completion of this certificate is 2 semesters.
Completion time will vary based on student preparation and number
of units completed per semester.

Courses Required for the Certificate of Accomplishment in
Manufacturing and Fabrication
Course ................................................ Units
Required courses:
  WELD H40 Manufacturing Processes ............... 3.0
  WELD H4A Survey of Welding Processes ........... 2.0
  WELD H4B Intermediate Welding Processes ...... 2.0
Elective Courses: Choose 3 units from the following
  CAD 190 Part Modeling in SolidWorks ............. 2.5
  ELEC 101 Electronics I: Essentials of Electronics
  Measurements and Passive Circuits ................. 2.5
  WELD 144C Advanced Welding Processes .......... 2.0
  ENGN 48L Introduction to Engineering and Technology
  Laboratory ......................................... 1.0
  ET 104 Introduction to Engineering Drawing and
  Manufacturing ..................................... 2.0
  ENGN 48L & ET 104 must both be taken for the 3 units to apply
towards the certificate
Total: ................................................ 10.0

Announcement of Courses
Biotechnology
Credit, Degree Applicable Courses:
BTEC 5. Briefings in Biotechnology (1)
  Lec-18; P/NP available
Underlying principles of molecular biology and the laboratory pro-
cedures involved in the biotechnology industry. Examples of new
products, processes, and prospects for the future in medicine, environ-
mental restoration, forensics, and agriculture. Implications for society
and governmental regulations. Features lectures by scientists currently
working in the biotechnology industry. UC/CSU

BTEC 6. Basics of Cell Culture (1)
  Lec-9; Lab-27, field trips; P/NP available
ADVISE: BTEC 5
Introduction to mammalian cell culture and stem cell biology and
techniques. Practical hands on experience include aseptic techniques,
counting cells, cell/stem cell culture maintenance, fluorescence labeling
and stem cell differentiation. CSU
OFFERED ONLY IN SUMMER SEMESTERS

BTEC 10. Research Skills for Career Opportunities in Biology (2)
  Lec-17.5, Lab-52.5; P/NP available
Coresq.: BTEC 107; BTEC 108A
ADVISE: ESLN 3700 or ESL 130 or ESL 182 or ENGL 91 or Pla-
  cemenent into ESLN 3800 or ESL 140 or ESL 18 or ENGL 95
Introduction to the laboratory skills and concepts necessary to work
in the biotechnology industry, allied health or other biology-re-
lated fields. This course is part of the learning community Bridge to
Biosciences program. CSU
Introduction to techniques for culturing mammalian cells, including cell growth and viability assays. CSU

BTEC 12A. GLP and GMP Principles (1)
Lec-18, Lab-6, field trips  P/NP available
ADVISOR: ESLN 3700 or ESL 130 or ESL 182 or ENGL 91 or ENGL 86
or Placement in ESLN 3800 or ESL 140 or ESL 184 or ENGL 95 or
ENGL 88
This course provides a general overview of Food and Drug Administration regulations as they pertain to the biotechnology field. Knowledge of Current Good Laboratory Practices (cGLP) and Current Good Manufacturing Practices (cGMP) is needed to work in biotechnology manufacturing and preclinical research laboratories. The course will emphasize practices of cGLP, cGMP and SOP that pertain to biopharmaceutical industry. CSU

BTEC 14A. Biotechnology Laboratory Techniques (2)
Lec-26.25, Lab-26.25
PREREQ.: COMPLETION OF OR CONCURRENT ENROLLMENT IN: BTEC 10
An introduction to laboratory techniques needed for entry-level positions in the biotechnology industry, especially in the research field. Intended as preparation for an internship in a biotechnology lab for students who complete the Bridge to Biosciences. CSU

BTEC 15. Career Exploration in Bioscience (2)
Lec-35, Lab-17.5  P/NP available
ADVISOR: COMPLETION OF OR CONCURRENT ENROLLMENT IN ANY LABORATORY COURSE IN THE CCSF BIOTECHNOLOGY PROGRAM OR BRIDGE TO BIOSCIENCES PROGRAM (BTEC 10, 107 and 108A) OR ESLN 3700 or ESL 130 or ESL 182 or ENGL L OR PLACEMENT INTO ESLN 3800 or ESL 140 or ESL 184 or ENGL 91
Students will explore various careers in bioscience through online research and informational interviews. They will present a summary of a chosen bioscience career to industry scientists. They will communicate and network with industry professionals, and attend professional workshops and seminars to gain internships and jobs through the Bridge Internship Program. CSU

BTEC 21A. Mammalian Cell Culture (2)
Lec-36, Lab-18, field trips  P/NP available
ADVISOR: (MATH 40 or ET 108A) AND BIO II AND (CHEM 32 or CHEM 40)
Introduction to techniques for culturing mammalian cells, including media formulation, aseptic technique, freezing, thawing, subculturing, and maintaining cells. Theory includes maintaining proper growth 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 and performing cell growth and viability assays. CSU

BTEC 21B. Fluorescent Cell Technology (2)
Lec-36, Lab-18, field trips  P/NP available
PREREQ.: BTEC 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 immunocytochemistry, DNA microarrays and FACS analysis. CSU

BTEC 21C. Stem Cell Technology (3)
Lec-48, Lab-24, 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 culture of mouse embryonic stem cells, and analysis of stem cells by immunofluorescence and flow cytometry. CSU

BTEC 21D. Introductory Stem Cell Internship Support (4)
Lec-70
PREREQ.: BTEC 21C
COR: BTEC 93
Provides the necessary communication tools for beginning students placed in off-campus stem cell biology internships. Emphasis is put on demonstrating how their work contributes to the overall scientific research being conducted at their internship site. Types of internships may include, but are not limited to, differentiation of pluripotent stem cells, FACS analysis, primary cell culture, propagation of iP cells, immunolocalization, microarray analysis and tumor cell characterization. CSU Offered Fall semesters

BTEC 21E. Advanced Stem Cell Internship Support (4)
Lec-70
PREREQ.: BTEC 21D
COREQ.: BTEC 93
Development of complex analysis and enhanced scientific presentation skills necessary for continuing students placed in off-campus stem cell biology internships. Students will complete and present a novel research project. Types of internships may include, but are not limited to, differentiation of pluripotent stem cells, FACS, cell culture, propagation of iP cells, immunolocalization, microarray analysis and tumor cell characterization. CSU Offered Spring semesters

BTEC 22. Enzyme Linked Immunosorbent Assay (ELISA) (1)
Lec-17.5, Lab-10.5, field trips  P/NP available
ADVISOR: MATH 40 AND BIO II
Underlying principles of immunoassay with focus on ELISA. Examples of ELISA techniques used in the pharmaceutical, biotechnology, and clinical laboratory settings will be discussed. Laboratory exercises and discussions cover qualitative and quantitative data analysis and direct, indirect, sandwich, and competitive ELISA methods. CSU

BTEC 23. Western Blotting Techniques (1)
Lec-16, Lab-8, field trips  P/NP available
ADVISOR: BIO II AND MATH 40
Underlying principles of immunoassay with focus on Western blots. Applications of Western blotting techniques used in the pharmaceutical,
biotechnology, and clinical laboratory settings will be discussed. Laboratory exercises feature hands-on exercises emphasizing all aspects of Western blotting including running protein gels, blotting, immunodetection and data analysis. CSU

BTEC 24. Introduction to PCR (1)
Lec-16, Lab-8 P/NP available
Advise: BIO II
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 biotechnology industry, basic science, forensics, epidemiology, diagnostics, and determination of evolutionary relationships will be discussed. CSU

BTEC 25. Analytical PCR Technology (1)
Lec-16, Lab-8 P/NP available
Prereq.: 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 multiplex PCR, reverse transcriptase PCR (RT-PCR), and real-time PCR. Experimental optimization will be emphasized. CSU

BTEC 93. Biotechnology Work Experience (1-8)
Work-60.00-600.00 P/NP available
Prereq.: Consent of Bioscience Internship/Work Experience Coordinator. Contact the instructor.
Repeat max. 16.00 units
Work experience for student in the Biotechnology Program through internships in the biotechnology industry. Interns are placed in local academic institutions and biotechnology companies. CSU

BTEC 102. Bioreactor Technology (2.5)
Lec-34, Lab-34, field trips P/NP available
Advise: BIO II 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), and Standard Operating Procedures (SOP) will be emphasized. CSU

BTEC 103. Protein Purification (2.5)
Lec-34, Lab-34, field trips P/NP available
Advise: CHEM 32; and BIO II or BTEC 10; and 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. Language Skills for Technicians (3)
Lec-52.5, Lab-17.5
Coreq.: BTEC 10 and BTEC 108A
Advise: ESLN 3700 or ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESLN 3800 or ESL 140 or ESL 184 or ENGL 95 or ENGL 88
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 is part of a Learning Community for Bridge to Biosciences. Concurrent enrollment in BTEC 10 and BTEC 107 is required. For more info, contact Li Lovett by email: lmiao@ccsf.edu

BTEC 108A. Practical Mathematics for Laboratory Science (3)
Lec-52.5, Lab-17.5
Coreq.: BTEC 10 and BTEC 107
Advise: ESLN 3700 or ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESLN 3800 or ESL 140 or ESL 184 or ENGL 95 or ENGL 88
Concepts, techniques and applications of mathematics and elementary algebra emphasizing applications to practical problems in biotechnology and chemistry. Use of traditional problem solving methods and interactive group activities. CSU

BTEC 115. Recombinant DNA Biotechnology (5)
Lec-52.5, Lab-105, field trips P/NP available
Advise: BIO II and CHEM 32
In-depth coverage of current recombinant DNA methods and concepts of modern genomics. The course emphasizes laboratory work using techniques such as culture of bacteria, DNA and RNA purification, plasmid DNA construction, cDNA synthesis, and real-time PCR. CSU
Formerly BIO 65
Offered Fall semesters

BTEC 120. Cell Biotechnology (5)
Lec-52.5, Lab-105, field trips P/NP available
Advise: BIO II; CHEM 32
An introduction to the principles and techniques of molecular and cell biology, and protein analysis. The emphasis is on lab techniques such as spectroscopy, preparation of cell lysates, Western blot, immunoprecipitation, enzyme assays, analysis of signal transduction, and stable transfection of mammalian cells. CSU
Offered Spring semesters

Computer Aided Drafting (CAD)
Credit, Degree Applicable Courses:
CAD 99A. 3D Printing and Solid Modeling (1)
Lec-16, Lab-16
Overview of 3D Printing, from its origins to its revolutionary future, and its impact on the design process. Produce a simple part in a 3D modeling software and print it. Experience using two significant categories of 3D printers. CSU

CAD 99B. Advanced AutoCAD Techniques (1)
Lec-16, Lab-16
Advanced AutoCAD techniques including 3D modeling and rendering, customization, external references, and data linking and management. CSU

CAD 180. Introduction to Technical Drawing (1)
Lec-8.75, Lab-26.25
Introduction to engineering and technical drawing techniques, the systems of drawings and their applications in design, 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 (2.5)
Lec-35, Lab-35
Advise: CAD 180 or ET 104 or 1 year H.S. Drafting
Introduction to Computer Aided Drafting (CAD) hardware and software operations and their applications in drafting; basic shape description, display, editing, dimensioning and plotting. UC/CSU

CAD 182. Engineering Detailing in Revit (2.5)
Lec-35, Lab-35
Advise: CAD 180 or ET 104 or equivalent skills/course work with 100 hours of industrial work experience in basic AutoCAD
An introduction to Autodesk’s Revit in platforms such as MEP, Structure and Architecture implementing Building Information Modeling (BIM). Basic concepts of Revit and simple 3D Revit modeling to generate building plans, sections, elevations, details and 3D views. Use of Revit in building engineering construction industry. CSU Offered Spring semesters

CAD 184. Structural Building Information Modeling (BIM) in Revit (2.5)
Lec-35, Lab-35
Advise: CAD 182
Building Information Modeling (BIM) - The essential features and functionality of Autodesk Revit structural tools from building and schematic design through construction documentation. Topics include 3D modeling, steel and concrete detail design for fabrication, parametric building design, scheduling for materials and quantity takeoff. CSU Offered Fall semesters

CAD 187. Mechanical, Electrical, and Plumbing (MEP) Building Information Modeling (BIM) in Revit (2.5)
Lec-35, Lab-35
Advise: ARCH 214 or CAD 181 or demonstration of CAD 181 exit skills
HVAC (Heating, Ventilation & Air Conditioning) and piping system design using parametric application software such as AutoDesk’s Revit-MEP . Introduction to computer generated documents to specify HVAC and piping systems layout and details. HVAC and process pipe industry drawing standards. Mechanical design including determination of equipment sizes. CSU Offered Spring semesters

CAD 190. Part Modeling in SolidWorks (2.5)
Lec-35, Lab-35
Advise: CAD 181
Overview of extending CAD-based graphics into 3-dimensional parametric modeling, realistic rendering, animation of assemblies, and exploded views. Introduction to SolidWorks. Experience creating a computer-generated physical 3D model using a state-of-the-art 3D printer. CSU

Electronics
Credit, Degree Applicable Courses:

ELEC 101. Electronics I: Essentials of Electronics - Measurements and Passive Circuits (2.5)
Lec-35, Lab-35
Advise: ET 50 or MATH 40 or placement in MATH 60
This course covers the construction and analysis of basic electronic circuits including capacitors and inductors. Use of the multi-meter to measure DC and AC voltages and currents in resistive series/parallel circuits and the oscilloscope for AC, pulsed waveforms, phase, and time delay measurements. Use of computer simulation software (Multisim) to analyze circuits. CSU

ELEC 102A. Electronics II: Active Analog Circuits and Practical Applications (2.5)
Lec-35, Lab-35
Advise: ELEC 101 or demonstration of exit skills.
This course covers diode characteristics, 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 for both calibration and troubleshooting. Hands-on electronic projects include building their own power supply, a current regulator, and various amplifier circuits. CSU

ELEC 102B. Electronics II: Digital Circuits and Practical Applications (2.5)
Lec-35, Lab-35
Advise: ELEC 101
This course covers Boolean logic concepts, flip-flops, memory, counters, clocks, display decoders and timers. Analysis of digital logic principles is practiced by building and testing functional and practical projects. There will be intense hands-on troubleshooting using logic analyzers, probes, signal generators and digital multimeters. Standard industry testing methods and equipment are used throughout the course. CSU

ELEC 103A. Electronics III: Analog Circuits and Practical Applications (2.5)
Lec-35, Lab-35
Prereq.: ELEC 102A or demonstration of exit skills
Introduction to intermediate analog electronic circuits, including field effect transistor basics, various analog amplifiers, operational amplifiers and their use. Hands-on electronic projects include building summing and difference amplifiers, audio amplifiers, and AM/FM radios. CSU Offered Spring semesters

ELEC 103B. Electronics III: Digital Circuit Interfaces and Programming (2.5)
Lec-35, Lab-35
Prereq.: ELEC 102B or demonstration of exit skills
Introduction to intermediate analog electronic circuits, including field effect transistor basics, various analog amplifiers, operational amplifiers and their use. Hands-on electronic projects include building summing and difference amplifiers, audio amplifiers, and AM/FM radios. CSU Offered Spring semesters

ELEC 104A. Electronics IV: Wireless Analog and Digital Communication Systems (2.5)
Lec-35, Lab-35
Prereq.: ELEC 102A or demonstration of exit skills.
This course covers analog and digital communications systems, antennas, and serves as an introduction to microwave signals. CSU Offered Fall semesters

ELEC 104B. Electronics IV: Microcontroller Interfaces and Programming (2.5)
Lec-35, Lab-35
Prereq.: ELEC 102B or demonstration of exit skills
Hands-on microcontroller interfacing, driver programs, input sensors, output electrical, and electromechanical devices. CSU Offered Spring semesters
Energy
Credit, Degree Applicable Courses:
ENRG 3: Introduction to Alternative Energy (3)
Lec-52.5
Advis: Concurrent enrollment in ENRG 3L
Introduction to the science that underpins alternative energy resources and their implementation in various contexts. Covers: fundamental energy science and math; climate change; national and global energy trends; solar, wind, and hydro resources; photovoltaic effect; photovoltaic; geothermal; and nuclear. Explores each resource in terms of technological options, sustainability, and feasibility. UC/CSU

ENRG 3L: Intro to Alternative Energy Laboratory (1)
Lab-52.5, field trips
Advis: Concurrent enrollment in ENRG 3
Physical science oriented laboratory course focused on alternative energy. Provides experimental understanding of the scientific principles that drive renewable energy systems. Solar, wind, fuel cells, geothermal, combustion and other energy experiments. Gain critical hands-on insight into the advantages and limitations of each energy system. UC/CSU
Offered Spring semesters

Engineering
Credit, Degree Applicable Courses:
ENGN 10A: Introduction to Engineering: The Profession (2)
Lec-35
The history and development of engineering as a profession. Engineering disciplines, job functions, educational requirements, transfer school information, academic success strategies, workplace skills, engineering ethics, sustainability principles applied to engineering, current and projected activities in the various branches of engineering. UC/CSU

ENGN 10B: Introduction to Engineering: Software Tools and Design (2)
Lec-17.5, Lab-52.5
Prereq.: MATH 90 or MATH 92 or Placement in MATH 100A or 110A
Introduction to team oriented engineering design, problem solving processes, and the use of computers in the solution of engineering problems - including commercial spreadsheet applications and analysis/graphics applications. Emphasis on technical communication, teamwork, engineering design and problem solving methodologies. Multiple hands-on design projects. UC/CSU

ENGN 20: Introduction to Circuit Analysis (3)
Lec-52.5
Prereq.: Completion of or concurrent enrollment in: MATH 110C and PHYC 4B
Advis: ENGN 10B
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. UC/CSU

ENGN 20L: Introduction to Circuit Analysis Laboratory (1)
Lab-52.5
Prereq.: Completion of or concurrent enrollment in: ENGN 20
Advis: ENGN 10B
An introduction to the construction and measurement of electrical circuits. Basic use of electrical test and measurement instruments including multimeters, oscilloscopes, power supplies, and function generators. Use of circuit simulation software. Interpretation of measured and simulated data based on principles of circuit analysis for DC, transient, and sinusoidal steady-state (AC) conditions. Elementary circuit design. Practical considerations such as component value tolerance and non-ideal aspects of laboratory instruments. Construction and measurement of basic operational amplifier circuits. UC/CSU

ENGN 24: Engineering Design Graphics (3)
Lec-35, Lab-52.5, field trips
Prereq.: ET 50 or MATH 95 or Demonstration of their exit skills
This course covers the principles involved in visually communicating engineering designs. Topics include 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; mechanical dimensioning and tolerancing practices and graphical analytical methods of solutions to three-dimensional problems. Assignments develop sketching and 2-D and 3-D CAD skills. The use of CAD software is an integral part of this course. UC/CSU

ENGN 36: Engineering Mechanics - Statics (3)
Lec-52.5
Prereq.: PHYC 4A and Completion of or concurrent enrollment in: MATH 110C
Advis: ENGN 10B
A first course in engineering mechanics: properties of forces, moments, couples and resultants; two- and three-dimensional force systems acting on engineering structures in equilibrium; analysis of trusses, and beams; distributed forces, shear and bending moment diagrams, center of gravity, centroids, friction, and area and mass moments of inertia. UC/CSU

ENGN 37: Engineering Mechanics - Dynamics (3)
Lec-52.5
Prereq.: ENGN 36
Advis: ENGN 10B
An introductory calculus-based course in dynamics covering kinematics and kinetics of particles, systems of particles, rigid bodies, and systems of rigid bodies. Applications of Newton's Second Law, the Work-Energy Theorem, the Principle of Impulse and Momentum, Coriolis acceleration and impact. UC/CSU

ENGN 38: Introduction to Programming Concepts and Methodologies for Engineers (3)
Lec-52.5, Lab-17.5
Prereq.: MATH 100A or MATH 110A
Engineering problem solving using computer programming. Topics include problem solving strategies, algorithm development, structured programming design, the interface of software with the physical world (e.g., the use of sensors) and the application of numerical techniques. UC/CSU

ENGN 45: Materials Science for Engineers (3)
Lec-35, Lab-52.5
Prereq.: CHEM 101A or CHEM 103A; PHYC 4A and PHYC 4AL
Advis: ENGN 10B; Completion/concurrent enrollment in CHEM 101B; and PHYS 4B/4BL
An introductory course in the fundamental science of materials used by engineers. Emphasis on structure and properties. Some processing and applications of materials is also covered. Finally, a strategy is developed for the selection and use of these materials in engineering design. UC, CSU transferable. UC/CSU
ENGN 48L. Introduction to Engineering and Technology - Laboratory (1)
Lec-17.5, Lab-52.5
P/NP available
A project-oriented, hands-on course to introduce students to the practices and methodologies used in Engineering and Technology. Areas of focus are electronics, mechanical construction/fabrication and technical mathematics. CSU

**Engineering Technology**

**Credit, Degree Applicable Courses:**
ET 50. Technical Mathematics (4)
Lec-70
Prereq.: ET 108B or demonstration of exit skills or MATH 90; MATH 92 and MATH 95
Applied mathematics designed to develop the ability to solve technical 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 104. Introduction to Engineering Drawing and Manufacturing (2)
Lec-17.5, Lab-52.5
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 108A. Practical Mathematics I (4)
Lec-70
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. CSU

ET 108B. Practical Mathematics II (3)
Lec-43.75, Lab-26.25
Prereq.: ET 108A or demonstration of exit skills
Concepts, techniques, and applications of intermediate algebra and introductory trigonometry emphasizing real world applications. Interactive group exercises and problem-solving methods. Demonstrations 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 135A and ET 139C for Certificates in Engineered Plumbing

**Systems and Heating, Ventilation, Air-Conditioning & Refrigeration**

ET 136A. HVAC System Fundamentals (2)
Lec-26.25, Lab-26.25
Calculations of cooling loads. Applications of heat transfer and air handling equipment. Design of air-conditioning systems. Analysis of air conditioning equipment, components, and control systems. Lab work including instruments and instrumentation for measuring air flow. CSU
Formerly ET 135B

ET 136B. Fundamentals of Air Conditioning and Refrigeration (2)
Lec-26.25, Lab-26.25
Advise: Completion of or concurrent enrollment in: ET 130
The refrigeration cycle, refrigeration systems, heat transfer components, and control systems. Laboratory work in operational characteristics of working systems. Analysis of refrigeration systems. Measurements of pressure, temperature and flow rates. Details of the function and interrelation of system components. CSU
Formerly ET 135C

ET 139A. Engineering Plumbing Systems (3)
Lec-52.5
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
Offered Spring semesters

ET 139B. Plumbing System Design Fundamentals (3)
Lec-52.5, field trips
Advise: ET 130
Design and sizing for a wide variety of plumbing systems, acoustics in plumbing construction, plumbing system specifications, plumbing construction costs, coordination of plumbing design with other construction work, energy conservation and review of plumbing installations. CSU
Offered on occasion

ET 140. Facility Automation and PLCs (2)
Lec-17.5, Lab-52.5
Prereq.: ET 50 or equivalent math course
Advise: ELEC 101
This course introduces Programmable Logic Controllers (PLCs) and explains how they can be used in a plant, manufacturing system, or part of centralized control of a building's heating, ventilation, and air conditioning (HVAC) system. There will be practical applications and exercises using PLCs in the workplace. CSU

ET 150. Metrology and CNC Machining (2)
Lec-17.5, Lab-52.5
Prereq.: ET 104
Introduction to computer numerical control (CNC) training in G and M codes. Hands on training on CNC machines: testing, debugging, and running programs. Identify the elements of machine drawings; interpret dimensions, tolerances, and geometric aspects of blueprints; and explain Geometric Dimensioning and Tolerancing (GD&T) symbols and their meanings CSU
Environmental Monitoring

EMSA 22. Foundations in Environmental Instrumentation, Sampling and Monitoring (4)
Lec-52.5, Lab-52.5, field trips P/NP available
Advise: MATH 40 or ET/BTEC 108A or placement in MATH 60; BIO II; and CHEM 32 or 40
This 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
Formerly EMAP 22X/BIO 224X/GEOL 35X
Offered Spring semesters

EMSA 28. Environmental Microbiology Methods (3)
Lec-35, Lab-70, field trips P/NP available
Advise: BIO II or BTEC 10; and MB 12; and CHEM 32 or CHEM 40; and MATH 40 or ET/BTEC 108A or placement in MATH 60
An introduction to the theoretical aspects and laboratory methods in environmental microbiology. Students gain practical experience performing EPA and standard methods and protocols to examine environmental samples such as water, soil, and air. The laboratory will emphasize methods used to detect, enumerate and identify microorganisms in the environment. UC/CSU
Offered on occasion

EMSA 30A. Water Quality Analysis by Anion-based Chromatography (.5)
Lec-12, Lab-12, field trips P/NP available
Prereq.: Completion of or concurrent enrollment in EMSA 22 or EMSA 28
Students will be taught the theory and practical applications of ion chromatography as it relates to water and drug quality analysis; identification and quantification of anions and other small molecules. This course will specifically study EPA-Method-300.1A and other standard methods used in both environmental and drug analyses. CSU
Offered Fall semesters

Geographic Information Systems

See Earth Sciences.

Sustainability

SUST 5. Sustainability and the Environment Speaker Series (1)
Lec-18, field trips P/NP available
Students will hear from professionals and experts from government, private, non-profits and public sectors as they share their insights on careers in sustainability and the environment. Career opportunities, academic and job training pathways will also be discussed. CSU

SUST 31L. Environmental Science Laboratory (1)
Lab-52.5, field trips P/NP available
Prereq.: Completion of or concurrent enrollment in: BIO 31 or GEOG 31 or SUST 31
An introduction to tools and techniques used by environmental scientists to investigate human impacts on the environment in lab and/or field settings. Application of qualitative and quantitative concepts and models to evaluate environmental problems and their proposed solutions. UC/CSU
BIO 31L = GEOG 31L = SUST 31L

SUST 91. Applied Research in Sustainability (1-8)
Work-60-600, field trips P/NP available
Advise: (BIO 31; SUST 31 or GEOG 31); ENRG 3
Repeat: Max 16 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 the instructor. CSU

SUST 225. Environmental Toxicology (3)
Lec-52.5 P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
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 toxics in the environment, and examination of the impacts of air/water/soil pollutants. Methods to identify, study, remediate and avert environmental toxics will be addressed. UC/CSU
Formerly EMAP 26X SUST 225 = BIO 225
Offered on occasion

Welding

Credit, Degree Applicable Courses:

WELD 140. Manufacturing Processes (3)
Lec-26.25, Lab-78.75
Elementary machine tool practice, with special emphasis on the use of the lathe engine, horizontal and vertical milling machines, and drill press. CSU

WELD 144A. Survey of Welding Processes (2)
Lec-26.5, Lab-26.5
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, oxy/fuel cutting, and Gas Tungsten Arc Welding (GTAW). This course provides students with cutting and welding skills relevant to industry standards, welding certification requirements and general purposes. CSU

WELD 144B. Intermediate Welding Processes (2)
Lec-26.5, Lab-26.5
Prereq: WELD 144A
Classroom instruction and laboratory practice in joining metal by welding. This course is designed to provide the safe and operational uses of the intermediate welding processes including Shielded Metal Arc Welding (SMAW), Flux Core Arc Welding (FCAW) and physical testing of welds. This course covers business oriented topics such as inventory control, machine maintenance, and sustainability. This course provides students with cutting and welding skills relevant to industry standards, welding certification requirements and general purposes. CSU
WELD 144C. Advanced Welding Processes (2)
Lec-26.5, Lab-26.5
Prereq: WELD 144B
Classroom instruction and laboratory practice in joining metal by welding. This course is designed to provide the safe and operational uses of the advanced welding and fabrication processes such as Gas Tungsten Arc Welding (GTAW) or exotic materials and Gas Metal Arc Welding (GMAW) of custom objects. This course provides students with cutting and welding skills relevant to industry standards, welding certification requirements and general purposes. CSU

WELD 148. Welding Symbols and Inspection (3)
Lec-52.5
Advise: ET 50
Introduction into welding symbols, codes, terminology, metallurgy, procedures, processes; welder qualification; high-strength bolting; the basics of destructive and non-destructive examination. CSU

English
Office: Batmale 556
Phone Number: (415) 239-3406
Web Site: www.ccsf.edu/english

Announcement of Curricula

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 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 units of Core Reading and Composition courses, students will learn techniques to produce clear, precise prose by integrating writing, reading, and research. The required units of Core Surveys of literature in English will ensure students have a broad familiarity with different eras of literary history; an additional requirement of 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
Upon completion of this program, students will be able to:

- Distinguish genres, themes, and contexts within a variety of works of literature.
- Employ 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.

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 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.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AA-T in English

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required Group 1: Core Reading and Composition courses:</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 1B Writing about Literature</td>
<td>3.0</td>
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<tr>
<td>ENGL IC Writing about Nonfiction</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Choose 6 units from Group 2: Core Survey courses:</strong></td>
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</tr>
<tr>
<td>ENGL 30A American Literature, Beginnings to Civil War</td>
<td>3.0</td>
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<tr>
<td>ENGL 30B American Literature, 1865-present</td>
<td>3.0</td>
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<tr>
<td>ENGL 46A Survey of Literature in English, Part 1: Beowulf through Milton</td>
<td>3.0</td>
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<tr>
<td>ENGL 46B Survey of Literature in English, Part 2: Late-17th through the Mid-19th Century</td>
<td>3.0</td>
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<tr>
<td>ENGL 46C Survey of Literature in English, Part 3: Mid-Nineteenth through the Twentieth Century</td>
<td>3.0</td>
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<tr>
<td><strong>Choose 6 units from Group 3: Specialized Literature courses:</strong></td>
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<tr>
<td>ENGL 35A Introduction to Writing Fiction</td>
<td>3.0</td>
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<tr>
<td>ENGL 35B Intermediate Fiction Writing</td>
<td>3.0</td>
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<tr>
<td>ENGL 35C Introduction to Writing Poetry</td>
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<tr>
<td>ENGL 35D Intermediate Poetry Writing</td>
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<tr>
<td>ENGL 35L Introduction to Literary Magazine</td>
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<tr>
<td>ENGL 35M Intermediate Literary Magazine</td>
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<tr>
<td>ENGL 43 Introduction to Poetry</td>
<td>3.0</td>
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<tr>
<td>ENGL 44A Survey of World Literature, Part I: Ancient, Medieval, and Early Modern</td>
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<tr>
<td>ENGL 44B Survey of World Literature, Part II: Early Modern to the Present</td>
<td>3.0</td>
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<tr>
<td>ENGL 48C Science Fiction and Fantasy</td>
<td>3.0</td>
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<tr>
<td>ENGL 48K The Bible as Literature</td>
<td>3.0</td>
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<tr>
<td>ENGL 51T The Graphic Novel as Literature</td>
<td>3.0</td>
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<tr>
<td>ENGL 52 Shakespeare</td>
<td>3.0</td>
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<tr>
<td>ENGL 57 Survey of Women's Literature</td>
<td>3.0</td>
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<tr>
<td>ENGL 58 Contemporary Women's Writing</td>
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<tr>
<td>CLAS 35 Tragic Drama of Greece</td>
<td>3.0</td>
</tr>
<tr>
<td>Group 2 courses not already taken</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>18.0</strong></td>
</tr>
</tbody>
</table>

English Major (AA)
CCSF's English major offers a wide variety of language, literature, and writing courses--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 units of Core Reading and Composition Courses, students will learn techniques to produce clear, precise prose by integrating writing, reading, and research. The required units of Core Surveys of literature in English will ensure students have a broad familiarity with different eras of literary history; an additional requirement 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
Upon completion of this program, students will be able to:

• Distinguish genres, themes, and contexts within a variety of works of literature.
• Employ 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.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in English

Course ................................................. Units
Choose 6 units from Group 1: Core Reading and Composition courses:
ENGL 1A University-Parallel Reading and Composition 4.0
ENGL 1B Writing about Literature* ......................... 3.0
ENGL 1C Writing about Nonfiction .......................... 3.0
* Completion of ENGL 1B is strongly recommended prior to enrolling in literature electives.

Choose 6 units from Group 2: Core Survey courses:
ENGL 46A Survey of Literature in English, Part I: Beowulf through Milton .................. 3.0
ENGL 46B Survey of Literature in English, Part II: Late-17th through the Mid-19th Century .................. 3.0
ENGL 30A American Literature, Beginnings to Civil War .................. 3.0
ENGL 30B American Literature, 1865-present ............. 3.0

Choose 6 units from Group 3: Specialized Writing and Literature
ENGL 44A Survey of World Literature, Part I: Ancient, Medieval, and Early Modern ................ 3.0
ENGL 44B Survey of World Literature, Part II: Early Modern to the Present ................ 3.0
ENGL 48C Science Fiction and Fantasy .................. 3.0
or ENGL 48K The Bible as Literature .................. 3.0
Group 1 or 2 courses not already taken .................. 3.0
ENGL 43 Introduction to Poetry .................. 3.0
ENGL 51 The Graphic Novel as Literature ................ 3.0
ENGL 52 Shakespeare .................. 3.0
ENGL 57 Survey of Women's Literature .................. 3.0
ENGL 58 Contemporary Women's Writing ................ 3.0
Total: .......................... 18.0

Creative Writing Certificate
The Creative Writing Certificate prepares students for a major or minor in creative writing and is strategic for obtaining jobs in publishing, editing, web-editing, and non-profit organizations in the arts/arts education. This certificate includes instruction in fiction, poetry, other genres, and the practice of the writing workshop. The certificate is inter-disciplinary and allows students to select from a range of courses offered in English Creative Writing and Interdisciplinary Studies as well as English Literature, Humanities, Broadcast Electronic Media Art, Cinema, Journalism, Photography, Theatre Arts, Visual Media Studies, and Women's Studies. Students will have the opportunity to enrich the community through an exchange of creative ideas and participate in the Bay Area's local literary tradition.

All courses in the Creative Writing Certificate are transferable to the California State University system; most are transferable to the University of California. Some courses satisfy requirements for CSU General Education Humanities Area C2, IGETC Area 3B, and CCSF General Education graduation requirements for Areas E and H. Students must complete all courses at City College of San Francisco with a grade of C or higher.

Learning Outcomes
Upon completion of this program, students will be able to:

• Identify craft elements of creative writing.
• Analyze and critically discuss published and unpublished literary work for its literary merit.
• Analyze and critically discuss the relationship between culture and literary expression.
• Compose original creative works in different genres.
• Demonstrate skills used in the publication process.
• Design, plan, and present literary expression in the community.

The Creative Writing Certificate is open to any student enrolled at CCSF who meets the prerequisite requirements for the required courses. A course may be used only once to fulfill requirements. The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Creative Writing

Course ................................................. Units
Choose 1 of the following Intro to Creative Writing courses
ENGL 35A Introduction to Writing Fiction .................. 3.0
ENGL 35C Introduction to Writing Poetry .................. 3.0

Choose 1 of the following Intro to Creative Writing in the Community courses:
ENGL 35L Introduction to Literary Magazine ................ 3.0
IDST 36 Poetry for the People .................. 3.0

Choose 1 of the following Continuing Studies in Creative Writing courses
ENGL 35B Intermediate Fiction Writing .................. 3.0
ENGL 35D Intermediate Poetry Writing .................. 3.0
ENGL 35M Intermediate Literary Magazine ................ 3.0
IDST 36 Poetry for the People* .................. 3.0
* If not completed above as a Creative Writing the Community course.

Choose 1 of the following Craft Exploration courses:
BCST 110 Introduction to Writing for Electronic Media ................ 3.0
CINE 72 Nonfiction Scriptwriting .................. 3.0
CINE 75 Screenwriting .................. 3.0
JOUR 22 Feature Writing .................. 3.0
JOUR 29A Introduction to Magazine Editing and Production ................ 3.0
PHOT 51 Beginning Photography .................. 3.0
PHOT 57 Photography for the Web .................. 3.0
PHOT 100/DSGN 101/VMD 101 Design Fundamentals ................ 3.0
TH A 171A Beginning Storytelling and Performance ................ 3.0
TH A 171B Intermediate Storytelling and Performance ................ 3.0
TH A 171C Advanced Intermediate Storytelling and Performance .................................................. 3.0
TH A 171D Advanced Storytelling and Performance ................................................................. 3.0
VMD 166 Storytelling and Storyboarding .................................................................................. 3.0
Any Creative Writing course elective not already completed .................................................. 3.0

Choose 1 of the following Studies in Literature courses:
ENGL 30A American Literature, Beginnings to Civil War ......................................................... 3.0
ENGL 30B American Literature, 1865-present .......................................................................... 3.0
ENGL 43 Introduction to Poetry .................................................................................................. 3.0
ENGL 44A Survey of World Literature, Part I: Ancient, Medieval, and Early Modern .......... 3.0
ENGL 44B Survey of World Literature, Part II: Early Modern to the Present ......................... 3.0
ENGL 46A Survey of Literature in English, Part I: Beowulf through Milton .......................... 3.0
ENGL 46B Survey of Literature in English, Part II: Late-17th through the Mid-19th Century .... 3.0
ENGL 46C Survey of Literature in English, Part 3: Mid-19th through the Twentieth Century .. 3.0
ENGL 57 Survey of Women's Literature ..................................................................................... 3.0
ENGL 58 Contemporary Women's Writing ................................................................................. 3.0
HUM 11 Music/Art/Literature: Traditional .................................................................................. 3.0
HUM 12 Music/Art/Literature: Modern ....................................................................................... 3.0
HUM 20 Bay Area Arts .............................................................................................................. 3.0
HUM 25 Women in the Arts ....................................................................................................... 3.0
HUM 41A Western Cultural Values: Pre-history to the Renaissance ...................................... 3.0
HUM 41B Western Cultural Values ............................................................................................. 3.0
HUM 48 African-American Music, Art and Literature ............................................................... 3.0
IDST 14 American Cultures in Literature and Film .................................................................. 3.0
IDST 46 Fa’a Pasefika: Interdisciplinary Cultural Expressions of Oceania .............................. 3.0
Total: ................................................................................................................................. 15.0

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. For more information, see “Placement Testing Waiver” in the “Admission to the College” section of this Catalog. 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 English eligibility information from the English Department website http://www.ccsf.edu/english.

Credit, Non-Degree Applicable Courses:
ENGL L. Foundation for College Reading and Studying (3)
Lec-52.5 P/NP available
Prereq.: ESL 130 or ESL 182 or placement in ENGL L or ESL 140 or ESL 184
In preparation for English 86, this course presents the basics of and practice in reading comprehension, vocabulary, and study skills, and helps students develop an awareness of their own reading processes. This course will also introduce the college essay writing approach they will use in the rest of the English sequence.

ENGL 86. Introduction to College Reading and Writing (6)
Lec-105, field trips
Prereq.: ENGL L or placement in ENGL 86
This course provides practice in writing, reading, and study skills. The emphasis is on acquiring and using strategies to comprehend texts and to undertake writing projects.

ENGL 86A. College Reading and Writing (3)
Lec-52.5, field trips
Prereq.: ENGL 86 or ESL 160 or placement in English 88
This course offers initial training in academic essay writing and analytical reading. The emphasis is on reading multiple academic texts, synthesizing ideas, and developing and revising text-based, thesis-driven essay at the pre-collegiate level.

ENGL 91. Introduction to Basic Reading and Writing (6)
Lec-105
Prereq.: ENGL L or placement in ENGL 91
Practice in writing, reading, and study skills. The emphasis is on reading closely to comprehend texts and on acquiring and using strategies to undertake writing projects.

ENGL 93. Introduction to Academic Writing and Reading (3)
Lec-52.5
Prereq.: ENGL 92 or ESL 160 or placement in ENGL 93
Training and practice in academic essay writing and analytical reading. Emphasis is on learning to read and write pre-collegiate argumentative prose.

ENGL 95. Academic Reading and Writing Intensive (6)
Lec-105, field trips
Prereq.: ENGL 91 or placement in ENGL 95
This six-unit course provides training in academic essay writing and analytical reading. The emphasis is on reading multiple academic texts, synthesizing ideas, and developing and revising text-based essays at the pre-collegiate level.

Formerly ENGL 95X

Credit, Degree Applicable Courses:
ENGL 88. College Reading and Writing (6)
Lec-105, field trips
Prereq.: ENGL 86 or ESL 160 or placement in ENGL 88
This course provides training in academic essay writing and analytical reading. The emphasis is on reading multiple academic texts, synthesizing ideas, and developing and revising text-based, thesis-driven essays at the pre-collegiate level.

Formerly ENGLISH 96; ENGL 88A + 88B = ENGL 88
ENGL 88B. College Reading and Writing (3)
Lec-52.5, field trips
Prereq.: ENGL 88A or ENGL 95 or ENGL 93 or placement in ENGL 88B or ENGL 96
This course offers training in analytical reading and academic essay writing. The emphasis is on reading multiple academic texts, synthesizing ideas, and developing and revising text-based, thesis-driven essays at the pre-collegiate level.

ENGL 96. Academic Writing and Reading (3)
Lec-52.5
Prereq.: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96
Practice in developing strategies for college level thesis-based analytical and argumentative essays. Useful for students who want additional preparation and support in developing a writing process and academic habits of mind. CSU

ENGL 16. Academic Writing Workshop (3)
Lec-52.5
Prereq.: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
Practice in developing strategies for college level thesis-based analytical and argumentative essays. Useful for students who want additional preparation and support in developing a writing process and academic habits of mind. CSU

ENGL 17. Writing Workshop for ENGL 1A (1.5)
Lec-26.25
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
Practice in developing strategies for university-parallel research essays. Useful for students who want additional preparation and support in developing a writing process and academic habits of mind. In this supportive learning community, students improve their chances of completing English 1A. CSU

ENGL 26. English Grammar and Sentence Combining (3)
Lec-52.5
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
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 26A. English Grammar: Sentence Core (1)
Lec-17.5
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
Recommended for students who wish to improve their knowledge and understanding of basic English grammar and those who want to tutor English/ESL.

ENGL 26B. English Grammar: Sentence Structure (1)
Lec-17.5
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
Recommended for students who wish to improve their knowledge and understanding of basic grammar. ENGL 26 = ENGL 26A + ENGL 26B + ENGL 26C

ENGL 26C. English Grammar: Sentence Combining (1)
Lec-17.5
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
Recommended for students who wish to improve their knowledge and understanding of basic grammar. ENGL 26 = ENGL 26A + ENGL 26B + ENGL 26C
ENGL 30A. American Literature, Beginnings to Civil War (3)
Lec-52.5   P/NP available
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
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. UC/CSU
C-ID ENGL 130
Offered in alternate Spring semesters

ENGL 30B. American Literature, 1865-present (3)
Lec-52.5, field trips   P/NP available
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B 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. UC/CSU
C-ID ENGL 135
Offered in alternate Spring semesters

ENGL 35A. Introduction to Writing Fiction (3)
Lec-52.5, field trips   P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B 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. UC/CSU
C-ID ENGL 200 (ENGL-CW 100) (ENGL 35A + ENGL 35C)

ENGL 35B. Intermediate Fiction Writing (3)
Lec-52.5, field trips   P/NP available
Advise: 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. UC/CSU

ENGL 35C. Introduction to Writing Poetry (3)
Lec-52.5   P/NP available
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
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. UC/CSU
C-ID ENGL 200 (ENGL-CW 100) (ENGL 35A + ENGL 35C)

ENGL 35D. Intermediate Poetry Writing (3)
Lec-52.5   P/NP available
Prereq.: Completion of or concurrent enrollment in: ENGL 88 or ENGL 88A
Advise: 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. UC/CSU

ENGL 35E. Introduction to Writing Creative Nonfiction (3)
Lec-52.5, field trips   P/NP available
Advise: ENGL 96 or ENGL 96 or placement in ENGL 1A
This beginning creative nonfiction writing course introduces students to the fundamentals of memoir writing, literary nonfiction, and personal essay, while cultivating creative and critical thinking skills through the examination of diverse authors, and preparing students for intermediate creative nonfiction writing, especially those students considering a major or minor in creative writing. UC/CSU

ENGL 35F. Intermediate Creative Nonfiction Writing (3)
Lec-52.5, field trips   P/NP available
Prereq.: ENGL 35G
In this intermediate creative nonfiction writing course, students expand their ability to write literary memoir, personal essays, and nonfiction shorts. Students will also further develop their ability to read and critique both diverse professional writing and writing of their peers. UC/CSU

ENGL 35G. Introduction to Writing Creative Nonfiction (3)
Lec-52.5, field trips   P/NP available
Advise: ENGL 88 or ENGL 96 or placement in ENGL 1A
This beginning creative nonfiction writing course introduces students to the fundamentals of memoir writing, literary nonfiction, and personal essay, while cultivating creative and critical thinking skills through the examination of diverse authors, and preparing students for intermediate creative nonfiction writing, especially those students considering a major or minor in creative writing. UC/CSU

ENGL 35H. Intermediate Creative Nonfiction Writing (3)
Lec-52.5, field trips   P/NP available
Prereq.: ENGL 35G
In this intermediate creative nonfiction writing course, students expand their ability to write literary memoir, personal essays, and nonfiction shorts. Students will also further develop their ability to read and critique both diverse professional writing and writing of their peers. UC/CSU

ENGL 35L. Introduction to Literary Magazine (3)
Lec-52.5, field trips   P/NP available
Advise: ENGL 88 or ENGL 96 or ENGL 88B or placement in ENGL 1A
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
Offered Spring semesters

ENGL 35M. Intermediate Literary Magazine (3)
Lec-52.5, field trips   P/NP available
Advise: 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
Offered Spring semesters

ENGL 43. Introduction to Poetry (3)
Lec-52.5   P/NP available
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B 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. UC/CSU
Offered on occasion

ENGL 44A. Survey of World Literature, Part 1: Ancient, Medieval, and Early Modern (3)
Lec-52.5   P/NP available
Prereq.: ENGL 96 or placement in ENGL 1A
A survey of significant world literature in English translation, from antiquity through the late Renaissance. UC/CSU
C-ID ENGL 140 (ENGL-LIT 180)
Offered on occasion
ENGL 44B. Survey of World Literature, Part II: Early Modern to the Present (3)
Lec-52.5 P/NP available
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
A survey of significant world literature in English translation, from the early modern period to the present. UC/CSU
C-ID ENGL 145 (ENGL-LIT 185)
ENGL 44A is not prerequisite to 44B
Offered on occasion

ENGL 46A. Survey of Literature in English, Part 1: Beowulf through Milton (3)
Lec-52.5 P/NP available
Prereq.: ENGL 1A
A survey of significant literature written in English, from the Anglo-Saxon era through the late Renaissance. UC/CSU
C-ID ENGL 160 (ENGL-LIT 160)
No part of ENGL 46 series is prerequisite to any other part. Required for a university major in English.
Offered every third semester

ENGL 46B. Survey of Literature in English, Part 2: Late-17th through the Mid-19th Century (3)
Lec-52.5 P/NP available
Prereq.: ENGL 1A
A survey of important literature written in English, from the Restoration through Neo-Classicism and Romanticism to the Early Victorian period. UC/CSU
C-ID ENGL 165 (ENGL 46B + ENGL 46C)
No part of ENGL 46 series is prerequisite to any other part. Required for a university major in English.
Offered every third semester

ENGL 46C. Survey of Literature in English, Part 3: Mid-19th through the Twentieth Century (3)
Lec-52.5 P/NP available
Prereq.: ENGL 1A
A survey of important literature written in English, from the Mid to Late Victorian Era through Early Modernism. UC/CSU
C-ID ENGL 165 (ENGL 46B + ENGL 46C)
No part of the English 46 series is prerequisite to any other part. Required for a university major in English.
Offered every third semester

ENGL 48C. Science Fiction and Fantasy (3)
Lec-52.5 P/NP available
Advise: ENGL 86 or ENGL 91 or ESL 160 or ESL 186 or placement in English 88
The roots, twentieth-century rise, and contemporary status of the science fiction and fantasy literary genres are studied. Focus is on recurrent themes and tropes, as well as the mythological, philosophical, and socio-cultural foundations from which they arise. UC/CSU
Offered on occasion

ENGL 48K. The Bible as Literature (3)
Lec-52.5 P/NP available
Advise: ENGL 86 or ESL 160 or ESL 186 or placement in ENGL 88
An introduction to the Bible in English—one of Western culture's most influential books and an important source for literature—through a study of its literary aspects, interpretative methods, and historical context. UC/CSU
Offered on occasion

ENGL 51. The Graphic Novel as Literature (3)
Lec-52.5, field trips P/NP available
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
This course focuses on the graphic novel as a literary and artistic medium exploring a variety of topics in a sophisticated and compelling manner, unique to this genre. UC/CSU
Offered on occasion

ENGL 52. Shakespeare (3)
Lec-52.5, field trips P/NP available
Prereq.: Completion of English 96 or placement in English IA
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. UC/CSU
Offered Spring semesters

ENGL 57. Survey of Women's Literature (3)
Lec-52.5, field trips 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. UC/CSU
Offered on occasion

ENGL 58. Contemporary Women's Writing (3)
Lec-52.5, 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 from diverse social, cultural and ethnic backgrounds. UC/CSU
Formerly ENGL 58A
Offered on occasion

Noncredit Course:
ENGL 1000, Supplemental Instruction in English (50 hrs)
A course designed to help faculty-referred students strengthen and refine college English skills and achieve course learning outcomes. Under faculty supervision, students utilize technology, receive tutoring, attend workshops, and engage in various writing, reading, study skills, or research.

Classics

Announcement of Course
Credit, Degree Applicable Course:
CLAS 35. Tragic Dramas of Greece (3)
Lec-52.5, field trips P/NP available
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
An intensive consideration of the tragic dramas of Classical Greece in which students learn how to analyze and interpret tragedy within a literary, cultural, and historical framework that is fundamentally different from our own while developing an understanding of the relevance of these texts for contemporary audiences. UC/CSU
Offered on occasion
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.

Learning Outcomes

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

- Read critically in a variety of genres of authentic texts.
- Write pre-college level expository essays and academic summaries.
- Speak with increasing accuracy and fluency in academic communication.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Advanced Academic English as a Second Language

Course ................................................. Units
Required course:
ESL 79 Advanced Speaking and Pronunciation ........ 3.0

Choose one of the following courses:
ESL 160 High-Advanced Academic ESL ............... 4.0
ESL 188 ESL College Reading and Writing ............ 6.0

Choose one of the following elective course:
ESL 66 Advanced Listening and Reading .................. 3.0
ESL 69 Accent Improvement ............................. 3.0
ESL 85 Advanced Editing and Grammar Review ........ 3.0

Total: .................................................... 10.0 – 12.0

Advanced English as a Second Language Oral Communication Skills Certificate

The Certificate of Accomplishment in Advanced English as a Second Language (ESL) Oral Communication Skills provides students, prospective employers, and others with documented evidence of persistence and academic accomplishment in listening and speaking. 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 program, students will be able to:

- Demonstrate comprehension of academic lectures and demonstrations in English.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Advanced English as a Second Language Oral Communication Skills

Course ...................................................... Units
Required courses:
ESL 142 High Intermediate Listening/Speaking .......... 3.0
ESL 79 Advanced Speaking and Pronunciation .......... 3.0

Choose one of the following course electives:
ESL 66 Advanced Listening and Reading .................. 3.0
ESL 69 Accent Improvement ............................. 3.0

Total: .................................................... 9.0

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 75. Intermediate Editing and Grammar Review (3)
Lec-52.5  P/NP available
Prereq.: ESL 130 or ESL 182 or placement in ESL 140 or ESL 184 or ENGL 91 or ENGL 95 or ENGL 86
Support for non-native speakers of English; intermediate grammar for texts which are lightly adapted for ESL and composition; editing/proofreading skills to improve quality and accuracy of written college work at the intermediate level.

Intended for non-native speakers of English taking ESL 140, ESL 150, ENGL 91 or ENGL 95 who require additional instruction in intermediate grammar and writing skills.

ESL 85. Advanced Editing and Grammar Review (3)
Lec-52.5  P/NP available
Prereq.: ESL 150 or ENGL 91 or ENGL 86 or placement in ESL 160 or ENGL 93 or ENGL 88
Advice: Concurrent enrollment in ESL 160 or ENGL 93 or ENGL 96 or ENGL 88 or ENGL 88A or ENGL 88B
Support for non-native speakers of English; advanced grammar for high level texts and composition; editing/proofreading skills to improve quality and accuracy of written college work at the advanced level. Meets requirements for the Certificate of Accomplishment in Advanced Academic English as a Second Language.

Intended for non-native speakers of English taking ESL 160, ENGL 93, ENGL 96 or ENGL 1A who require additional instruction in advanced grammar and writing skills.

ESL 110. Introductory Academic ESL (6)
Lec-105
Prereq.: Placement in ESL 110
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.

**Intended to be taken together with a Listening/Speaking course, such as ESL 112 or ESL 122 (depending on Listening/Speaking course placement).**

**ESL 112. High Beginning Listening/Speaking (3)**

Lec-52.5  
P/NP available  
Prereq.: Placement in ESL 112.

Introduction to pre-academic listening and speaking skills and strategies. Oral communication activities and brief oral presentations with vocabulary and grammatical structures appropriate to the high beginning level.

**Intended to be taken together with an academic Reading and Writing course such as ESL 110/120 (depending on Reading/Writing course placement)**

**ESL 120. Low-Intermediate Academic ESL (6)**

Lec-105  
Prereq.: ESL 110 or placement in ESL 120

Advise: This course is the second level in the Academic ESL sequence that covers reading, writing, grammar, and vocabulary. It serves as a prerequisite for ESL 130.

Pre-academic reading skills and strategies. Practice in writing academic paragraphs, short essays and reports. Low-intermediate vocabulary and grammar study.

**Intended to be taken concurrently with ESL Listening/Speaking.**

**ESL 122. Low-Intermediate Listening/Speaking (3)**

Lec-52.5  
P/NP available  
Prereq.: Placement in ESL 122 or completion of ESL 112

Pre-academic listening and speaking skills and strategies. Oral communication activities and oral presentations with vocabulary and grammatical structures appropriate to the low-intermediate level.

**Intended to be taken together with an academic reading/writing course such as ESL 110 or 120, depending on the reading/writing placement**

**ESL 130. Intermediate Academic ESL (6)**

Lec-105  
Prereq.: ESL 120 or placement in ESL 130

Advise: Completion of or concurrent enrollment in: ESL 122 or ESL 132 or ESL 142; (depending on ESL Listening/Speaking course placement)

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.

**Intended to be taken together with a Listening/Speaking course, such as ESL 122 or ESL 132 or ESL 142 (depending on Listening/Speaking course placement).**

**ESL 132. Intermediate Listening/Speaking (3)**

Lec-52.5  
P/NP available  
Prereq.: ESL 122 or placement in ESL 132

Intermediate academic listening and speaking skills and strategies. Oral communication activities and oral presentations with vocabulary and grammatical structures appropriate to the intermediate level.

**Intended to be taken with a reading/writing course such as ESL 120 or ESL 130 or ESL 140 (depending on Reading/Writing course placement)**

**ESL 142. High Intermediate Listening/Speaking (3)**

Lec-52.5  
P/NP available  
Prereq.: ESL 132 or placement in ESL 142

High intermediate academic listening and speaking skills and strategies. Oral communication activities, oral presentations and listening competency with vocabulary and grammatical structures appropriate to the high-intermediate level.

**Intended to be taken with a reading/writing course such as ESL 130 or ESL 140 or ESL 150 (depending on Reading/Writing course placement)**

**ESL 182. Intermediate Academic ESL (6)**

Lec-105, Lab-15  
Prereq.: ESL 120 or ESLA 3180 or placement in ESL 130 or ESL 182

Training and practice in intermediate reading and writing, with emphasis on language structure and vocabulary development for non-native speakers of English. Practice in reading passages from informational and literary texts to support written work. Practice in a variety of writing tasks. Intermediate language skills integrated on the basis of academic tasks and content.

**Intended to be taken together with a Listening/Speaking course such as ESL 122, ESL 132, or ESL 142**

**Credit, Degree Applicable Courses:**

**ESL 49. Pronunciation (3)**

Lec-52.5, Lab-15  
P/NP available  
Prereq.: ESL 110 or placement in ESL 120

Systematic practice in American English sounds and speech segments and suprasegments, for improved reading and oral communication, especially listening and pronunciation. Recommended for ESL 120, 130, and 140 students with pronunciation problems. CSU

**Intended to be taken together with a reading/writing class, such as ESL 120 and a listening/speaking class, such as ESL 122 or 132**

**ESL 51A. ESL for Child Development (3)**

Lec-52.5  
P/NP available  
Prereq.: ESL 130 or ESL 182 or placement in ESL 140 or ESL 132 or equivalent English language skills

Support class for non-native speakers of English taking Child Development (CDEV) 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

**ESL 66. Advanced Listening and Reading (3)**

Lec-52.5  
Prereq.: ESL 130 or ESL 182 or placement in ESL 140 or ESL 184

Intensive work on academic skills and strategies in the areas of listening in mainstream classroom lectures, reading of a variety of text types in different academic content areas, and note-taking and test-taking. CSU

**This course is designed for students who already have time-management and native-language academic skills. Intended to be taken concurrently with ESL 140, 150, 160, 186, or 188 for students who need additional work in academic Listening and Reading.**

**ESL 69. Accent Improvement (3)**

Lec-52.5, Lab-15  
P/NP available  
Prereq.: ESL 130 or ESL 182 or placement in ESL 140 or ESL 184

Improvement in standard American English pronunciation with emphasis on accent reduction, by improving overall clarity, voice
ESL 79. Advanced Speaking and Pronunciation (3)
Lec-52.5  
P/NP available
Prereq.: ESL 140 or ESL 184 or placement in ESL 150 or ESL 186  
Advise: ESL 142 or ESL 69
Practice in effective communication in academic situations through the use of individual and group presentations, oral reports and summaries, debates, and discussions, in conjunction with pronunciation practice. CSU
Not intended for students who have completed more than one level beyond ESL 160

ESL 140. High-Intermediate Academic ESL (6)
Lec-105  
Prereq.: ESL 130 or ESL 182 or placement in ESL 140 or ESL 184
Advise: Completion of or concurrent enrollment in: ESL 132 or ESL 142, (depending on ESL Listening/Speaking course placement)
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. UC/CSU
Intended to be taken together with a Listening/Speaking course, such as ESL 132 or ESL 142 (depending on Listening/Speaking course placement).

ESL 150. Advanced Academic ESL (5)
Lec-87.5, Lab-15  
Prereq.: ESL 140 or ESL 184 or placement in ESL 150 or ESL 186
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. UC/CSU

ESL 160. High-Advanced Academic ESL (4)
Lec-70, Lab-15.5  
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. UC/CSU

ESL 184. High Intermediate Academic ESL (6)
Lec-105, Lab-15  
Prereq.: ESL 182 or ESL 130 or placement in ESL 140 or ESL 184
Training and practice in high intermediate reading and writing, with emphasis on language structure and vocabulary development for non-native speakers of English. Practice in reading passages from a variety of academic genres used to support written work. Practice in a variety of writing tasks at the high intermediate level. High intermediate language skills integrated on the basis of academic tasks and content. UC/CSU
Intended to be taken together with a Listening/Speaking course such as ESL 132 or ESL 142 (depending on Listening/Speaking course placement)

ESL 186. ESL Introduction to College Reading and Writing (6)
Lec-105, Lab-15  
Prereq.: ESL 140 or ESL 184 or placement in ESL 150 or ESL 186
Training and practice in advanced academic reading and writing, with emphasis on language structure and vocabulary development for non-native speakers of English. Practice in reading multiple academic texts, synthesizing ideas, and developing and revising text-based assignments at the pre-collegiate level. Advanced language skills integrated on the basis of academic tasks and content. UC/CSU

ESL 188. ESL College Reading and Writing (6)
Lec-105, Lab-15  
Prereq.: ESL 186 or placement in ESL 188
Pre-collegiate training and practice in critical reading and analytical writing, with emphasis on language structure and vocabulary development for non-native speakers of English. Research, synthesis, and documentation skills. High-advanced language skills integrated on the basis of academic tasks and content. UC/CSU

Announcement of Curricula
Noncredit Programs
General Programs
ESL Literacy  
ESL Beginning Low  
ESL Beginning Low Focus Skills  
ESL Beginning Low Oral Communication Skills  
ESL Beginning High  
ESL Beginning High Focus Skills  
ESL Beginning Intensive  
ESL Computer Assisted  
ESL Intermediate Low  
ESL Intermediate Low Focus Skills  
ESL Intermediate High  
ESL Intermediate High Focus Skills  
ESL Intermediate Oral Communication Skills  
ESL Advanced Low
Vocational ESL Programs
ESL Beginning Workplace Skills  
ESL for Health Professionals  
Beginning Low VESL Communication  
Beginning VESL for Janitorial Workers  
Beginning VESL for the Hospitality Industry  
Intermediate VESL for Clerical Workers  
Intermediate VESL for Health Workers  
Intermediate VESL for Job Searching  
VESL for Construction Workers  
Vocational ESL Office Training

General Programs
ESL Literacy Noncredit Certificate
English as a Second Language students with little or no English language skills develop basic language skills to prepare them for com
munity participation, further study, or entry-level employment.

**Learning Outcomes**

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

- Identify a limited range of simple spoken words from learned material.
- Relate personal information and basic survival needs in limited social conversation.
- Identify letters, numbers, and basic words.
- Write words, phrases, and high-frequency expressions from learned material.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Noncredit Certificate in ESL Literacy**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ESLN 3010 ESL Literacy A (175 hrs)</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3015 ESL Literacy A</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLN 3020 ESL Literacy B (175 hrs)</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 4015 ESL Literacy A Abridged</td>
<td>45.0</td>
</tr>
</tbody>
</table>

Choose one of the following Beginning High 1 courses:

- ESLN 3000 Beginning Low 1 (175 hrs) ............ 175.0
- ESLN 3005 Beginning Low 1 Abridged ............ 85.0

Total: .................................. 130.0 – 350.0

**ESL Beginning Low Noncredit Certificate**

In this certificate, English as a Second Language students develop low beginning English skills in speaking, listening, reading, and writing to prepare for limited community participation, further study, and entry-level work.

**Learning Outcomes**

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

- Interpret commonly used beginning low statements and questions in familiar contexts.
- Employ simple learned phrases and sentences to engage in basic social conversations.
- Construct general meaning from simplified reading materials on familiar topics.
- Write simple words and sentences.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Students must receive a P (Pass) for each course in the certificate.

**Courses Required for the Noncredit Certificate in ESL Beginning Low Focus Skills**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3010 ESL Beginning Low 1 (175 hrs)</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3015 Beginning Low 1</td>
<td>85.0</td>
</tr>
</tbody>
</table>

Choose one of the following core courses:

- ESLN 3120 ESL Beginning Low 1-2 Multilevel . . . 175.0
- ESLN 3150 Beginning Low 1-2 Intensive (175 hrs) . 175.0
- ESLN 3200 Beginning Low 2 (175 hrs) ............ 175.0
- ESLN 3205 Beginning Low 2 Abridged ............ 85.0

Choose one of the following focus skill courses:

- ESLF 3129 Writing Beginning Low (90) ........... 85.0
- ESLF 3128 Reading Beginning Low 85 hrs ........ 85.0
- ESLF 5125 Speaking and Listening: Beginning Low ... 85.0

Total: .................................. 170.0 – 260.0

**ESL Beginning Low Oral Communication Skills Noncredit Certificate**

Low beginning ESL students develop speaking skills in this certificate. Students practice communicating in basic conversations using simple learned phrases and sentences. This certificate prepares students for limited community participation, further study, and future entry-level work.

**Learning Outcomes**

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

- Identify general ideas in beginning low oral discourse on limited familiar topics.
- Produce low beginning language to engage in conversational exchanges on limited familiar topics.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Students must receive a P (Pass) for each course in the certificate.

**Courses Required for the Noncredit Certificate in ESL Beginning Low Oral Communication Skills**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3010 ESL Beginning Low 1 (175 hrs)</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3015 Beginning Low 1</td>
<td>85.0</td>
</tr>
</tbody>
</table>

Choose one of the following communication skills courses:

- ESLF 3144 Pronunciation Beginning (85 hrs) .... 85.0
ESLF 4127 Beginning Low Conversation (40 hrs) ........ 40.0
ESLF 5125 Speaking and Listening: Beginning Low .... 85.0
Choose one of the following core courses:
ESLN 3001 Beginning Low 1 (175 hrs) .................. 175.0
ESLN 3105 Beginning Low 1 Abridged ................. 85.0
ESLN 3201 Beginning Low 1-2 Multilevel .......... 175.0
ESLN 3200 Beginning Low 1 (175 hrs) .............. 175.0
ESLN 3205 Beginning Low 2 Abridged ............... 85.0
Total: .................................................................. 125.0 – 260.0

ESL Beginning High Noncredit Certificate

These courses in English as a Second Language develop and expand Beginning High English skills.

Learning Outcomes

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

• Identify main points and some details of spoken English in familiar contexts in spite of unfamiliar vocabulary.
• Relate information about basic needs and routine activities in common social situations in comprehensible English.
• Apply basic word analysis and vocabulary development skills to determine general meaning of simple written English text.
• Produce a paragraph of grammatically correct and related sentences about familiar topics using appropriate Beginning High language structures and forms.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in ESL Beginning High

Course ......................................................... Hours
Choose one of the following Beginning High Level 3 courses:
ESLN 3300 Beginning High 3 (175 hrs) .............. 175.0
ESLN 3305 Beginning High 3 Abridged ............. 85.0
Choose one of the following Beginning High 4 and multi-level courses:
ESLN 3340 Beginning High 4-4 Multilevel ........ 175.0
ESLN 3345 Beginning High 4-4 Multi-level L/S (85 hrs) .......... 85.0
ESLN 3340 Beginning High 3-4 Multilevel (175 hrs) .... 175.0
ESLN 3350 Beginning High 4-4 Intensive (175 hrs) ... 175.0
ESLN 3340 Beginning High 4 (175 hrs) .......... 175.0
ESLN 3345 Beginning High 4 Abridged ............. 85.0
Total: .................................................................. 170.0 – 350.0

ESL Computer Assisted Noncredit Certificate

Using digital technology and online ESL resources, students enhance intermediate level ESL listening, speaking, reading, and writing skills through computer-assisted projects. This certificate allows ESL students to expand language and digital skills to prepare them for increasing community participation, further study, and employment.

Learning Outcomes

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

• Use learned language structures and digital processes to communicate in oral interactions in an automated environment.
• Apply reading skills and digital technologies to determine meaning of written text.
• Use digital technologies and learned language structures to create simple written texts.
English as a Second Language 255

- Use digital technologies to develop language skills and conduct basic research.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester. Students must receive a P (Pass) in each course in the certificate.

Courses Required for the Noncredit Certificate in ESL Computer Assisted
Course ........................................ Hours
Choose one of the following courses:
ESLB 3006 Introduction to Computers for ESL-Intermediate .................................. 85.0
ESLB 4821 Intermediate Introduction to Computers for ESL ..................................... 45.0
ESL 3829 Computer Assisted ESL High Intermediate .................. 85.0

Choose one of the following courses:
ESLF 3006 Computer Assisted ESL (175 hrs) .................. 175.0
ESLF 3007 Computer Assisted ESL Beginning
Low (85 hrs) ........................................ 85.0
ESLF 3008 Computer Assisted ESL Beginning
High (85 hrs) ....................................... 85.0
ESLF 3020 ESL Skills Computer Lab (85 hrs) ............. 90.0
ESLF 4006 Intermediate CALL .................................. 85.0
ESLF 5006 Computer-Assisted ESL Projects (40 hrs) . 40.0
Total: .................................................. 85.0 – 260.0

ESL Intermediate Low Noncredit Certificate
This certificate in English as a Second Language allows students to develop and expand low intermediate English skills in speaking, listening, reading, and writing and prepares them for increasing community participation, further study, and employment.

Learning Outcomes
Upon completion of this program, students will be able to:
- Identify key points and supporting ideas in spoken English in familiar and some unfamiliar contexts.
- Employ low intermediate language structures and word choice to communicate in extended formal and informal conversations.
- Interpret adapted and short authentic informational and literary texts on a variety of topics.
- Write one or two organized paragraphs containing related ideas and appropriate details.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester. Students must receive a P (Pass) for each course in the certificate.

Courses Required for the Noncredit Certificate in ESL Intermediate Low
Course ........................................ Hours
Choose one of the following courses:
ESLN 3500 Intermediate Low 5 (175 hrs) .................. 175.0

Choose one of the following courses:
ESLN 3550 Intermediate Low 5-6 Intensive (175 hrs) . 175.0
ESLN 3560 Intermediate Low 5-6 (175 hrs) ............. 175.0
ESLN 3600 Intermediate Low 6 (175 hrs) ............. 175.0
Total: .................................................. 350.0

ESL Intermediate Low Focus Skills Noncredit Certificate
Low intermediate skills are emphasized for students who want focused practice in listening, speaking, reading, or writing. These courses in English as a Second Language allow students to develop and expand low intermediate English skills and prepare them for increasing community participation, further study, and employment.

Learning Outcomes
Upon completion of this program, students will be able to:
- Identify key points and supporting ideas in narrative and informational listening texts containing some unfamiliar vocabulary.
- Engage in extended conversational exchanges in formal and informal settings with increasing accuracy and fluency.
- Interpret main and supporting ideas in adapted and simple authentic narrative and informational texts in mostly familiar contexts.
- Communicate ideas and appropriate details in one or more clearly organized paragraphs.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester. Students must receive a P (Pass) for each course in the certificate.

Courses Required for the Noncredit Certificate in ESL Intermediate Low Focus Skills
Course ........................................ Hours
Choose one of the following core courses:
ESLN 3550 Intermediate Low 5-6 Intensive (175 hrs) . 175.0
ESLN 3560 Intermediate Low 5-6 (175 hrs) ............. 175.0
ESLN 3600 Intermediate Low 6 (175 hrs) ............. 175.0

Choose one of the following focus skill courses:
ESLF 3568 Reading Intermediate Low (85 hrs) ........... 85.0
ESLF 3569 Writing Intermediate Low (85 hrs) ........... 85.0
ESLF 5565 Speaking and Listening Intermediate Low . 85.0
ESLA 3565 Strategies for Success in Credit
ESL (85 hrs) ....................................... 85.0
Total: .................................................. 260.0

ESL Intermediate High Noncredit Certificate
These courses in English as a Second Language develop and expand ESL Intermediate High English skills.

Learning Outcomes
Upon completion of this program, students will be able to:
- Identify essential points in discussions and speeches on familiar and unfamiliar topics.
- Use appropriate syntax and grammatical patterns in extended conversations and interviews.
- Interpret common authentic reading material, including specialized academic or career-related texts.
- Construct brief compositions or other multi-paragraph writing on previously discussed or familiar topics, and exhibit control of basic grammatical patterns.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.
Courses Required for the Noncredit Certificate in ESL Intermediate High

Course ........................................ Hours
Choose one of the following courses:
ESLN 3700 Intermediate High 7 (175 hrs) .... 175.0
ESLN 3786 Intermediate High 7-8 Intensive 
  Reading/Writing (85 hrs) ....................... 85.0
Choose one of the following courses:
ESLN 3580 Intermediate 5-8 Multi-Level (175 hrs) . . 175.0
ESLN 3780 Intermediate High 7/8 Multi-Level . . . 175.0
ESLN 3800 Intermediate High 8 ............. 175.0
Total: ........................................ 260.0 – 350.0

ESL Intermediate High Focus Skills Noncredit Certificate

High intermediate 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 high intermediate English skills to prepare students for CTE courses, credit ESL and other credit courses, and career pathways.

Learning Outcomes
Upon completion of this program, students will be able to:
- Identify essential points of authentic extended spoken texts.
- Identify essential points of authentic extended written texts.
- Employ appropriate high intermediate structures and forms to communicate in extended spoken discourse.
- Employ appropriate high intermediate structures and forms to communicate in extended written discourse.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Students must receive a "P" (Pass) for each course in the certificate.

Courses Required for the Noncredit Certificate in ESL Intermediate Oral Communication Skills

Course ........................................ Hours
Choose one of the following communication skills courses:
ESLF 3584 Pronunciation Intermediate (85 hrs) .... 85.0
ESLF 4567 Intermediate Low Conversation (40 hrs) ... 40.0
ESLF 4787 Intermediate High Conversation (40 hrs) ... 40.0
ESLF 5565 Speaking and Listening Intermediate Low . . . 85.0
ESLF 5785 Speaking and Listening Intermediate High . . . 85.0
ESLV 3819 Social Communication (85 hrs) ............. 85.0
Choose one of the following core courses:
ESLN 3500 Intermediate Low 5 (175 hrs) ............. 175.0
ESLN 3560 Intermediate Low 5-6 (175 hrs) ............ 175.0
ESLN 3580 Intermediate Low 5-8 Multi-Level (175 hrs) ... 175.0
ESLN 3600 Intermediate Low 6 (175 hrs) ............... 175.0
Total: ........................................ 215.0 – 260.0

ESL Advanced Low Noncredit Certificate

These courses in English as a Second Language allow students to develop and expand low advanced English skills in order to participate in the community, further their studies, and seek employment.

Learning Outcomes
Upon completion of this program, students will be able to:
- Interpret informational and narrative spoken and written texts, including abstract topics in familiar contexts.
- Write multi-paragraph texts using appropriate structures and forms.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Students must receive a P (Pass) for each course in the certificate.

Courses Required for the Noncredit Certificate in ESL Advanced Low

Course ........................................ Hours
Required course:
ESLN 3900 Advanced Low 9 (175 hrs) ............. 175.0
Choose one of the following courses:
ESLN 3780 Intermediate High 7/8 Multi-Level .... 175.0
ESLN 3800 Intermediate High 8 ..................... 175.0
ESLA 3180 Introduction to Academic ESL .......... 175.0
Total: ........................................ 350.0
Vocational ESL Programs

**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 for the workplace.

**Learning Outcomes**

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

- Recall basic oral and written instructions to complete simple workplace related assignments and exercises.
- Type and proofread original or adapted ESL-level-appropriate personal business letter.
- Read, write, and pronounce vocabulary used in workplace health and safety policies.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Noncredit Certificate in ESL Beginning Workplace Skills**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3836 ESL for Customer Service</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 4842 ESL for Work Beginning</td>
<td>85.0</td>
</tr>
<tr>
<td>Total:</td>
<td>170.0 - 260.0</td>
</tr>
</tbody>
</table>

**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 workers, and others documented evidence of completion of three courses in an accelerated program in English communication for the healthcare workplace.

**Learning Outcomes**

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

- Apply strategies for recognizing and including cultural beliefs and values, as they relate to health and health care.
- Demonstrate basic understanding of health and safety in the workplace.
- Recall basic oral and written instructions to complete simple workplace related assignments and exercises.
- Use appropriate language skills with patients and co-workers.
- Use basic janitorial terminology and relate janitorial tasks.
- Apply strategies for recognizing and including cultural beliefs and values, as they relate to health and health care.
- Relate basic workers’ rights on the job.
- Demonstrate on-the-job safety practices.

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.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Noncredit Certificate 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>105.0</td>
</tr>
<tr>
<td>ESLV 3843 Healthcare Communication II</td>
<td>105.0</td>
</tr>
<tr>
<td>ESLV 3844 Healthcare Communication III</td>
<td>105.0</td>
</tr>
<tr>
<td>Total:</td>
<td>315.0</td>
</tr>
</tbody>
</table>

**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 program, students will be able to:

- Demonstrate basic understanding of health and safety in the workplace.
- Use basic janitorial terminology and relate janitorial tasks.
- Apply strategies for recognizing and including cultural beliefs and values, as they relate to health and health care.
- Relate basic workers’ rights on the job.
- Demonstrate on-the-job safety practices.
- Use basic janitorial terminology and relate janitorial tasks.
- Relate basic workers’ rights on the job.

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.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Noncredit Certificate in Beginning Low VESL Communication**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 4816 ESL for Janitors</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 4842 ESL for Work Beginning</td>
<td>85.0</td>
</tr>
<tr>
<td>Total:</td>
<td>170.0</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 for students interested in the custodial industry.

**Learning Outcomes**

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

- Identify and pronounce names of basic janitorial equipment and tools.
- Use basic janitorial terminology and relate janitorial tasks.
- Develop and expand their knowledge of beginning English skills for the workplace.
- Explore career goals and tools to assist them in advancing their career in health.
- Relate basic workers’ rights on the job.
- Demonstrate on-the-job safety practices.
- Relate basic workers’ rights on the job.
- Demonstrate on-the-job safety practices.
- Identify and pronounce names of basic janitorial equipment and tools.

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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Noncredit Certificate in Beginning VESL for Janitorial Workers**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 4816 ESL for Janitors</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 4842 ESL for Work Beginning</td>
<td>85.0</td>
</tr>
<tr>
<td>Total:</td>
<td>170.0</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 for students interested in working in the hospitality industry.

**Learning Outcomes**

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

- Identify and pronounce names of basic tools and equipment in the hospitality industry.
- Demonstrate on-the-job safety practices.
- Engage in job related communication with co-workers and supervisors on the job.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Noncredit Certificate in Beginning VESL for the Hospitality Industry**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3814 ESL for Chinese Cooking</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 3827 ESL for Hotel/Service Workers</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 3836 ESL for Customer Service</td>
<td>85.0</td>
</tr>
</tbody>
</table>

**Intermediate VESL for Clerical Workers Noncredit Certificate**

This certificate develops and expands ESL Intermediate level verbal communication skills for jobs as clerical workers. These courses in English as a Second Language develop and expand intermediate English skills for students interested in working as clerical workers.

**Learning Outcomes**

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

- Compose business messages, memorandum, 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Noncredit Certificate in Intermediate VESL for Clerical Workers**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3804 ESL for Clerical Workers</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLV 3819 Social Communication</td>
<td>85.0</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 for students interested in the health industry.

**Learning Outcomes**

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

- Identify major health care settings, terminology, and job titles.
- Engage in effective communication with workers in a medical setting, including use of small talk and idioms.
- Use appropriate language and behavior that respects cultural and gender diversity in a medical environment.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Noncredit Certificate in Intermediate VESL for Health Workers**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3835 ESL for Health Workers</td>
<td>175.0</td>
</tr>
</tbody>
</table>

**Intermediate VESL for Job Searching Noncredit Certificate**

This is an Intermediate VESL certificate for students interested in practicing job search skills. These courses in English as a Second Language develop and expand intermediate English skills.

**Learning Outcomes**

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

- Describe past 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Noncredit Certificate in Intermediate VESL for Job Searching**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3823 ESL for Job Searching</td>
<td>85.0</td>
</tr>
</tbody>
</table>
VESL for Construction Workers Noncredit Certificate

This certificate develops and expands ESL intermediate level students’ communication skills for jobs in the construction trades.

Learning Outcomes

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

- Apply basic construction terms in a variety of communication activities.
- Communicate and apply general safety practices in construction tasks.
- Ask and answer questions appropriately to clarify basic tasks in a construction work environment.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Students must receive a P (Pass) for each course in the certificate. 

Courses Required for the Noncredit Certificate in VESL for Construction Workers

Course .................................................. Hours
Choose one of the following courses:
ESLV 3831 ESL for Construction Workers (175 hrs) ........ 175.0
ESLV 3832 ESL for Construction B (85 hrs) ................. 85.0
Choose one of the following courses:
ESLV 3800 ESL for the Workplace (85 hrs) ............... 85.0
ESLV 3801 Workplace Communication (175 hrs) .......... 175.0

Total: .................................................... 170.0 – 350.0

Vocational ESL Office Training Noncredit Certificate

This certificate of completion prepares ESL students for a variety of entry-level office positions in an automated environment or further advanced studies, including business studies. Students learn basic business skills (keyboarding and office correspondence), basic business communication skills (telephone skills and job search), and basic computer applications (word processing, database management, and spreadsheets).

Learning Outcomes

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

- Identify and evaluate general office work culture in the U.S.
- Communicate effectively and respond appropriately in an office environment.
- Use basic technology to complete office procedures.
- Apply job search skills to find office work.

Admission Requirements. Completion of ESLN 3500 (Intermediate Low 5) and typing (25 wpm).

Requirements for Completion. In addition to the course requirements, students must also fulfill the following requirements: 80% minimum attendance and typing (45 wpm; 10% error rate). Students must receive a grade of C or P (Pass) for each course in the certificate.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in Vocational ESL Office Training

Course .................................................. Hours
Required courses:
ESLV 3804 VESL for Clerical Workers (175 hrs) ........... 175.0
ESLV 3801 Workplace Communication (175 hrs) ........ 175.0

Choose four of the following courses:
ESLB 3821 Introduction to Computers for ESL-Intermediate ........................................ 85.0
ESLB 3822 Keyboarding for ESL Students (175 hrs) ...... 175.0
ESLV 3822 ESL Keyboarding ................................ 85.0
ESLV 3819 Social Communication (85 hrs) ............... 85.0
ESLV 3823 ESL for Job Searching ........................... 85.0
ESLV 3829 Computer VESL High Intermediate .......... 85.0

Total: .................................................... 690.0 – 780.0

Announcement of Courses

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 3180. Introduction to Academic ESL (175 hrs)
Advisement: ESLN 3600 or placement in ESLN 3700 (Intermediate High 7)
Preparation for credit ESL courses. Training and practice in beginning academic reading, writing, listening, and speaking, with emphasis on language structure and vocabulary development for non-nativespeakers of English. Practice in reading informational and literary texts, and writing paragraphs and summaries. Language skills integrated on the basis of academic tasks and content.

ESLA 3565. Strategies for Success in Credit ESL (85 hrs)
Advisement: Completion of ESLN 3400 (Beginning Low 4)
Intermediate non-credit 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

ESLB 3821. Introduction to Computers for ESL-Intermediate (85 hrs)
Advisement: ESLN 3400 or placement in ESLN 3500 (Intermediate Low 5)
Introduction to computers for intermediate level ESL students. Overview of English terminology used in computer and digital applications: word processing software, the Internet, email, spreadsheets, presentations, and digital platforms. ESL reading, writing, speaking and listening skills are developed through a variety of projects and interactive work.

ESLB 3822. Keyboarding for ESL Students (175 hrs) (175 hrs)
Advisement: ESLN 3100 or placement in ESLN 3200 (Beginning Low 2)
Reinforcement of beginning low English language skills through introduction to computer keyboarding with materials and lessons adapted for ESL students. Development of keyboarding skills for speed and accuracy.
ESLB 4821. Intermediate Introduction to Computers for ESL (45 hrs)
Advise: ESLN 3400 or placement in ESLN 3500 (Intermediate Low 5)
A brief introduction to computers for intermediate level ESL students. Overview of English terminology used in common computer software and applications. Word processing software and digital platforms to explore the Internet, email, spreadsheets, and presentations. ESL reading, writing, speaking, and listening skills are developed through projects and interactive work.

ESLB 4822. ESL Keyboarding (85 hrs)
Advise: ESLN 3100 or placement in ESLN 3200 (Beginning Low 2)
Reinforcement of English language skills through introduction to computer keyboarding with materials and lessons especially adapted for ESL students. Development of keyboarding skills for speed and accuracy.

ESLC, Citizenship

ESLC 3031. Beginning Low Citizenship (85 hrs)
Advise: ESLN 3100 or placement in ESLN 3200
Preparation for the U.S. Citizenship test for low beginning English students. Speaking, listening, reading, and writing skills are taught to prepare for the test questions on U.S. history, government, and the Constitution given by the United States Citizenship and Immigration Service (USCIS). Offered Spring semesters

ESLC 3032. ESL/Citizenship for Multi-Level 1-4 (85 hrs)
Advise: ESLN 3100 or placement in ESLN 3200, 3300, or 3400
Preparation for the U.S. Citizenship test given by the United States Citizenship and Immigration Service (USCIS). Beginning speaking, listening, reading, and writing skills for Beginning English 1-4 level students to prepare for citizenship test questions on U.S. history, U.S. government, and the Constitution.

ESLC 3033. ESL Citizenship Intermediate 5-8 (85 hrs)
Advise: ESLN 3400 or placement in ESLN 3500 or higher
Preparation for the U.S. Citizenship test given by the United States Citizenship and Immigration Service (USCIS) for ESL Levels 5-8 students. Intermediate speaking, listening, reading, and writing skills are applied to answer test questions about U.S. history, government structure and organization, and the Constitution. Preparation for extended conversations about personal history. Offered on occasion

ESLC 4032. ESL Citizenship Multi-level 1-4 (40 hrs)
Advise: Literate in Native Language
Preparation for the U.S. Citizenship test given by the United States Citizenship and Immigration Service or ESL Levels 1-4 students. Accurate responses to test questions, both oral and simple written responses are emphasized for Beginning ESL level students.

ESL, Focus

ESLF 3002. ESL Current Events (85 hrs) (85 hrs)
Advise: ESLN 3500 or placement in ESLN 3600 (Intermediate Low 6)
Readings from a variety of sources 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. Offered on occasion

ESLF 3006. Computer Assisted ESL (175 hrs)
Advise: Completion of ESLN 3400, ESLF 3056, ESLF 3556 or equivalent language ability
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 (85 hrs)
Advise: Completion of ESLN 3010, ESLF 3057 or equivalent language ability
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 (85 hrs)
Advise: Completion of ESLN 3200 (Beginning Low 2), ESLF 3058CALL-BH (45) or equivalent language ability
Beginning level ESL listening, speaking, reading and writing skills are expanded and developed through group computer projects. Aural development, oral readiness and reading readiness are stressed. Computer terminology and basic computer skills. Offered on occasion

ESLF 3020. ESL Skills Computer Lab (6-90 hrs)
Advise: 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 3128. Reading-Beginning Low (85 hrs)
Advise: 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. Offered on occasion

ESLF 3129. Writing - Beginning Low (85 hrs)
Advise: 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. Offered on occasion

ESLF 3144. Pronunciation, Beginning (85 hrs)
Advise: Completion of ESLN 3020 (Literacy B)
Development of basic pronunciation skills through understanding of English sounds. Rhythm, stress, and intonation are introduced.

ESLF 3348. Reading - Beginning High (85 hrs)
Advise: Completion of ESLN 3200 or equivalent language ability
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 (85 hrs)
Advisement: Completion of ESLN 3200 or equivalent language ability
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 3568. Reading - Intermediate Low (85 hrs)
Advisement: 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 (85 hrs)
Advisement: Completion of ESLN 3400 (High Beginning 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 3584. Pronunciation - Intermediate (85 hrs)
Advisement: Completion of ESLN 3400 or equivalent language ability
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 3788. Reading - Intermediate High (85 hrs) (85 hrs)
Advisement: ESLN 3600 or placement in ESLN 3700 (Intermediate High 7)
High intermediate reading skill development. Comprehension and response to authentic written informational and narrative texts. Vocabulary skills development.

ESLF 3789. Writing - Intermediate High (85 hrs)
Advisement: 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. Offered on occasion

ESLF 4006. Intermediate CALL (85 hrs)
Advisement: ESLN 3400 or placement in ESLN 3500 (Intermediate Low 5)
Intermediate level English as a Second Language (ESL) listening, speaking, reading, and writing skills are developed in an interactive computer lab. Introduction to basic computer terminology and visual and digital media tools and technologies for ESL learning. Short in-class group projects.

ESLF 4127. Beginning Low Conversation (40 hrs)
Advisement: 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 (40 hrs)
Advisement: 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 (40 hrs)
Advisement: Completion of ESLN 3400 (Beginning High 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 4787. Intermediate High Conversation (40 hrs)
Advisement: Completion of ESLN 3600 (Intermediate Low 6)
Intermediate high speaking and listening skills are emphasized. Students able to read and discuss authentic material on common topics. Offered on occasion

ESLF 5006. Computer-Assisted ESL Projects (40 hrs)
Advisement: 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.

ESLF 5125. Speaking and Listening: Beginning Low (85 hrs)
Advisement: Native language literacy
Short conversations about familiar topics in familiar contexts focusing on low beginning speaking and listening.

ESLF 5345. Speaking and Listening - Beginning High (85 hrs)
Advisement: ESLN 3200 or placement in ESLN 3300 (Beginning High 3)
High beginning speaking and listening focus course. Comprehension of important points and details in spoken English. Basic conversations on a variety of topics.

ESLF 5565. Speaking and Listening - Intermediate Low (85 hrs)
Advisement: ESLN 3400 or placement in ESLN 3500 (Intermediate Low 5)
Low intermediate speaking and listening focus course. Comprehension of main ideas and details of spoken English in familiar and some unfamiliar contexts. Participation in conversations and discussions. Introduction to oral presentations.

ESLF 5785. Speaking and Listening - Intermediate High (85 hrs)
Advisement: ESLN 3400 or placement in ESLN 3700 (Intermediate High 7)
High intermediate speaking and listening focus course. Comprehension of essential points and details of spoken English. Extended conversations and discussions on a variety of topics. Oral presentation skills.

ESL, Noncredit General

ESLN 3010. ESL Literacy A (175 hrs)
Advisement: Developing literacy 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.

ESLN 3015. ESL Literacy A (85 hrs)
Advisement: Developing literacy in native language
Orientation to classroom procedures, and development of ESL literacy listening and speaking skills and pre-reading and pre-writing skills.
ESLN 3020. ESL Literacy B (175 hrs)
Advisement: Developing literacy in native language
Development of ESL literacy skills. Emphasis on English sound/symbol correspondence, and reading and writing simple English words and phrases.

ESLN 3100. Beginning Low 1 (175 hrs)
Advisement: Literate in native language
Beginning Low 1 language skills. Language for daily life and limited participation in basic social exchanges. Aural, oral, and reading readiness are stressed. Basic writing skills are introduced.

ESLN 3105. Beginning Low 1 Abridged (85 hrs)
Advisement: Native language literacy
Low beginning 1 language skills. A short course of speaking, listening, reading, and writing English in limited familiar contexts.

ESLN 3120. ESL Beginning Low 1-2 Multilevel (175 hrs)
Advisement: Literacy in native language
Beginning low language skills. Language for daily needs and participation in basic social conversations. Aural, oral, and reading skills development are emphasized. Simple writing is introduced.

ESLN 3140. Beginning 1-4 Multilevel (175 hrs)
Advisement: Placement in ESLN 3100 (Beginning Low 1)
Beginning level English skills for students with varying English language proficiencies for school, work and basic needs. Development of listening, speaking and reading skills. Production of sentences and brief paragraphs.

ESLN 3145. Beginning 1-4 Multi-level - L/S (85 hrs)
Advisement: 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 3150. Beginning Low 1-2 Intensive (175 hrs)
Advisement: 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 (175 hrs)
Advisement: ESLN 3100 or placement in ESLN 3200 (Beginning Low 2)
Beginning Low 2 language skills. Language for daily needs and participation in basic common social conversations. Aural, oral, and reading development are emphasized. Simple writing is introduced.

ESLN 3205. Beginning Low 2 Abridged (85 hrs)
Advisement: ESLN 3100 or placement in ESLN 3200 (Beginning Low 2)
Low beginning 2 language skills. A short course of speaking, listening, reading, and writing English in familiar contexts.

ESLN 3300. Beginning High 3 (175 hrs)
Advisement: ESLN 3200 or placement in ESLN 3300 (Beginning High 3)
Beginning High 3 language skills. Comprehension of spoken English in familiar contexts. Communication about basic needs and routine activities in basic conversations in common social situations. Comprehension of simplified reading texts. Sentence writing and introduction to short, simple paragraphs.

ESLN 3305. Beginning High 3 Abridged (85 hrs)
Advisement: ESLN 3200 or placement in ESLN 3300 (Beginning High 3)
High beginning 3 language skills. A short course of speaking, listening, reading, and writing English in familiar contexts.

ESLN 3340. Beginning High 3-4 Multilevel (175 hrs)
Advisement: Completion of ESLN 3200
Students develop and expand Beginning High basic level English skills. Students participate in basic conversations in familiar work and life contexts and further develop their ability to communicate about basic needs and routine activities. Sentences about life and work topics are organized into a paragraph.

ESLN 3350. Beginning High 3-4 Intensive (175 hrs)
Advisement: Completion of ESLN 3200 (Beginning High 2)
Beginning High accelerated course. Students develop comprehension of spoken English in familiar contexts and participate in simple conversations about basic needs and common activities in routine social situations. Read simplified material on familiar topics. Generate sentences to form short, loosely organized paragraphs on a familiar topic.

ESLN 3400. Beginning High 4 (175 hrs)
Advisement: ESLN 3300 or placement in ESLN 3400 (Beginning High 4)
Beginning High 4 language skills. Spoken English in familiar contexts, communication about basic needs and common activities, and conversations in routine social situations. Comprehension of simplified reading texts. Sentence development to write loosely organized paragraphs.

ESLN 3405. Beginning High 4 Abridged (85 hrs)
Advisement: ESLN 3300 or placement in ESLN 3400 (Beginning High 4)
High beginning 4 English language skills. A short course of speaking, listening, reading, and writing English in a variety of familiar contexts.

ESLN 3500. Intermediate Low 5 (175 hrs)
Advisement: ESLN 3400 or placement in ESLN 3500 (Intermediate Low 5)
Intermediate low 5 language skills. Participation in extended conversations on familiar topics. Comprehension of authentic or adapted narratives and descriptive passages. Development of short, clearly organized paragraphs.

ESLN 3550. Intermediate Low 5-6 Intensive (175 hrs)
Advisement: Completion of ESLN 3400
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 (175 hrs)
Advisement: Completion of ESLN 3400
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 (175 hrs)
Advise: Completion of ESLN 3400 or equivalent language ability
Intermediate non-credit 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 (175 hrs)
Advise: ESLN 3500 or placement in ESLN 3600 (Intermediate Low 6)

ESLN 3700. Intermediate High 7 (175 hrs)
Advise: ESLN 3600 or placement in ESLN 3700
High Intermediate 7 language skills. Extended conversations, and discussions and/or lectures. Comprehension of authentic reading material including main ideas, simple inferences and vocabulary from context. Development of organized and connected written paragraphs.

ESLN 3780. Intermediate High 7/8 Multi-Level (175 hrs)
Advise: ESLN 3600 or placement in ESLN 3700 (Intermediate High 7)
Intermediate-high language skills. Conversations, discussions, lectures and readings of increasing length and complexity. Increased fluency and grammatical accuracy in both speaking and writing. Analysis of main ideas, inference, and vocabulary in authentic written and spoken texts. Practice to increase fluency and grammatical accuracy in speaking and writing paragraphs and short compositions.

ESLN 3786. Intermediate High 7-8 Intensive - Reading/Writing (85 hrs)
Advise: 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 materials 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 (175 hrs)
Advise: ESLN 3700 or placement in ESLN 3800 (Intermediate High 8)
High Intermediate 8 language skills. Extended conversations, discussions, and lectures in special fields of interest. Comprehension of authentic reading material on a variety of topics including main ideas, inferences, vocabulary from context, and conclusions. Development of unified and cohesive written compositions.

ESLN 3900. Advanced Low 9 (175 hrs) (175 hrs)
Advise: ESLN 3800 or placement in ESLN 3900 (Advanced Low 9)
Advanced low 9 language skills. Extended conversations and discussions on a variety of topics based on authentic listening and reading material. Development of sentence-combining skills and unified, cohesive written texts.

ESLN 4015. ESL Literacy Abridged (45 hrs)
Advise: Developing literacy in native language
Short literacy course. Development of ESL literacy listening and speaking skills for basic needs and introduction to pre-reading and pre-writing skills.

ESL, Vocational

ESLV 3800. ESL for the Workplace (85 hrs)
Advise: 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. Workplace Communication (175 hrs)
Advise: 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 (175 hrs)
Advise: ESLN 3500 or placement in ESLN 3600 (Intermediate Low 6 level)
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 3814. ESL for Chinese Cooking (85 hrs)
Advise: 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 3819. Social Communication (85 hrs)
Advise: 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 3823. ESL for Job Searching (85 hrs)
Advise: ESLN 3500 or placement in ESLN 3600 (Intermediate Low 6)
Development of written and oral English skills that support a successful job search for non-native English speaking students. Emphasis is on the language required to use online job search tools, create resumes and cover letters, and interview.

ESLV 3825. VESL for Career Exploration I (45 hrs)
Advise: Completion of ESLN 3200 or equivalent language ability
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)
Advise: Completion of ESLN 3200 or equivalent language ability
Communication skills and vocabulary related to the areas of keeping a job, personal skills evaluation and development, career evaluation, and resume writing. Also see VESL 3825 (VESL for Career Exploration I)
ESLV 3827. ESL for Hotel/Service Workers (85 hrs)
ADVISE: 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. 
OFFERED ON OCCASION

ESLV 3829. Computer VESL - High Intermediate (85 hrs)
ADVISE: ESLN 3500 OR PLACEMENT IN ESLN 3600 (INTERMEDIATE LOW 6)
Communicative language skills, computer vocabulary and terminology used in the automated office environment. Computer applications for documents, spreadsheets and presentations. Additional focus will be on language development necessary for following procedures, problem-solving, and responding to computer messages.

ESLV 3830. ESL for Health Workers (175 hrs)
ADVISE: 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. 
OFFERED ON OCCASION

ESLV 3831. ESL for Construction Workers (175 hrs)
ADVISE: COMPLETION OF ESLN 3400 (BEGINNING HIGH 4) OR EQUIVALENT LANGUAGE ABILITY
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. ESL for Construction B (85 hrs)
ADVISE: COMPLETION OF ESLN 3200 (BEGINNING LOW 2) OR EQUIVALENT LANGUAGE ABILITY
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 3836. ESL for Customer Service (85 hrs)
ADVISE: COMPLETION OF ESLN 3010 OR EQUIVALENT LANGUAGE ABILITY
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.
OFFERED ON OCCASION

ESLV 3842. Healthcare Communication I (105 hrs)
ADVISE: HEALTH CARE BACKGROUND, COMPLETION OF ESLN 3600 
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. 
OFFERED EVERY THIRD SEMESTER

ESLV 3843. Healthcare Communication II (105 hrs)
ADVISE: HEALTH CARE BACKGROUND, COMPLETION OF ESLN 3600 
INTERMEDIATE LOW 6
For all health care professionals with upper intermediate English language proficiency. Develop integrated language skills for job resumés, 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. 
OFFERED EVERY THIRD SEMESTER

ESLV 3844. Healthcare Communication III (105 hrs)
ADVISE: HEALTH CARE BACKGROUND, COMPLETION OF ESLN 3600 AND ESLB 3821
Designed for all health care professionals with upper intermediate English language proficiency. Develop integrated language skills for phone and e-mail 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.
OFFERED EVERY THIRD SEMESTER

ESLV 4816. ESL for Janitors (85 hrs)
ADVISE: 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.
OFFERED ON OCCASION

ESLV 4822. Workplace Conversation Strategies (40 hrs)
ADVISE: COMPLETION OF ESLN 3300 (BEGINNING HIGH 3)
Students learn verbal and nonverbal communication strategies for successful interaction in multicultural workplaces.
OFFERED ON OCCASION

ESLV 4842. ESL for Work - Beginning (85 hrs)
ADVISE: ESLN 3200 OR PLACEMENT IN ESLN 3300 (BEGINNING HIGH 3)
Beginning level English to develop basic workplace skills and become a successful employee, including U.S. culture, health and safety, basic rights, and effective communication.
OFFERED ON OCCASION

ESLV 5822. Basic ESL for Work (22.5 hrs)
ADVISE: COMPLETION OF ESLN 3300 (BEGINNING HIGH 3)
Development of verbal and nonverbal communication strategies for successful interaction in multicultural workplaces.
OFFERED ON OCCASION

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.

Admission. Enrollment is open to all interested students.

Work Experience Training. Students in the Program may obtain field training in the horticulture or floral industries by enrolling in the appropriate work-experience course. To receive credit, students must work at least 60 hours 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 twelve 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.

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

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

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>O H 50 Introduction to Environmental Horticulture</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 56 Horticultural Machines</td>
<td>3.0</td>
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<tr>
<td>O H 76 Fall and Winter Plant Identification</td>
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Second Semester:

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<th>Course</th>
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<tr>
<td>O H 58 Greenhouse Operations</td>
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<tr>
<td>O H 77 Spring and Summer Plant Identification</td>
<td>4.0</td>
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<tr>
<td>R F 81 Flower and Foliage Identification/Culture and Care</td>
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Third Semester:

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<tr>
<td>O H 63 Soils</td>
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<tr>
<td>O H 65 Plant Propagation</td>
<td>3.0</td>
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<tr>
<td>CMST 11 Basic Public Speaking</td>
<td>3.0</td>
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<tr>
<td>R F 82 Interior Plant Identification</td>
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Fourth Semester:

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<th>Course</th>
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<tr>
<td>O H 60 Business Practices</td>
<td>3.0</td>
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<tr>
<td>O H 75 Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 97 Work Experience</td>
<td>2.0–4.0</td>
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Fourth Semester: choose one of these Landscape courses:

<table>
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<th>Units</th>
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<tbody>
<tr>
<td>O H 70A Principles of Landscape Design</td>
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<tr>
<td>O H 71A Landscape Construction</td>
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Recommended additional coursework:

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<th>Course</th>
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<td>ACCT 10 Introduction to Accounting</td>
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<tr>
<td>SMBS 135 Ownership and Operation of a Small Business</td>
<td>3.0</td>
</tr>
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</table>

Total: 42.0 – 45.0

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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Landscape Gardening and Landscape Contracting

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester:</td>
<td></td>
</tr>
<tr>
<td>O H 50 Introduction to Environmental Horticulture</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 56 Horticultural Machines</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 76 Fall and Winter Plant Identification</td>
<td>4.0</td>
</tr>
<tr>
<td>CMST 11 Basic Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester:</td>
<td></td>
</tr>
<tr>
<td>O H 53A Beginning Landscape Horticulture</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 63 Soils</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 75 Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 77 Spring and Summer Plant Identification</td>
<td>4.0</td>
</tr>
<tr>
<td>Third Semester:</td>
<td></td>
</tr>
<tr>
<td>O H 53B Advanced Landscape Horticulture</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 70A Principles of Landscape Design</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 71A Landscape Construction</td>
<td>4.0</td>
</tr>
<tr>
<td>Fourth Semester:</td>
<td></td>
</tr>
<tr>
<td>O H 60 Business Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 70B Advanced Principles of Landscape Design</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 71B Landscape Construction</td>
<td>4.0</td>
</tr>
<tr>
<td>O H 97 Work Experience</td>
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<tr>
<td>Recommended additional coursework: ACCT 10 Introduction to Accounting</td>
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</tr>
<tr>
<td>SMBS 135 Ownership and Operation of a Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>49.0</td>
</tr>
</tbody>
</table>

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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Nursery and Garden-Center Operation

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester:</td>
<td></td>
</tr>
<tr>
<td>O H 50 Introduction to Environmental Horticulture</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 56 Horticultural Machines</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 76 Fall and Winter Plant Identification</td>
<td>4.0</td>
</tr>
<tr>
<td>Second Semester:</td>
<td></td>
</tr>
<tr>
<td>O H 63 Soils</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 75 Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 77 Spring and Summer Plant Identification</td>
<td>4.0</td>
</tr>
<tr>
<td>Third Semester:</td>
<td></td>
</tr>
<tr>
<td>O H 65 Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>CMST 11 Basic Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 70A Principles of Landscape Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Fourth Semester:</td>
<td></td>
</tr>
<tr>
<td>O H 60 Business Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 71A Landscape Construction</td>
<td>4.0</td>
</tr>
<tr>
<td>O H 97 Work Experience</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended additional coursework: ACCT 10 Introduction to Accounting</td>
<td>5.0</td>
</tr>
<tr>
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<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>39.0</td>
</tr>
</tbody>
</table>

Certificate Curricula

The programs of study in Environmental Horticulture are 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.

**Commercial Cut-Flower Greenhouse Production Certificate**

The program of study for this certificate is designed to give students both broad and specialized training for entry level employment or to add to their capabilities in commercial cut-flower greenhouse production.

**Admission.** Enrollment is open to all interested students.

**Employment.** A number of entry-level positions are open to those who complete training in this field. Students who complete the requirements in greenhouse operation are qualified for employment in sales work and in various kinds of horticultural production.

**Learning Outcomes**

Upon completion of this program, 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.

**Requirements for the Certificate of Achievement.** Students may obtain this certificate by completing each of the following courses with a final grade of “C” or higher.

**Credit Toward Graduation.** All credit that students earn in obtaining this certificate may also be applied toward satisfaction of the requirements for graduation from the College.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Commercial Cut-Flower Greenhouse Production**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>O H 50 Introduction to Environmental Horticulture</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 56 Horticultural Machines</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 60 Business Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 63 Soils</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 75 Pest Management</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 76 Fall and Winter Plant Identification</td>
<td>4.0</td>
</tr>
<tr>
<td>O H 77 Spring and Summer Plant Identification</td>
<td>4.0</td>
</tr>
<tr>
<td>CMST 11 Basic Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 58 Greenhouse Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>O H 65 Plant Propagation</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td>32.0</td>
</tr>
</tbody>
</table>

**Landscape Construction Certificate**

The program of study for this certificate is designed to give students both broad and specialized training for entry level employment or to add to their capabilities in landscape design.

**Admission.** Enrollment is open to all interested students.

**Employment.** A number of entry-level positions are open to those who complete training in this field.

**Learning Outcomes**

Upon completion of this program, 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.

**Requirements for the Certificate of Achievement.** Students may obtain this certificate by completing each of the following courses with a final grade of “C” or higher.

**Credit Toward Graduation.** All credit that students earn in obtaining this certificate may also be applied toward satisfaction of the requirements for graduation from the College.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Landscape Construction**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>O H 71A Landscape Construction</td>
<td>4.0</td>
</tr>
<tr>
<td>O H 71B Landscape Construction</td>
<td>4.0</td>
</tr>
<tr>
<td>Total</td>
<td>34.0</td>
</tr>
</tbody>
</table>

**Landscape Design Certificate**

The program of study for this certificate is designed to give students both broad and specialized training for entry level employment or to add to their capabilities in landscape design.

**Admission.** Enrollment is open to all interested students.

**Employment.** A number of entry-level positions are open to those who complete training in this field.

**Learning Outcomes**

Upon completion of this program, 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.

**Requirements for the Certificate of Achievement.** Students may obtain this certificate by completing each of the following courses with a final grade of “C” or higher.

**Credit Toward Graduation.** All credit that students earn in obtaining this certificate may also be applied toward satisfaction of the requirements for graduation from the College.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.
Courses Required for the Certificate of Achievement in Landscape Design

Course ................................................. Units
Required courses:
O H 50 Introduction to Environmental Horticulture . . . . . 3.0
O H 56 Horticultural Machines ............................. 3.0
O H 60 Business Practices .................................. 3.0
O H 63 Soils ............................................. 3.0
O H 75 Pest Management .................................. 3.0
O H 76 Fall and Winter Plant Identification ............... 4.0
O H 77 Spring and Summer Plant Identification .......... 4.0
CMST 11 Basic Public Speaking .......................... 3.0
O H 70A Principles of Landscape Design ................. 3.0
O H 70B Advanced Principles of Landscape Design .... 3.0
Total: ................................................................ 32.0

Landscape Maintenance Certificate

The program of study for this certificate is designed to give students both broad and specialized training for entry level employment or to add to their capabilities in landscape maintenance.

Admission. Enrollment is open to all interested students.

Employment. A number of entry-level positions are open to those who complete training in this field. Students who complete the requirements in landscape maintenance may work as self-employed maintenance gardeners or take State and City civil service examinations for the position of maintenance gardener

Learning Outcomes

Upon completion of this program, 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.

Requirements for the Certificate of Achievement. Students may obtain this certificate by completing each of the following courses with a final grade of “C” or higher.

Credit Toward Graduation. All credit that students earn in obtaining this certificate may also be applied toward satisfaction of the requirements for graduation from the College.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Landscape Maintenance

Course ................................................. Units
Required courses:
O H 50 Introduction to Environmental Horticulture . . . . . 3.0
O H 56 Horticultural Machines ............................. 3.0
O H 60 Business Practices .................................. 3.0
O H 63 Soils ............................................. 3.0
O H 75 Pest Management .................................. 3.0
O H 76 Fall and Winter Plant Identification ............... 4.0
O H 77 Spring and Summer Plant Identification .......... 4.0
CMST 11 Basic Public Speaking .......................... 3.0
O H 53A Beginning Landscape Horticulture .............. 3.0
O H 53B Advanced Landscape Horticulture ............... 3.0
Total: ................................................................ 32.0

Nursery and Garden-Center Operation Certificate

The program of study for this certificate is designed to give students both broad and specialized training for entry level employment or to add to their capabilities in nursery and garden-center operation.

Admission. Enrollment is open to all interested students.

Employment. A number of entry-level positions are open to those who complete training in this field. Students who complete the requirements in nursery and garden-center operation are qualified for employment in sales work and in various kinds of horticultural production.

Learning Outcomes

Upon completion of this program, 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.

Requirements for the Certificate of Achievement. Students may obtain this certificate by completing each of the following courses with a final grade of “C” or higher.

Credit Toward Graduation. All credit that students earn in obtaining this certificate may also be applied toward satisfaction of the requirements for graduation from the College.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Nursery and Garden-Center Operation

Course ................................................. Units
Required courses:
O H 50 Introduction to Environmental Horticulture . . . . . 3.0
O H 56 Horticultural Machines ............................. 3.0
O H 60 Business Practices .................................. 3.0
O H 63 Soils ............................................. 3.0
O H 75 Pest Management .................................. 3.0
O H 76 Fall and Winter Plant Identification ............... 4.0
O H 77 Spring and Summer Plant Identification .......... 4.0
CMST 11 Basic Public Speaking .......................... 3.0
Total: ................................................................ 26.0

Floristry

Floristry Major (AS)

Instruction in retail floristry is offered in cooperation with the American Institute of Floral Designers, 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, the art of arranging and
selling them to the public, and 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:

- Arrange floral project proficiently and artistically.
- Identify, select, and purchase plants and flowers appropriate for floral design products and retail business
- Apply management practices necessary to operate a floral business.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Floristry

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester:</td>
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</tr>
<tr>
<td>R F 80A Flower Shop Procedures and Basic Designs</td>
<td>5.0</td>
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<tr>
<td>R F 81 Flower and Foliage Identification/Culture and Care</td>
<td>2.0</td>
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<tr>
<td>One of the following:</td>
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<tr>
<td>R F 85A Introduction to Floral Design Spring</td>
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<tr>
<td>R F 85B Introduction to Floral Design-Summer</td>
<td>2.0</td>
</tr>
<tr>
<td>R F 85C Introduction to Flower Arranging Fall</td>
<td>2.0</td>
</tr>
<tr>
<td>R F 85D Introduction to Flower Arranging Winter</td>
<td>2.0</td>
</tr>
<tr>
<td>Second Semester:</td>
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<tr>
<td>ACCT 10 Introduction to Accounting</td>
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</tr>
<tr>
<td>R F 80B Intermediate Floral Design</td>
<td>5.0</td>
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<tr>
<td>R F 82 Interior Plant Identification</td>
<td>3.0</td>
</tr>
<tr>
<td>Third Semester:</td>
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<tr>
<td>R F 80C Advanced Floral Design</td>
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<tr>
<td>R F 86A Beginning Oriental Flower Arrangement</td>
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<tr>
<td>R F 98 Retail Floristry Work Experience</td>
<td>3.0</td>
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<tr>
<td>Fourth Semester:</td>
<td></td>
</tr>
<tr>
<td>R F 84 Flower Shop Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>R F 98 Retail Floristry Work Experience</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 122 Professional Selling</td>
<td>3.0</td>
</tr>
<tr>
<td>or MRKT 140 Introduction to Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>or MRKT 170 Advertising and Integrated Marketing Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended additional coursework:</td>
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</tr>
<tr>
<td>ART 130A Basic Drawing</td>
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</tr>
<tr>
<td>BSEN 74 Written Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>BSEN 76 Business and Technical Report Writing</td>
<td>3.0</td>
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<tr>
<td>BSL 1 Business Law I</td>
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<tr>
<td>SMB 135 Ownership and Operation of a Small Business</td>
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<tr>
<td>PSYC 26 Applied Psychology</td>
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<tr>
<td>Total: 38.5 – 42.5</td>
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</tr>
</tbody>
</table>

Announcement of Courses

Environmental Horticulture

Credit, Degree Applicable Courses:

O H 50. Introduction to Environmental Horticulture (3)  Lec-35, Lab-52.5, 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. UC/CSU

O H 53A. Beginning Landscape Horticulture (3)  Lec-35, Lab-70, 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 55. Tree Care (3)  Lec-35, Lab-52.5, field trips
P/NP available
ADVISE: O H 50 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-35, Lab-52.5, 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 58. Greenhouse Operations (3)  Lec-35, Lab-52.5, field trips
ADVISE: 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. Management of growing medium, irrigation, fertilization, temperature, growth regulators, CO2, and light. Alternative cropping systems, post-production storage and handling discussed. Crops surveyed include foliage, cut flowers, potted flowering plants and bedding plants. CSU

Offered Fall Semesters
O H 60. Business Practices in Environmental Horticulture (3)
Lec-52.5
Introduces students to the fundamentals required to run a horticultural enterprise. Addresses issues facing horticultural entrepreneurs as well as management challenges faced in larger horticultural businesses. Emphasis is on landscape-related businesses. Guest speakers from landscape design and construction, landscape maintenance, arboriculture, consulting, restoration management, nursery operations and others.
**Offered Fall semesters**

O H 63. Soils (3)
Lec-35, Lab-52.5, field trips
Advis: 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
**Offered Spring semesters**

O H 65. Plant Propagation (3)
Lec-35, Lab-52.5, field trips
Advis: 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
**Offered Spring semesters**

O H 66. Irrigation (3)
Lec-35, Lab-52.5, field trips
Advis: O H 50 and 53A, or demonstration of exit skills
Basics of design, installation and maintenance of sprinkler and drip irrigation systems. Nursery and greenhouse irrigation discussed; emphasis on landscape irrigation. Topics include establishing hydrozones, backflow prevention, calculating pressure and flow requirements, system design and installation, equipment and fittings, automatic control systems and water conservation technologies. CSU
**Offered Fall semesters**

O H 70A. Principles of Landscape Design (3)
Lec-35, Lab-52.5, 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.
**Offered Fall semesters**

O H 70B. Advanced Principles of Landscape Design (3)
Lec-35, Lab-52.5, field trips
Advis: O H 70A
The process of advanced landscape design. Emphasis on three dimensional visualization using the Sketchup program, irrigation and lighting plans, permaculture and sustainability principles, the making of models, use of brush and ink and hands-on work of design-build projects. CSU
**Offered Spring semesters**

O H 71A. Landscape Construction (4)
Lec-35, Lab-105, 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-35, Lab-105, 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-52.5, field trips
Advis: 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
**Offered Spring semesters**

O H 76. Fall and Winter Plant Identification (4)
Lec-70, 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. UC/CSU
**Offered Fall semesters**

O H 77. Spring and Summer Plant Identification (4)
Lec-70, 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. UC/CSU
**Offered Spring semesters**

O H 91. Independent Study (1)
Lab-52.5, field trips
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 92. Independent Study (2)
Lab-105, field trips
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 93. Independent Study (3)
Lab-17.5, field trips P/NP available
Prereq.: 6 units of O H course work and project approval
Independent research on a special topic in environmental horticulture. Opportunity 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 (2-4)
Lec-17.5, work-60-225
Advise: Completion of or concurrent enrollment in: a floristry or horticulture course and/or approval of the EH/F Dept work experience coordinator
Repeat max. 12 units
Field application of principles taught in horticulture classes. A supervised work experience program with cooperating employers, providing hands-on experience and transition into commercial practice. Students acquire job experience in their chosen field of horticulture. Preparation of portfolios and resumes. Career development skills and practical workplace skills related to horticulture industry. CSU

O H 101. Garden Practices (3)
Lec-52.5 P/NP available
Topics include basic tools, soil, composting, planning a garden adapted to microclimates, plant selection, seed germination, transplanting, watering and water conservation, integrated pest management, maintenance and pruning. Plants discussed will include annuals, bulbs, perennials, groundcovers, lawns, shrubs, trees, vegetables, drought-tolerant plants, and houseplants. Appropriate for all interested in gardening. CSU

O H 111A. Year-Round Garden Color (1)
Lec-17.5, field trips P/NP available
Includes selecting and planting colorful, harmonious combinations of annuals, perennials, groundcovers, lawns, shrubs, trees, vegetables, drought-tolerant plants, and houseplants. Appropriate for all interested in gardening. CSU

O H 111B. Growing Orchids (1)
Lec-17.5, field trips
Cultural needs of individual orchids, including materials needed and how to grow, pot, divide and water many different kinds of orchids. Troublesome ailments, diseases and pests coupled with solutions and cures. CSU

O H 111C. Container Gardening (1)
Lec-17.5, field trips P/NP available
Introduction to use and care of landscape container plantings, design considerations, container types, installation and maintenance practices unique to container culture, and plant materials well suited to use in containers, for both commercial and residential settings. CSU

O H 111D. Introduction to Xeriscaping (1)
Lec-17.5 P/NP available
Advise: O H 50
Theory and practice of water conservation in the landscape through the use of drought tolerant plants, efficient irrigation and appropriate design. CSU

Floristry
Credit, Degree Applicable Courses:

R F 80A. Flower Shop Procedures and Basic Designs (5)
Lec-52.5, Lab-105, 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

Offered Fall semesters

R F 80B. Intermediate Floral Design (5)
Lec-70, Lab-52.5, field trips
Advise: 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 (4)
Lec-70, Lab-17.5, field trips
Advise: 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, arrangements and display design. CSU

R F 81. Flower and Foliage Identification/Culture and Care (2)
Lec-35
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

Offered on occasion

R F 81A. Fall and Winter Flower and Foliage Identification/Culture and Care (2)
Lec-35
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. Focus is on crops available in the fall and winter. CSU

Offered Fall semesters

R F 81B. Spring and Summer Flower and Foliage Identification/Culture and Care (2)
Lec-35
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. This course will focus on crops available in the spring and summer. CSU

Offered Spring semesters

R F 82. Interior Plant Identification (3)
Lec-52.5, 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

Offered on occasion
R F 84. Flower-Shop Operations (3)
Lec-52.5, 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
Offered Fall semesters

R F 85A. Introduction to Floral Design - Spring (2)
Lec-35, Lab-17.5
Introduction to basic flower arranging for Spring, flower and foliage use, care and handling of Spring fresh materials, use of Spring ever-lasting materials, flower forms, types and use of containers. Basic historical periods and styles of Spring decorating for beginners. CSU

R F 85B. Introduction to Floral Design-Summer (2)
Lec-35, Lab-17.5
Introduction to basic flower arranging for Summer, flower and foliage use, care and handling of Summer fresh materials, use of Summer ever-lasting materials, flower forms, types and use of containers. Basic historical periods and styles of Summer decorating for beginners. CSU

R F 85C. Introduction to Flower Arranging Fall (2)
Lec-35, Lab-17.5
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
Offered on occasion

R F 85D. Introduction to Flower Arranging Winter (2)
Lec-35, Lab-17.5
Introduction to basic flower arranging for Winter. 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 Winter for beginners. CSU

R F 86A. Beginning Oriental Style Flower Arranging (1.5)
Lec-17.5, Lab-35
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
Students provide own materials. Formerly RF 86

R F 86B. Oriental Flower Arrangement II (1.5)
Lec-17.5, Lab-35, field trips
Prereq.: RF 86A or demonstration of exit skills
Second level of understanding and appreciation of Oriental Style flower arrangement, known as Ikebana. Variations of beginning designs, experimentation, technique, exploration, and critique intended to develop creativity and manipulation of floral materials at the next level from RF 86A. CSU

R F 86C. Oriental Flower Arrangement III (1.5)
Lec-17.5, Lab-35, field trips
Prereq.: RF 86B or demonstration of exit skills
Third level of understanding and appreciation of Oriental Style flower arrangement, known as Ikebana. Variations of beginning and second level designs, experimentation, technique, exploration, and critique intended to develop creativity and manipulation of floral materials at the next level from RF 86 A and B. CSU

R F 86D. Oriental Flower Arrangement IV (1.5)
Lec-17.5, Lab-35, field trips
Prereq.: RF 86C or demonstration of exit skills
Fourth level of understanding and appreciation of Oriental Style flower arrangement, known as Ikebana. Variations of beginning, second and third level designs, experimentation, technique, exploration, and critique intended to develop creativity and manipulation of floral materials at the next level from RF 86 A, B and C. CSU

R F 88. Designs in Floristry (2.5)
Lec-35, Lab-35, field trips
Advise: Concurrent enrollment in a RF or other floristry course and/or experience in horticulture or floristry
An in-service training for those engaged in the field of floristry and/or enrolled in Retail Floristry. Guest lecturer-demonstrators. Design work and topics such as trends in such topics as body flowers, new techniques, internationally influenced design styles, memorial flowers, special events, weddings, competition, and exhibition designs. CSU
Offered Spring semesters

R F 98. Retail Floristry Work Experience (2-6)
Lec-17.5, work- 60-300
Advise: Completion of or concurrent enrollment in: A floristry or horticulture course and/or approval of the EH/F Dept work experience coordinator
Repeat max. 12 units
A supervised work-experience program at an approved florist or related business. Designed to provide the student 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/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.

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 this program, students 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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Fashion Merchandising

Course: ................................. Units

Required courses:
- FASH 42 Introduction to the Fashion Industry .............. 3.0
- FASH 44 Fashion Retail Buying ................................... 3.0
- FASH 46 Fashion Merchandising ............................... 3.0
- FASH 47 Fashion Direction and Coordination .............. 3.0
- FASH 48 Fashion Show Production ............................ 4.0
- FASH 49 Visual Merchandising ................................... 3.0
- FASH 53 Fashion Forecasting ................................... 3.0
- FASH 54A Fashion Styling ........................................ 3.0
- FASH 56 Fashion Writing & Publicity .......................... 3.0
- FASH 60 Fieldwork Fashion Merchandising .................. 1.0
- BSMA 68 Mathematics of Business ............................ 3.0

Choose one of the following courses:
- FASH 22 Textile Analysis ........................................ 3.0
- FASH 57 Fabric Glossary ........................................ 1.0

Choose one of the following courses:
- FASH 50 Runway: The Business of Modeling ................ 3.0
- FASH 54B Advanced Fashion Styling ........................ 3.0
- FASH 45A Image Consulting ..................................... 3.0

Choose one of the following work experience courses:
- FASH 61 Fashion Merchandising/Marketing Internship .... 2.0
- FASH 62 Work Experience in Image Consulting ............ 3.0

Recommended additional coursework:
- ACCT 1, ACCT 10; ART 101-108, 138; BSEN 70, BSEN 74; CMST 11, CMST 12; FASH 23; MRKT 122, MRKT 140, MRKT 148, MRKT 170; MABS 101, MABS 405, MABS 406; SMBS 135; SMBU 9415, SMBU 9421.

Total: ............................................. 38.0 – 41.0

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 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.
- Identify criteria for entry level employment in the fashion industry, create an entrepreneurial fashion business, or be successful in the next level of fashion coursework, should they choose to continue.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Fashion Design

Course: ............................................. Units

First Semester (Fall):
- FASH 15A Apparel Construction I .................. 3.0
- FASH 21 Fashion Careers ................................. 1.0
- FASH 22 Textile Analysis .................................. 3.0
- FASH 27 Fashion Draping .................................... 3.0
- FASH 35A Fashion Illustration I ....................... 3.0

Second Semester (Spring):
- FASH 15B Apparel Construction 2 .................. 3.0
- FASH 23 Fashion History .................................. 3.0
- FASH 26 Flat Pattern Design I ......................... 3.0
- FASH 36A Fashion Design I .............................. 3.0

Third Semester (Fall):
- FASH 15C Apparel Construction 3 .................. 3.0
- FASH 35B Fashion Illustration II ..................... 3.0
- FASH 55 Icons of Contemporary Fashion .......... 3.0
- FASH 67 Computerized Pattern Development ....... 3.0

Fourth Semester (Spring):
- FASH 33 Portfolio for Fashion Design ............... 3.0
- FASH 37 Flat Pattern Design II ....................... 3.0
- FASH 51 Creating a Garment Business ............... 3.0
- FASH 63 Fashion Design & Production Internship ... 2.0
FASH 112 Digital Illustration for Fashion .................. 3.0

Recommended additional coursework
ART 125A, 125B, 132A, 132B; FASH 29, 34, 42, 46, 53, 54, 66; VMD 105, 150, 154

Total: .................................................. 51.0

Apparel Construction Certificate

The Apparel Construction Certificate of Accomplishment takes students from basic sewing skills through the advanced construction techniques and sequences used to sew complex garments. Students will learn both home and industry methods for proper garment construction and fitting.

Learning Outcomes
Upon completion of this program, students will be able to:

- Read a fashion production pattern.
- Construct multiple types of garments from a wide variety of fabrics.
- Analyze and apply the appropriate order of construction techniques, and equipment to complete a variety of garments.
- Achieve proper fit for multiple garments.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Apparel Construction

Course .......................................................... Units
Required courses:
FASH 15A Apparel Construction 1 .................. 3.0
FASH 15B Apparel Construction 2 .................. 3.0
FASH 15C Apparel Construction 3 .................. 3.0
FASH 16 Garment Fitting Techniques .............. 3.0
FASH 57 Fabric Glossary ............................. 1.0

Choose one of the following courses:
FASH 26 Flat Pattern Design I .................. 3.0
FASH 27 Fashion Draping .................. 3.0

Total: .................................................. 16.0

Advanced Apparel Techniques Certificate

Certain segments of the fashion industry use specialized skills and materials not used in other forms of garment production. The advanced Apparel Techniques Certificate of Accomplishment teaches the student these specialized and advanced techniques, and prepares the student to utilize them in either production or custom settings.

Learning Outcomes
Upon completion of this program, students will be able to:

- Construct complex garments from a wide variety of challenging fabrics.
- Employ appropriate hand and machine techniques for intimates, suiting, daywear and eveningwear.
- Achieve proper fit for a wide variety of garments.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Advanced Apparel Techniques

Course .......................................................... Units
Required courses:
FASH 17 Custom Tailoring .................. 3.0
FASH 74 Haute Couture Sewing Techniques .......... 3.0
FASH 69 Basic Pant Draft .................. 1.0
FASH 72 Drafting a Sloper (Moulage) .............. 1.0
FASH 73 Sewing with Knit and Stretch Fabrics ........ 1.0

Total: .................................................. 9.0

Fashion Design Certificate

Students may receive a Certificate of Achievement in Fashion Design. The curriculum in Fashion Design, a two-year course of study 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.
- Identify the criteria for entry level employment in the fashion industry, create an entrepreneurial fashion business, or be successful in the next level of fashion coursework, should they choose to continue.

The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Fashion Design

Course .......................................................... Units
First Semester (Fall):
FASH 15A Apparel Construction I .................. 3.0
FASH 21 Fashion Careers .................. 1.0
FASH 22 Textile Analysis .................. 3.0
FASH 27 Fashion Draping .................. 3.0
FASH 35A Fashion Illustration I .................. 3.0

Second Semester (Spring):
FASH 15B Apparel Construction 2 .................. 3.0
FASH 23 Fashion History .................. 3.0
FASH 26 Flat Pattern Design I .................. 3.0
FASH 36A Fashion Design I .................. 3.0
Third Semester (Fall):
FASH 15C Apparel Construction 3 .......................... 3.0
FASH 35B Fashion Illustration II ............................. 3.0
FASH 55 Icons of Contemporary Fashion ..................... 3.0
FASH 67 Computerized Pattern Development ................. 3.0

Fourth Semester (Spring):
FASH 33 Portfolio for Fashion Design
and Merchandising ........................................... 3.0
FASH 37 Flat Pattern Design II ............................... 3.0
FASH 51 Creating a Garment Business ......................... 3.0
FASH 63 Fashion Design & Production Internship ............ 2.0
FASH 112 Digital Illustration for Fashion ..................... 3.0

Recommended additional coursework:
ART 125A, 125B, 132A, 132B; FASH 29, 34, 42, 46, 53, 54, 66; VMD 105, 150, 154
Total: .................................................. 51.0

**Fashion Illustration Certificate**

The Certificate of Accomplishment in Fashion Illustration prepares the student to communicate in the global language of fashion illustration, be it technical or artistic.

**Learning Outcomes**

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

- Render artistically a variety of garments on a variety of body types in different media.
- Create technical drawings that accurately communicate design and construction details for apparel production.
- Apply the principles and history of fashion design in creating a fashion collection.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Fashion Illustration**

Course .................................................. Units

Required courses:
FASH 35A Fashion Illustration I ............................... 3.0
FASH 35B Fashion Illustration II ............................. 3.0
FASH 112 Digital Illustration for Fashion .................... 3.0
FASH 36A Fashion Design I ................................ 3.0

Choose one of the following courses:
FASH 55 Icons of Contemporary Fashion .................. 3.0
FASH 23 Fashion History ..................................... 3.0
Total: .................................................. 15.0

**Fashion Merchandising Certificate**

The Certificate of Achievement in Fashion Merchandising 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 program, students 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.

The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Fashion Merchandising**

Course .................................................. Units

Required courses:
FASH 42 Introduction to the Fashion Industry ............... 3.0
FASH 44 Fashion Retail Buying ................................ 3.0
FASH 46 Fashion Merchandising .............................. 3.0
FASH 47 Fashion Direction and Coordination ............... 3.0
FASH 48 Fashion Show Production .......................... 4.0
FASH 49 Visual Merchandising ............................... 3.0
FASH 53 Fashion Forecasting ................................ 3.0
FASH 54A Fashion Styling .................................... 3.0
FASH 56 Fashion Writing & Publicity ......................... 3.0
FASH 60 Fieldwork Fashion Merchandising .................. 1.0
BSMA 68 Mathematics of Business .......................... 3.0

Choose one of the following courses:
FASH 22 Textile Analysis ..................................... 3.0
FASH 57 Fabric Glossary .................................... 1.0

Choose one of the following courses:
FASH 50 Runway: The Business of Modeling ............... 3.0
FASH 54B Advanced Fashion Styling ......................... 3.0
FASH 45A Image Consulting .................................. 3.0

Choose one of the following work experience courses:
FASH 61 Fashion Merchandising/Merchandising Internship 2.0
FASH 62 Work Experience in Image Consulting .............. 3.0

Recommended additional coursework:
ACCT 1, ACCT 10; ART 101-118, ART 138; BSEN 70, BSEN 74; CMST 11; FASH 23, FASH 28; MRKT 122, MRKT 140, MRKT 170; PSYC 26
Total: .................................................. 38.0 – 41.0

**Fashion Portfolio Certificate**

The Fashion Portfolio Certificate of Accomplishment takes students from the fundamentals of design, through the development of a design philosophy that captures their design identity. Upon completion, students will have a professional portfolio to aid them in their chosen career path.

**Learning Outcomes**

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

- Formulate and communicate a design philosophy.
- Create a collection that includes fabric and color stories based on a design philosophy.
- Create a body of work culminating in a professional portfolio.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.
The Patternmaking Certificate of Accomplishment prepares the student to create patterns for a variety of garments that meet industry standards for production. Students learn different methodologies of developing patterns from sketches or samples.

Learning Outcomes
Upon completion of this program, students will be able to:
- Interpret a design and create a pattern for that design using a variety of methodologies.
- Create patterns that employ standard industry pattern terminology and symbols for garment production.
- Apply the principles of pattern grading to develop a full size range for patterns.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Patternmaking

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>FASH 15A Apparel Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 26 Flat Pattern Design</td>
<td>3.0</td>
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<tr>
<td>FASH 27 Fashion Draping</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 37 Flat Pattern Design II</td>
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<tr>
<td>FASH 29 Pattern Grading</td>
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Total: 10.0 – 11.0
Choose one of the following courses:
FASH 67A Computerized Pattern Development:PAD . . 3.0
FASH 67B Computerized Pattern Development: Gerber . 3.0
Total: .................................................. 16.0

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 program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Textiles

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<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>FASH 15A Apparel Construction I</td>
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<td>FASH 22 Textile Analysis</td>
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<td>FASH 25A Weaving I</td>
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<td>FASH 25B Weaving II</td>
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<td>FASH 25C Weaving 3</td>
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<tr>
<td>FASH 64 Textile Design Printing Techniques</td>
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<td>FASH 65 Textile Design Dye and Fabrication</td>
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<td>FASH 71 Creating &amp; Upcycling Wearable Art</td>
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Recommended additional coursework:

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<th>Course</th>
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<tr>
<td>ART 125A Basic Design</td>
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<tr>
<td>ART 125B Advanced Design: 3D</td>
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<tr>
<td>ART 126 Color</td>
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</table>

Total: .................................................. 22.0

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 program, 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in Textile, Weaving and Sewing

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>FASH 6008 Weaving, Tapestry</td>
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<tr>
<td>FASH 6014 Fashion Sewing and Alterations</td>
<td>108.0</td>
</tr>
<tr>
<td>FASH 6025 Quiltmaking</td>
<td>54.0</td>
</tr>
</tbody>
</table>

Total: .................................................. 234.0

Announcement of Courses

Credit, Non-Degree Applicable Course:
FASH A. Introduction to Sewing (1)
Lec-12, Lab-20 P/NP available
Introduction to sewing. Students will learn the basics of sewing machines, how to make minor repairs 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-35, Lab-52.5 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)
Lec-35, Lab-52.5 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)
Lec-35, Lab-52.5, field trips 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

Offered Spring Semesters

FASH 16. Garment Fitting Techniques (3)
Lec-35, Lab-52.5, field trips P/NP available
Prereq.: FASH 15A
Advise: FASH 27
Introduction to fitting on a live model. Students will learn to identify and correct fitting problems on sample muslin garments, including bodices, skirts, pants and jackets. Students will then learn how to transfer those adjustments to the pattern and use draping techniques to create well fitting production patterns. Fitting issues for knit and stretch fabrics will also be addressed. CSU

FASH 17. Custom Tailoring (3)
Lec-35, Lab-52.5 P/NP available
Prereq.: FASH 15B
Advise: FASH 16 and FASH 26
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 Offered on occasion

FASH 21. Fashion Careers (1)
Lec-17.5, field trips P/NP available
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-52.5 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. UC/CSU Offered Fall semesters

FASH 23. Fashion History (3)
Lec-52.5, field trips P/NP available
Chronological study of costumes in western civilization from antiquity to the late 20th century, including social, economic and political influences on historic costume. Analysis of contemporary fashion design as influenced by historic styles. CSU Offered Spring semesters

FASH 25A. Weaving I (2)
Lec-17.5, Lab-52.5
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-17.5, Lab-52.5
Advise: FASH 25A
Advanced weave structures, equipment and finishing techniques are integrated in this class to design and weave original textiles. Computer designing and yarn selection are emphasized to weave fabrics suitable for fashion and interiors. CSU

FASH 25C. Weaving III (3)
Lec-35, Lab-52.5, field trips
Advise: FASH 25B PREREQ: FASH 25B
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 for fashion and interiors. CSU

FASH 26. Flat Pattern Design I (3)
Lec-35, Lab-52.5, 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-35, Lab-52.5, field trips P/NP available
Learn to create clothing designs from scratch by manipulating fabrics in 3-D on a mannequin and marking them to create pattern pieces. Draping is an essential skill for any designer and in this class you will learn how to make a basic dress with sleeves, a bias cut gown, a corset and other garments from an industry professional. Sewing is required. CSU

FASH 28. The Social Meaning of Clothing (3)
Lec-52.5 P/NP available
Analysis of the social meanings and expectations associated with dress and behavior in various cultures and subcultures. An exploration of essential topics such as gender, celebrity, social hierarchy, art, cultural norms and violation of cultural norms. UC/CSU Offered Fall semesters

FASH 29. Pattern Grading (1)
Lec-8.75, Lab-26.25, 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 Offered Fall semesters

FASH 30. Portfolio in Fashion Design and Merchandising (3)
Lec-52.5, field trips P/NP available
Prereq: For Design Students: FASH 35A and 36A; For Merchandising Students: FASH 49 or 54A
Advise: For Design Students: FASH 35B, 36B and 112 For Merchandising Students: FASH 54B
Prepares Design and Merchandising students in the presentation of their work in a professional portfolio for the purpose of employment. Presentations of the student's body of work and overall professional presentation standards will be covered. CSU Offered on occasion

FASH 35A. Fashion Illustration I (3)
Lec-35, Lab-52.5, field trips P/NP available
Students will learn beginning and intermediate illustration skills including line, proportion, shading, and color in order to advance their ability to communicate fashion designs. CSU

FASH 35B. Fashion Illustration II (3)
Lec-35, Lab-52.5, field trips P/NP available
Prereq.: FASH 35A
Students will expand on their artistic renderings, flat sketches, coloration, and textile interpretations. 10 head fashion figure proportions will be taught and explored from every angle and clothed in a variety of garments. CSU Offered on occasion

FASH 36A. Fashion Design I (3)
Lec-52.5, field trips P/NP available
This course provides a foundation in the design principles of fashion. Students work through carefully selected projects aimed at developing visual research skills, identifying design elements and communicating ideas. CSU Formerly FASH 36

FASH 36B. Fashion Design 2 (3)
Lec-52.5 P/NP available
Building on the skills learned in Illustration 1 and Design 1, students will learn to develop fashion collections based on their own design aesthetic and philosophy. Emphasis and critique will be given on communicating design ideas, creating cohesive collections, and designing appropriately for a specific market. CSU Offered Fall semesters

FASH 37. Flat Pattern Design II (3)
Lec-35, Lab-52.5, field trips P/NP available
Prereq.: FASH 26
Continuation of techniques for pattern development, with an emphasis on industry production skills. Techniques covered include the
development of complex designs, including patterns for tailored garments, pants, and patterns for stretch fabric. CSU

FASH 41A. Hot Topics in Fashion (1)
Lec-17.5, field trips P/NP available
This course will expose fashion students to new retail stores and designers as well as the latest news in celebrities, film, music, art and social media. CSU
Offered Spring Semesters

FASH 42. Introduction to Fashion Industry (3)
Lec-52.5, field trips P/NP available
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-52.5, 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
Offered Spring Semesters

FASH 45A. Advanced Image Consulting (3)
Lec-52.5, field trips P/NP available
Fundamentals of image consulting, including conducting assessments, color analysis, body analysis, fashion personality, wardrobe management and business management. CSU

FASH 45B. Advanced Image Consulting (3)
Lec-52.5, field trips
Prereq.: FASH 45A
Provides advanced knowledge and skills in image consulting. Emphasis is placed on techniques of wardrobe planning and consultation, public relations, marketing and business operations of an image consulting business. CSU
Offered on Occasion

FASH 46. Fashion Merchandising (3)
Lec-52.5, 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-52.5, 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-52.5, Lab-70, field trips
Prereq.: FASH 47
Preparation and execution of a complete fashion show from concept to runway. Required for all fashion merchandising students. CSU
Offered Spring Semesters

FASH 49. Visual Merchandising (3)
Lec-52.5, 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
Offered Spring Semesters

FASH 50. Runway: The Business of Modeling (3)
Lec-52.5, field trips
Fundamentals and practices in training for a career in modeling and fashion coordination, with emphasis on developing the ability to identify specific skills, requisite of the industry. CSU
Offered Fall Semesters

FASH 51. Creating a Garment Business (3)
Lec-52.5 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
Offered Spring Semesters

FASH 53. Fashion Forecasting (3)
Lec-52.5, 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
Offered Spring Semesters

FASH 54A. Fashion Styling (3)
Lec-52.5, field trips P/NP available
This course explores the skills required for styling outfits, accessories, and props for photography, film and commercials, visual merchandising, fashion shows and digital media. Emphasis on identifying the many styling methods used in promoting fashion throughout the industry. CSU

FASH 54B. Advanced Fashion Styling (3)
Lec-52.5, 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
Offered Fall Semesters

FASH 55. Icons of Contemporary Fashion (3)
Lec-52.5, field trips P/NP available
Students will learn about the fashion industry, the social use of clothing, and modern fashion history through the people, events, politics, and cultures that have effected change. CSU
Offered on Occasion

FASH 56. Fashion Writing and Publicity (3)
Lec-52.5, field trips P/NP available
The field of fashion writing and publicity offers a wide range of careers. Students will learn how to write trend reports, press releases, photo captions, runway critiques and create a fashion blog. CSU
Offered Spring Semesters
FASH 57. Fabric Glossary (1)
Lec-17.5, field trips P/NP available
Advis: ESL 160 or ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or Placement in ENGL 96 or ENGL 88B
Learn about fabrics used for clothing, how to identify fabric families, and how to determine the suitability of these fabrics to various styles of fashion. CSU
Offered on occasion

FASH 60. Field Work - Fashion Merchandising (1)
Work-60 to 75 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. Fashion Merchandising/Marketing Internship (2)
Work-120-150 P/NP available
Prereq.: Approval of Fashion Department
Repeat Max. 16 units
Experience in the Fashion industry through merchandising, styling, buying, or marketing positions. Students will intern with local employers to gain meaningful work experience. Provides practical experience in the retail wholesale environments. Emphasis will be placed on the role of fashion in the workplace. One unit of credit is earned for 60 hours of unpaid, or 75 hours of paid work. CSU
FASH 60, 61, 62, and 63 combined, maximum credit: 16 units

FASH 62. Work Experience in Image Consulting (3)
Work- 180-225 (total hrs) 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
Offered Fall semesters

FASH 63. Fashion Design and Production Internship (2)
Work-120-150 (total hrs) P/NP available
Repeat: FASH 60, 61, 62, and 63 combined, maximum credit: 16 units
Fashion design and production internship with local employers to gain meaningful work experience. CSU

FASH 64. Textile Design Printing Techniques (3)
Lec-35, Lab-52.5, field trips P/NP available
Students will learn to design and pattern fabric with tie-dye, block printing, relief printing, mono-printing, screen-printing and creating repeat patterns. CSU
All sections will charge a material fee of $30.00
Offered Spring semesters

FASH 65. Textile Design Dye and Fabrication (3)
Lec-35, Lab-52.5, field trips P/NP available
Students will learn to design and embellish fabric with beading, batik, sashiko, Arashi shibori, appliquA®, natural dyes including indigo, silk painting, nuno felting, and discharge dyeing. CSU
Offered on occasion

FASH 66. Computerized Pattern Development (3)
Lec-52.5, 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
Offered on occasion

FASH 67A. Computerized Pattern Development: PAD (3)
Lec-52.5, field trips P/NP available
Overview of the functions and capabilities of the PAD computerized pattern development system. Industry pattern development including drafting, modifying, and grading patterns. Digitizing and plotting patterns. CSU
Offered spring semesters

FASH 67B. Computerized Pattern Development: Gerber (3)
Lec-52.5, field trips P/NP available
Overview of the functions and capabilities of the Gerber computerized pattern development system. Industry pattern development including drafting, modifying, and grading patterns. Digitizing and plotting patterns. CSU
Offered on occasion

FASH 69. Basic Pant Draft (1)
Lec-9, Lab-26 P/NP available
Prereq.: FASH 15A
Students learn the specialized skills needed to properly measure a figure and draft a well-fitting pant pattern. CSU
Offered Fall semesters

FASH 70. Copying Ready-to-Wear (1)
Lec-12, Lab-20 P/NP available
Prereq.: FASH 15A
Students learn how to duplicate an existing garment while it is still intact by analyzing commercial construction techniques and details, and learning how to generate a pattern from the intact garment. CSU
Offered Fall semesters

FASH 71. Creating & Upcycling Wearable Art (3)
Lec-35, Lab-52.5, field trips P/NP available
Students will learn specialized design, deconstruction, and construction techniques to upcycle or create one-of-a-kind “art-to-wear” garments and accessories integrating techniques such as beading, silk screen and paint. CSU
Offered on occasion

FASH 72. Drafting a Sloper (Moulage) (1)
Lec-12, Lab-20 P/NP available
Advise: FASH 15A
Students learn the classic techniques needed to measure a figure and draft a well-fitting moulage/sloper/basic pattern
Offered on occasion

FASH 73. Sewing with Knit and Stretch Fabrics (1)
Lec-8.75, Lab-26.25, field trips P/NP available
Special sewing techniques for garments made from knitted fabrics, such as t-shirts, activewear and swimwear. Students will construct garments while learning how to work with knitted fabrics, including ribbed finishes, elastic edgings, and special seam types. CSU
Offered Spring semesters

FASH 74. Haute Couture Sewing Techniques (3)
Lec-35, Lab-52.5, field trips P/NP available
Advise: FASH 27 and FASH 15B Prereq: FASH 26 or FASH 15A
“Haute” means “elegant” and “Couture” means “sewing” in French. In this elegant sewing class students will learn advanced and unique sewing techniques used for high-end fashion garments by famous houses such as Chanel and Dior. CSU
Offered Fall semesters
FASH 111A. Beginning Leather and Heavy Textiles (1)
Lec-12, Lab-20, field trips P/NP available
Advise: FASH 15A
This course introduces the skills and techniques needed to make patterns and sew leather, suede, vinyl, fur and other heavy textile accessories. Students will add new skill sets to their creative work life, including using the Walking Foot machine and learning unique seam finishes. CSU

FASH 111B. Advanced Leather and Heavy Textiles (1.5)
Lec-19.5, Lab-32.5, field trips P/NP available
Advise: FASH 111A
Further development of skills working with heavy textiles, enabling students to reach new levels of technique and creativity. Designs for a skirt/pants and jacket will be cut and constructed on a Walking Foot machine in leather, suede, vinyl, fur, or other heavy duty fabrications. CSU

FASH 112. Digital Illustration for Fashion (3)
Lec-52.5, Lab-17.5 P/NP available
Advise: VMD 105; FASH 35A; FASH 36A or FASH 54A
This course covers techniques in Adobe Photoshop and Illustrator appropriate for Fashion Designers and Merchandisers. CSU

FASH 113. Sustainability in Fashion (1)
Lec-18 P/NP available
Overview of sustainability issues in the fashion industry. Supply chain, garment life cycle, environmental impacts of each step of production, sale, use, and disposal. Other impacts such as exploitation and poor working conditions. Mitigation strategies and responsible choices. CSU

Offered Spring semesters

FASH 115. Structured Foundations & Swimwear (3)
Lec-35, Lab-52.5 P/NP available
Prereq: FASH 15B or demonstration of exit skills
Advise: FASH 26
Construction of bras, corsets and women's swimwear. Techniques needed to sew with high-performance materials and findings used in bras, structured foundations, swimwear. Specialized measuring and sewing techniques needed for successful production of highly contoured garments. CSU

Offered Fall semesters

FASH 120. Intimate Apparel & Lingerie (3)
Lec-35, Lab-52.5 P/NP available
Prereq: FASH 15A
How to analyze the design elements, fabrics, embellishments, and construction sequences used to create lingerie and intimate apparel. Construction of garments that integrate techniques into individual student designs. CSU

Offered Fall semesters

FASH 138. Fashion Workplace and Career Essentials (3)
Lec-52.5, field trips P/NP available
Prereq: Completion of or concurrent enrollment in: FASH 37 or FASH 54B or FASH 36B or FASH 45B or FASH 35B or FASH 15C or FASH 25C
Advise: ESL 140 or ESL 184 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 88
This course gives an overview of the skills required for a successful career in the fashion industry. Topics such as establishing goals, brand development, marketing presentation materials, interview skills, communication, presentations, networking and workplace etiquette are covered. CSU

Formerly FASH 38

Noncredit Courses:
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 6009. Fiber Explorations (72 hrs)
Students will learn ways of manipulating fibers without using a loom. Explorations include felting, papermaking, hand spinning, knitting and crochet, tablet weaving, and bead weaving. Students will learn embroidery, hand stitching, and bead embroidery.

FASH 6014. Fashion Sewing and Alterations (108 hrs)
Development of skills in clothing construction. Students will have a basic understanding of sewing tools, techniques, alteration and fitting. Offered on occasion

FASH 6025. Quiltmaking (54 hrs)
Fundamentals of quiltmaking including fabric and color selection, block techniques, finishing, borders, batting and binding. Creation of a sampler quilt from start to finish.

FASH 6055. Beginning Upholstery (70 hrs)
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. All sections will charge a materials fee of $55.

FASH 6056. Advanced Upholstery Trade (70 hrs)
Advanced upholstery builds on the skills learned in beginning upholstery with a focus on preparing students for a career in upholstery as a trade. Students will work on their own furniture. They will learn antique upholstery furniture restoration techniques as well as novelty upholstery treatments such as headboards, lambrequins and screens. All sections will charge a materials fee of $55.

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French
Office: Art 202
Phone Number: (415) 239-3223
Web Site: www.ccsf.edu/forlang

Announcement of Curricula

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.

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 program, 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.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in French

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<th>Course</th>
<th>Units</th>
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<td>Choose 15 units from the following core courses:</td>
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<td>FREN 2 Continuation of Elementary French</td>
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<td>or FREN 2A Continuation of Elementary French</td>
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<tr>
<td>or FREN 2B Continuation of Elementary French</td>
<td>3.0</td>
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<tr>
<td>FREN 3A Intermediate French</td>
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<tr>
<td>FREN 3B Intermediate French</td>
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<tr>
<td>FREN 4 Cont. of Intermediate French</td>
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<tr>
<td>FREN 5 Advanced French: Conversation on French Literature and Culture</td>
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<tr>
<td>FREN 22 Grammar Review and Composition</td>
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Choose an additional three (3) units from the following courses:

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<td>FREN 1A Elementary French</td>
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<tr>
<td>FREN 1B Elementary French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 10B Continuation of Beginning Conversational French</td>
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<tr>
<td>or FREN 2A Continuation of Elementary French</td>
<td>3.0</td>
</tr>
<tr>
<td>or FREN 2B Continuation of Elementary French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 3A Intermediate French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 3B Intermediate French</td>
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<tr>
<td>FREN 4 Cont. of Intermediate French</td>
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<td>FREN 5 Advanced French: Conversation on French Literature and Culture</td>
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<td>FREN 22 Grammar Review and Composition</td>
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<td>FREN 10B Continuation of Beginning Conversational French</td>
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<tr>
<td>or FREN 10C Intermediate Conversational French</td>
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<td>or FREN 10D Intermediate Conversational French</td>
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<tr>
<td>FREN 10E Continuation of Intermediate Conversational French</td>
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<tr>
<td>FREN 11A Advanced Conversational French</td>
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<td>FREN 11B Advanced Conversational French</td>
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</tr>
<tr>
<td>FREN 15A Continuation of Advanced Conversational French</td>
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<td>or FREN 2A Continuation of Elementary French</td>
<td>3.0</td>
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<tr>
<td>or FREN 2B Continuation of Elementary French</td>
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<tr>
<td>FREN 41 Culture and Civilization of France</td>
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<td>FREN 42 Contemporary French Culture and Civilization</td>
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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. Each course must be completed with a final grade of “C” or higher or Pass.

Learning Outcomes
Upon completion of this program, 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.
- 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in French

<table>
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<tr>
<td>or FREN 1A Elementary French</td>
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<tr>
<td>or FREN 3A Intermediate French</td>
<td>3.0</td>
</tr>
<tr>
<td>or FREN 3B Intermediate French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 4 Cont. of Intermediate French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 5 Advanced French: Conversation on French Literature and Culture</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 22 Grammar Review and Composition</td>
<td>3.0</td>
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Choose an additional 6 units from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>FREN 10A Beginning Conversational French</td>
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<tr>
<td>FREN 10B Continuation of Beginning Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>or FREN 10C Intermediate Conversational French</td>
<td>3.0</td>
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<tr>
<td>or FREN 10D Intermediate Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 10E Continuation of Intermediate Conversational French</td>
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<tr>
<td>FREN 11A Advanced Conversational French</td>
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<tr>
<td>FREN 11B Advanced Conversational French</td>
<td>3.0</td>
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<tr>
<td>FREN 20 Independent Studies in French</td>
<td>1.0</td>
</tr>
<tr>
<td>FREN 22 Grammar Review and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 23 French Phonetics</td>
<td>2.0</td>
</tr>
<tr>
<td>FREN 41 Culture and Civilization of France</td>
<td>3.0</td>
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<tr>
<td>FREN 42 Contemporary French Culture and Civilization</td>
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<td>Total:</td>
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</table>
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-87.5 P/NP available
Advis: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or any City College or university foreign language course or placement in ENGL 96 or ENGL 88B
This introductory course will develop the four basic skills of listening, speaking, reading and writing. The course also introduces some cultural aspects of France and the francophone world. UC/CSU FREN 1A + 1B = FREN 1

FREN 1A. Elementary French (3)
Lec-52.5 P/NP available
Advis: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B or any City College or university foreign language course
This introductory course will develop the four basic skills of listening, speaking, reading and writing. The course also introduces some cultural aspects of France and the francophone world. UC/CSU FREN 1A + 1B = FREN 1

FREN 1B. Elementary French (3)
Lec-52.5 P/NP available
Advis: FREN 1A or demonstration of FREN 1A exit skills.
This introductory course will develop the four basic skills of listening, speaking, reading and writing. The course also introduces some cultural aspects of France and the francophone world. UC/CSU FREN 1A + 1B = FREN 1

FREN 2. Continuation of Elementary French (5)
Lec-87.5 P/NP available
Advis: FREN 1 OR FREN 1B or demonstration of FREN 1 or 1B exit skills.
Second semester course. Continuation of elementary grammar, composition and reading; continued practice in speaking and understanding French. Introduction to Francophone cultures. UC/CSU FREN 2A + 2B = FREN 2

FREN 2A. Continuation of Elementary French (3)
Lec-52.5 P/NP available
Advis: FREN 1 OR FREN 1B or demonstration of FREN 1 or 1B exit skills.
Continuation of elementary grammar, composition and reading. Continued practice in speaking and understanding French. UC/CSU FREN 2A + 2B = FREN 2

FREN 2B. Continuation of Elementary French (3)
Lec-52.5 P/NP available
Advis: FREN 2A or demonstration of FREN 2A exit skills.
Continuation of elementary grammar, composition and reading. Continued practice in speaking and understanding French. UC/CSU FREN 2A + 2B = FREN 2

FREN 3. Intermediate French (5)
Lec-87.5 P/NP available
Advis: FREN 2 or 2B or demonstration of FREN 2 or 2B exit skills.
Reading of intermediate-level French prose, associated grammar review and essay composition, constant practice in the use and comprehension of the spoken language. Study of culture through film and excerpts of various texts (articles, novels or informational texts specifically written for our textbook). UC/CSU FREN 3=FREN 3A+3B Offered on occasion

FREN 3A. Intermediate French (3)
Lec-52.5 P/NP available
Advis: FREN 2 or 2B or demonstration of FREN 2 or 2B exit skills.
Review of grammar and composition; reading of cultural materials. Constant practice in the use and comprehension of the spoken language. Conducted in French. UC/CSU Non-sequential. FREN 3A + 3B = FREN 3 Offered Fall semesters

FREN 3B. Intermediate French (3)
Lec-52.5 P/NP available
Advis: FREN 2 or 2B or demonstration of FREN 2 or 2B exit skills.
Review of grammar and composition; reading of cultural materials. Constant practice in the use and comprehension of the spoken language. Conducted in French. UC/CSU Non-sequential. FREN 3A + 3B = FREN 3

FREN 4. Continuation of Intermediate French (3)
Lec-52.5 P/NP available
Advis: 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. UC/CSU Offered on occasion

FREN 5. Advanced French: Conversation on French Literature and Culture (3)
Lec-52.5, field trips P/NP available
Advis: FREN 2/2B or demonstration of FREN 2 or 2B exit skills.
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 Offered on occasion

FREN 10A. Beginning Conversational French (3)
Lec-52.5 P/NP available
This is a beginner’s course and the first of a series of five conversational courses. This course offers extensive oral training in French and an emphasis on practical vocabulary and idiom rather than formal grammar and literature. It is open to all beginning students; however, it is not advised for native speakers of French. It is recommended for students already enrolled in FREN 1 or FREN 1A wishing to get more oral practice. CSU Recommended all beginning students and for students enrolled in FREN 1 or FREN 1A. Not recommended for native speakers of French.

FREN 10B. Continuation of Beginning Conversational French (3)
Lec-52.5 P/NP available
Advis: FREN 10A or demonstration of FREN 10A exit skills.
Second semester course. Continuation of extensive oral training in French. Emphasis on practical vocabulary and idiom rather than...
formal grammar and literature. CSU

**Recommended for students enrolled in FREN 2 or FREN 2A.**
**Not recommended for native speakers of French.**

**FREN 10C. Intermediate Conversational French (3)**
Lec-52.5  P/NP available
Advise: FREN 10B or demonstration of FREN 10B exit skills
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

**Recommended for students enrolled in FREN 2 or 2A or 2B.**
**Not recommended for native speakers of French.**

**Offered on occasion**

**FREN 10D. Continuation of Intermediate Conversational French (3)**
Lec-52.5  P/NP available
Advise: FREN 10C or demonstration of FREN 10C exit skills
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

**Recommended for students enrolled in FREN 2B or 3A or 3B.**
**Not recommended for native speakers of French.**

**Offered on occasion**

**FREN 10E. Continuation of Intermediate Conversational French (3)**
Lec-52.5  P/NP available
Advise: FREN 10D or demonstration of exit skills.
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

**Recommended for students enrolled in FREN 3 or FREN 3B.**
**Not recommended for native speakers of French.**

**Offered on occasion**

**FREN 11A. Advanced Conversational French (3)**
Lec-52.5  P/NP available
Advise: FREN 10E or FREN 3 or (FREN 3A and FREN 3B) or demonstration of exit skills
Students will strengthen 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. UC/CSU

**Non-sequential**

**Offered on occasion**

**FREN 11B. Advanced Conversational French (3)**
Lec-52.5  P/NP available
Advise: FREN 10E or 3 or 3A+3B or demonstration of FREN 10E, 3, or 3A+3B exit skills.
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. UC/CSU

**Non-sequential**

**Offered on occasion**

**FREN 15A. Continuation of Advanced Conversational French (3)**
Lec-52.5  P/NP available
Advise: FREN 10D or 3 or 3B or demo of exit skills
Continuation of extensive oral training in French. Designed for students who wish to acquire more advanced skills in conversational French. The major difference between French 15A and 15B is in reading and oral assignments. The courses focus on specific topics (literature, fine arts, current affairs) but include different grammar topics. UC/CSU

**Offered on occasion**

**FREN 15B. Continuation of Advanced Conversational French (3)**
Lec-52.5  P/NP available
Advise: FREN 10D or 3 or 3B or demo of exit skills
Continuation of extensive oral training in French. Designed for students who wish to acquire more advanced skills in conversational French. The major difference between French 15A and 15B is in reading and oral assignments. The courses focus on specific topics (literature, fine arts, current affairs) but include different grammar topics. UC/CSU

**Offered on occasion**

**FREN 20. Independent Studies in French (1)**
Lab-52.5  P/NP available
Prereq.: FREN 3, FREN 4 or demonstration of FREN 3A/3B/4 exit skills
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

**May not be offered every semester. UC upon review**

**Offered on occasion**

**FREN 22. Grammar Review and Composition (3)**
Lec-52.5  P/NP available
Prereq.: FREN 4 or demonstration of FREN 4 exit skills.
Advanced review of grammar and composition with attention to style, vocabulary development, and more advanced grammatical structure, taught entirely in French. UC/CSU

**May not be offered every semester.**

**Offered on occasion**

**FREN 23. French Phonetics (3)**
Lec-52.5  P/NP available
Prereq.: FREN 2 or FREN 2B or FREN 10C or demonstration of exit skills of FREN 2, 2B, or 10C
Introduction to the French phonological system with attention given to spoken French and how it corresponds to written French. Emphasis on improving listening comprehension and more closely approximating native-speaker pronunciation, rather than on grammatical structures. CSU

**May not be offered every semester.**

**Offered on occasion**

**FREN 41. Culture and Civilization of France (3)**
Lec-52.5  P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
The geography, history, social institutions, literature, art, architecture and music of France from their beginnings to the First World War. No knowledge of French required UC/CSU

**No knowledge of French required. May not be offered every semester.**

**Offered on occasion**

**FREN 42. Contemporary French Culture and Civilization (3)**
Lec-52.5  P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
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. UC/CSU

No knowledge of French required. May not be offered every semester.

Offered on occasion

Gay, Lesbian and Bisexual Studies

See Lesbian, Gay, Bisexual, and Transgender Studies

Geography

See Earth Sciences.

Geology

See Earth Sciences.

German

Office: Art 202
Phone Number: (415) 239-3223
Web Site: www.ccsf.edu/forlang

Announcement of Curricula

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. Each course must be completed with a final grade of "C" or higher or Pass.

Learning Outcomes

Upon completion of this program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in German

Course........................................Units
Choose 9 units from the following core courses:

GERM 1 Elementary German .................. 5.0
or GERM 1A Elementary German .............. 3.0
and GERM 1B Elementary German .............. 3.0

GERM 2 Continuation of Elementary German .... 5.0
or GERM 2A Continuation of Elementary German .... 3.0
and GERM 2B Continuation of Elementary German .... 3.0

GERM 3 Intermediate German ................. 5.0
or GERM 3A Intermediate German .............. 3.0
and GERM 3B Intermediate German .............. 3.0

GERM 4 Continuation of Intermediate German .... 5.0
or GERM 4A Continuation of Intermediate German .... 3.0

and GERM 4B Continuation of Intermediate German .... 3.0

Choose 6 units from the following elective courses:

GERM 10A Beginning Practical Spoken German ....... 3.0
GERM 10B Beginning Practical Spoken German ....... 3.0
GERM 10C Intermediate Conversational German ....... 3.0
GERM 10D Continuation of Intermediate Conversational German ........... 3.0

GERM 11A Advanced Conversational German .......... 3.0
GERM 11B Advanced Conversational German .......... 3.0

Total: ........................................15.0

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-87.5 P/NP available

Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in English 96 or ENGL 88B or any City College or university foreign language course

Beginner’s course: Grammar, composition, and reading; practice in speaking and understanding German. UC/CSU

GERM 1A. Elementary German (3)

Lec-52.5 P/NP available

Prereq.: GERM 1 or 1B or demonstration of GERM 1/1B exit skills.

Continuation of elementary grammar, composition and reading; practice in speaking and understanding simple German. UC/CSU

GERM 1A + 1B = GERM 1

GERM 1B. Elementary German (3)

Lec-52.5 P/NP available

Prereq.: GERM 1 or 1B or demonstration of GERM 1/1B exit skills.

Grammar, composition and reading; practice in speaking and understanding simple German. UC/CSU

GERM 1A + 1B = GERM 1

GERM 2. Continuation of Elementary German (5)

Lec-87.5 P/NP available

Prereq.: GERM 1 or 1B or demonstration of GERM 1/1B exit skills.

Second semester course. Continuation of elementary grammar, composition and reading; practice in speaking and understanding German. UC/CSU

GERM 1A + 1B = GERM 1

GERM 2A. Continuation of Elementary German (3)

Lec-52.5 P/NP available

Prereq.: GERM 1 or 1B or demonstration of GERM 1/1B exit skills.

Continuation of elementary grammar, composition and reading; practice in speaking and understanding German. UC/CSU

GERM 2A + 2B = GERM 2
GERM 2B. Continuation of Elementary German (3)
Lec-52.5 P/NP available
Prereq.: GERM 2A or demonstration of GERM 2A exit skills. Continuation of elementary grammar, composition and reading; practice in speaking and understanding German. UC/CSU
GERM 2A + 2B = GERM 2
Offered Spring semesters

GERM 3. Intermediate German (5)
Lec-87.5 P/NP available
Prereq.: GERM 2 or GERM 2B or demonstration of GERM 2/2B exit skills. Associated grammar review and essay composition, introduction to the reading of intermediate-mid to intermediate-high level German prose, constant practice in the use and comprehension of the spoken language. UC/CSU
GERM 3A + 3B = GERM 3
Offered on occasion

GERM 3A. Intermediate German (3)
Lec-52.5 P/NP available
Prereq.: GERM 2 or GERM 2B or demonstration of GERM 2/2B exit skills. Associated grammar review and essay composition, introduction to the reading of intermediate-mid level German prose, constant practice in the use and comprehension of the spoken language, using correct verb conjugation in the present tense and the imperative mood within basic sentence structures, and use verbal communication to navigate everyday situations like planning social events. UC/CSU
GERM 3A + 3B = GERM 3. GERM 3A is not a prerequisite for GERM 3B. These courses may be taken non-sequentially. Offered on occasion

GERM 3B. Intermediate German (3)
Lec-52.5 P/NP available
Prereq.: GERM 2 or GERM 2B or demonstration of GERM 2/2B exit skills. Associated grammar review and essay composition, introduction to the reading of intermediate-mid to intermediate-high level German prose, constant practice in the use and comprehension of the spoken language, using correct verb conjugation in the future tense and the imperative mood within more complex sentence structures, and use verbal communication to navigate everyday situations like planning social events, asking for information, and making travel arrangements. UC/CSU
GERM 3A + 3B = GERM 3. GERM 3A is not a prerequisite for GERM 3B. These courses may be taken non-sequentially. Offered on occasion

GERM 4. Continuation of Intermediate German (5)
Lec-87.5 P/NP available
Prereq.: GERM 3 or GERM 3A + 3B or demonstration of GERM 3/3A + 3B exit skills. Introduction to the reading of intermediate-high level German prose, associated grammar review and essay composition, constant practice in the use and comprehension of the spoken language. UC/CSU
GERM 4A + 4B = GERM 4
Offered on occasion

GERM 4A. Continuation of Intermediate German (3)
Lec-52.5 P/NP available
Prereq.: GERM 3 or 3A + 3B or demonstration of GERM 3/3A + 3B exit skills. Introduction to the reading of intermediate-high level German prose, associated grammar review and essay composition, constant practice in the use and comprehension of the spoken language, using subjunctive II mood, and prepositional phrases as well as correct verb conjugation in all tenses within more complex sentence structures. UC/CSU
GERM 4A + 4B = GERM 4; GERM 4A and 4B may be taken in any order. Offered on occasion

GERM 4B. Continuation of Intermediate German (3)
Lec-52.5 P/NP available
Prereq.: GERM 3 or 3A + 3B or demonstration of GERM 3/3A + 3B exit skills. Introduction to the reading of intermediate-high to advanced-low level German prose, associated grammar review and essay composition, constant practice in the use and comprehension of the spoken language. UC/CSU
GERM 4A + 4B = GERM 4; GERM 4A and 4B may be taken in any order. Offered on occasion

GERM 10A. Beginning Practical Spoken German (3)
Lec-52.5 P/NP available
Beginning Practical Spoken German is a course for beginning students of the German language with extensive oral training. It offers a step-by-step approach to learning daily life communication skills; it follows the Common European Framework of Reference for Languages (CEFR) from levels A1 to B1. CSU
Not recommended for native speakers of German

GERM 10B. Beginning Practical Spoken German (3)
Lec-52.5 P/NP available
Advise: GERM 10A or demonstration of GERM 10A exit skills. 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
Not recommended for native speakers of German. Offered Spring semesters

GERM 10C. Intermediate Conversational German (3)
Lec-52.5 P/NP available
Advise: GERM 10B or demonstration of GERM 10B exit skills. Continuation of extensive oral training in German. Emphasis on conversational idiom. Introduction to German customs, culture, civilization, current affairs, etc. Grammar analysis is kept to a minimum. CSU
Not recommended for native speakers of German. Recommended for students enrolled in GERM 2 or 2A.

GERM 10D. Continuation of Intermediate Conversational German (3)
Lec-52.5 P/NP available
Advise: GERM 10C or demonstration of GERM 10C exit skills. Continuation of extensive oral training in German. Emphasis on conversational idiom. Introduction to German customs, culture,
General Information
The Health Care Technology Department offers a variety of vocational programs to prepare students for employment in the healthcare profession. Please see individual program areas for specifics regarding registration, certification, licensure and/or degree status.

Programs within the Health Care Technology Department prepare individuals for employment in both in-hospital and pre-hospital careers. Students successfully completing programs shall attain the knowledge and competency based skills required to pass certification, registry or licensure examinations.

Paramedic Major (AS)
The Paramedic Program provides students with the knowledge and skills necessary to provide advanced emergency medical care in the pre-hospital setting. The licensed paramedic is the highest level of the pre-hospital care team and may find employment with a fire department, private ambulance service, third city service, hospital, or other operation. The Paramedic Program includes classroom didactic, practical laboratory, in-hospital clinical and pre-hospital field internship to allow students to sit for the National Registry Paramedic Licensure Examination upon successful completion of the program.

Accreditation. The Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) under the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Profession (CoA-EMSP), Program #600218. For more information about these agencies, see the “Overview of the College” section of this Catalog.

Learning Outcomes
Upon completion of this program, 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.

The prerequisite for the Paramedic Program is current EMT-I certification per CCR. DIV 9 Title 22. It is recommended that students have six months field experience as an EMT prior to submitting an application to the Paramedic Program.

Enrollment is open to qualified applicants who fulfill the following admission requirements:
1. Hold a current California EMT-I certification
2. Attend mandatory information session
3. Complete application to the program
4. Pass the EMT review test at 75% or higher
5. Submit two letters of recommendation

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Paramedic

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<th>Course</th>
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<tr>
<td>EMTP 120 Human Systems and Patient Assessment</td>
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<td>EMTP 121 Introduction to EMS</td>
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<td>EMTP 122 Pharmacology and Ventilatory Mgt</td>
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<tr>
<td>EMTP 123 Trauma Emergencies</td>
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<td>EMTP 124 Trauma Certification</td>
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<td>EMTP 125 Cardiorespiratory Emergencies</td>
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<tr>
<td>EMTP 126 Neuroendocrine Emergencies</td>
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<tr>
<td>EMTP 127 Medical Emergencies</td>
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<td>EMTP 128 OB/GYN &amp; Pedi Emergencies</td>
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<tr>
<td>EMTP 129 Special Populations, EMS Ops</td>
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<tr>
<td>EMTP 130 Clinical and Field Internship</td>
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<tr>
<td>EMTP 104 Advanced Skills for EMS providers</td>
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<td><strong>Total:</strong></td>
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Cardiovascular Technician/Echocardiography Major (AS)

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. 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, students will be able to:

- 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).

The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in CVT/ Echocardiography Technician
Course ........................................... Units
Fall Semester:
ECHO 101 Echocardiography .................... 7.0
CVT 101 Cardiovascular Technician ................ 3.0
CVT 110 Cardiovascular Skills .................... 7.0
Spring Semester:
ECHO 201 Advanced Echocardiography Technician . . . 7.0
CVT 201 Advanced Cardiovascular Technician ........ 4.0
CVT 210 Advanced Cardiovascular Skills ............ 7.0

Fall Semester:
ECHO 301 Advanced Cardiac Abnormalities ........ 5.0
CVT 301 Physics of Cardiac Ultrasound ............. 3.0
CVT 310 Clinical Experience in Cardiac Ultrasound . . . 9.0
Spring Semester:
ECHO 401 Advanced Echocardiographic Studies .... 6.0
CVT 410 Clinical Experience in Advanced Cardiac Ultrasound .................. 13.0
Total: ............................................. 71.0

EKG Technician Certificate
This program prepares students to operate an EKG equipment and work as an EKG Technician in a cardiology office, non-invasive 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, students will be able to:

- Comprehend, apply and evaluate in formation 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).

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.
Courses Required for the Certificate of Accomplishment in EKG Technician

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ECGT 101 ECG Technician I*</td>
<td>4.0</td>
</tr>
<tr>
<td>ECGT 102 ECG Technician II*</td>
<td>4.0</td>
</tr>
</tbody>
</table>

* Successful completion of program requires completion of above with a grade of C or higher and minimum of 80% attendance.

Total: 8.0

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 completion of this program, students will be able to:

- 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Emergency Medical Technician

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMT 100 Emergency Medical Technician</td>
<td>8.0</td>
</tr>
</tbody>
</table>

Total: 8.0

Paramedic Certificate

The program is designed to prepare students to sit for the National Registry Paramedic Licensure Examination.

Credit Toward Graduation. The credit students earn in obtaining the Certificate of Achievement in Paramedic may also be applied toward satisfaction of the requirements for graduation.

Learning Outcomes

Upon completion of this program, 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.

Program Prerequisite and Advisory: The prerequisite for the Paramedic Certificate Program is Current EMT-I certification per CCR, DIV 9, Title 22. It is recommended that students have six months field experience as an EMT prior to submitting an application to the Paramedic Certificate Program.

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. The minimum time for completion of this certificate is 5 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

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>5.0</td>
</tr>
<tr>
<td>EMTP 121 Introduction to EMS</td>
<td>2.0</td>
</tr>
<tr>
<td>EMTP 122 Pharmacology and Ventilatory Mgt</td>
<td>2.0</td>
</tr>
<tr>
<td>EMTP 123 Trauma Emergencies</td>
<td>4.0</td>
</tr>
<tr>
<td>EMTP 124 Trauma Certification</td>
<td>1.5</td>
</tr>
<tr>
<td>EMTP 125 Cardiorespiratory Emergencies</td>
<td>4.5</td>
</tr>
<tr>
<td>EMTP 126 Neuroendocrine Emergencies</td>
<td>3.0</td>
</tr>
<tr>
<td>EMTP 127 Medical Emergencies</td>
<td>3.0</td>
</tr>
<tr>
<td>EMTP 128 OB/GYN &amp; Pedi Emergencies</td>
<td>4.0</td>
</tr>
<tr>
<td>EMTP 129 Special Populations, EMS Ops</td>
<td>4.0</td>
</tr>
<tr>
<td>EMTP 130 Clinical and Field Internship</td>
<td>12.0</td>
</tr>
<tr>
<td>EMT 104 Advanced Skills for EMS providers</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total: 49.0

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 health 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). For more information about this agency, see the "Overview of the College" section of this Catalog.

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: ESL 150 or ENGL 91 or 86 or placement in ESL 160 or ENGL 88
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 disciple 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 this program, 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
- 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

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Health Information Technology

Course ........................................... Units
First Semester: choose one of the following Anatomy and Physiology options:

OPTION 1:
BIO 106 Introduction to Human Anatomy and Physiology ...................................... 4.0

OPTION 2:
BIO 108 General Human Anatomy ........................................... 4.0
AND choose one of the following Physiology courses:
BIO 111 Human Physiology .......................... 5.0
BIO 112 Introduction to Human Physiology ............. 4.0

First Semester: required courses:
HCT 61 Introduction to Health Care ......................... 3.0
HIT 50A Medical Terminology I ........................ 3.0
HCT 67 Computer Applications in the Health
Care Setting ................................................ 2.0

Second Semester:
HIT 50B Medical Terminology II .......................... 2.0
HIT 57 Disease Process ..................................... 3.0
HIT 63 Health Information Systems ........................ 3.0
HIT 65 Organization of Health Data ........................ 2.0
HIT 73A ICD-10-CM Coding ............................... 2.0

Third Semester:
HIT 72 Legal Aspects of HIM .............................. 3.0
HIT 73B ICD-10-PCS Coding ................................ 4.0
HIT 77A Professional Practice I ............................. 5.0
HIT 74 Introduction to Quality Improvement .............. 2.0

Fourth Semester:
HIT 75 Organization and Management in Health ........ 3.0
HIT 76 CPT Coding ......................................... 3.0
HIT 77B Professional Practice II ............................. 5.0
HIT 78 Reimbursement Methods in HIM .................. 2.0

Total: ....................................................... 51.0 – 56.0

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 this program, students will be able to:
- Demonstrate the behavioral, interpersonal, ethical and professional skills necessary for HIM employment as a health information professional.
- Perform computer applications necessary for HIM entry-level employment as a health information professional.
- Demonstrate record management 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Health Information Clerk II

Course ................................................. Units
First Semester: Choose one of the anatomy and physiology options:
OPTION 1:
BIO 106 Introduction to Human Anatomy and Physiology 4.0

OPTION 2:
BIO 108 General Human Anatomy ........................ 4.0

AND choose one of the following Physiology courses:
BIO 111 Human Physiology .............................. 5.0
BIO 112 Introduction to Human Physiology ............. 4.0

Choose one of the following courses:
ENGL 86 Introduction to College Reading and Writing ........................................... 6.0
ESL 150 Advanced Academic ESL .............................. 5.0

Required courses:
HCT 61 Introduction to Health Care ......................... 3.0
HIT 50A Medical Terminology I ............................. 3.0
HCT 67 Computer Applications in the Health
Care Setting ................................................ 2.0

Total: ....................................................... 17.5 – 23.0

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 this program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Health Information Clerk II

Course ................................................. Units
First Semester: Choose one of the anatomy and physiology options:
OPTION 1:
BIO 106 Introduction to Human Anatomy and Physiology 4.0

OPTION 2:
BIO 108 General Human Anatomy ........................ 4.0

AND one of the following physiology courses:
BIO 111 Human Physiology .............................. 5.0
BIO 112 Introduction to Human Physiology ............. 4.0

First Semester: Required courses
HCT 61 Introduction to Health Care ......................... 3.0
HIT 50A Medical Terminology I ............................. 3.0
HIT 67 Computer Applications in the Health Care Setting ............................... 2.0

First Semester: Choose one of the following courses:
ENGL 86 Introduction to College Reading and Writing ............................... 6.0
ESL 150 Advanced Academic ESL .............................................................. 5.0

Second Semester:
HIT 50B Medical Terminology II ............................................................... 2.0
HIT 63 Health Information Systems ............................................................. 3.0
HIT 65 Organization of Health Data ............................................................ 2.0
HIT 72 Legal Aspects of HIM ................................................................. 3.0
HIT 73A ICD-10-CM Coding ................................................................. 2.0
HIT 77A Professional Practice I ............................................................... 5.0
MATH 30 Prealgebra with Basic Mathematics ........................................... 5.0

Total: ................................................................. 39.5 – 45.0

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 this program, 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.
- Apply for Certified Coding Associate (CCA) examination offered through the American Health Information Management Association (AHIMA).
- Demonstrate professional and behavior skills and adhere to the necessary ethical standards of coding for HIM employment as a health information coder.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Health Information Coding Specialist

Course ................................................................. Units
First Semester: choose one of the following Anatomy and Physiology options:
OPTION 1:
BIO 106 Introduction to Human Anatomy and Physiology .............................................. 4.0

OPTION 2:
BIO 108 General Human Anatomy ............................................................... 4.0
AND choose one of the following Physiology courses:
BIO 111 Human Physiology ............................................................... 5.0
BIO 112 Introduction to Human Physiology .............................................. 4.0

First Semester: required courses
HCT 61 Introduction to Health Care .............................................................. 3.0

HIT 50A Medical Terminology I ............................................................... 3.0
HIT 67 Computer Applications in the Health Care Setting .............................................. 2.0

First Semester: choose one of the following courses:
ENGL 86 Introduction to College Reading and Writing .............................................. 6.0
ESL 150 Advanced Academic ESL ............................................................. 5.0

Second Semester:
HIT 50B Medical Terminology II ............................................................... 2.0
HIT 57 Disease Process ................................................................. 3.0
HIT 63 Health Information Systems ............................................................. 3.0
HIT 65 Organization of Health Data ............................................................ 2.0
HIT 73A ICD-10-CM Coding ................................................................. 2.0

Third Semester:
HIT 73B ICD-10-PCS Coding ................................................................. 4.0
HIT 74 Introduction to Quality Improvement ............................................... 2.0
HIT 76 CPT Coding ................................................................. 3.0
HIT 77A Professional Practice I ............................................................... 5.0
HIT 78 Reimbursement Methods in HIM .................................................. 2.0

Total: ................................................................. 45.5 – 51.5

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 this program, 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.
- Demonstrate the technical skills and knowledge necessary for HIM entry level 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).
- Demonstrate the behavioral, interpersonal, ethical and professional skills necessary for HIM employment as a health information professional in various health care setting.

The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Health Information Technology

Course ................................................................. Units
First semester: choose one of the following Anatomy and Physiology options:
OPTION 1:
BIO 106 Introduction to Human Anatomy and Physiology .............................................. 4.0

OPTION 2:
BIO 108 General Human Anatomy ............................................................... 4.0
AND choose one of the following Physiology courses:
BIO 111 Human Physiology ............................................................... 5.0
BIO 112 Introduction to Human Physiology .............................................. 4.0

First Semester: required courses
HCT 61 Introduction to Health Care .............................................................. 3.0
Awareness training to qualify for the Professional Practice Internship. Background and drug and alcohol screening, and complete a HIPAA Provider card from the American Heart Association, complete a Students who enroll in HCT 82 must also hold a valid CPR Healthcare Federal ADA guidelines. Go to: www.occupationalinfo.org Please refer to the Dictionary of Occupational Titles to review the following: which indicates that they are in good physical health to include the test or chest x-ray, proof of immunizations, and a physical examination. Students must complete HCT 61, Introduction to Health Care, during in ESL 160 or ENGL 88. Students must have completed ESL 150 or ENGL 92 or 86 or be placed in ESL 160 or ENGL 88. 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 chairs
- 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/clerical 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 of Allied Health Education Programs (CAAHEP), on recommendation of the Committee on Accreditation for Medical Assistant Education Review Board (MAERB). For more information about these agencies, see the “Overview of the College” section of this Catalog.

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 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 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 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 assigned primarily to perform administrative duties without compensation in an outpatient clinic, medical office, or 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 Assisting or Medical Administrative Assisting with a 2.0 grade point average or higher receive the Associate Degree in Medical Assisting or Medical Administrative Assisting.

Certified Medical Assistant Examination. Graduates who receive the Certificate of Achievement in Medical Assisting are eligible to take the Certified Medical Assistant (CMA) examination given by the American Association of Medical Assistants (AAMA).

Medical 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. The Medical Assisting Certificate 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 also receive the Certificate of Achievement and are eligible to take the Certified Medical Assistant examination given by the American Association of Medical Assistants (AAMA). Students must hold a valid AHA Healthcare Provider CPR and First Aid card to complete the Internship.

Learning Outcomes
Upon completion of this program, students will be able to:

- Effectively perform clinical procedures, laboratory tests, phlebotomy, and diagnostic studies.
- Use computer applications to create documents and perform medical record and billing activities.
- Practice infection control and adhere to OSHA regulations.
- Receive, communicate with, and support patients and staff.
- Collaborate in a culturally diverse health care environment and apply the principles of health care ethics and professional conduct with patients, staff, and the community.
- Apply for and pass the Certified Medical Assistant (CMA) examination or other approved medical assisting certification examination.
- Apply for and pass the Certified Phlebotomy Technician (CPT-1) examination.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Medical Assisting

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required course:</td>
<td></td>
</tr>
<tr>
<td>PSYC 1 General Psychology</td>
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</tr>
<tr>
<td>Choose one of the following Anatomy and Physiology options:</td>
<td></td>
</tr>
<tr>
<td>OPTION 1:</td>
<td></td>
</tr>
<tr>
<td>BIO 106 Introduction to Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>OPTION 2:</td>
<td></td>
</tr>
<tr>
<td>BIO 108 General Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>AND choose one of the following Physiology courses:</td>
<td></td>
</tr>
<tr>
<td>BIO 111 Human Physiology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 112 Introduction to Human Physiology</td>
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</tr>
<tr>
<td>First Semester:</td>
<td></td>
</tr>
<tr>
<td>HCT 61 Introduction to Health Care</td>
<td>3.0</td>
</tr>
<tr>
<td>HCT 104 Phlebotomy Technician</td>
<td>6.0</td>
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<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3.0</td>
</tr>
<tr>
<td>HCT 67 Computer Applications in the Health</td>
<td></td>
</tr>
<tr>
<td>Care Setting</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4.0</td>
</tr>
<tr>
<td>MED 56 Administrative Procedures</td>
<td>3.5</td>
</tr>
<tr>
<td>Second Semester:</td>
<td></td>
</tr>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2.0</td>
</tr>
<tr>
<td>HIT 57 Disease Process</td>
<td>3.0</td>
</tr>
<tr>
<td>HIT 76 CPT Coding</td>
<td>3.0</td>
</tr>
<tr>
<td>MED 49 Clinical Procedures</td>
<td>5.5</td>
</tr>
<tr>
<td>MED 62 Communication and Professionalism in Health Care</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 70 Medical Insurance Billing</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 71 Electronic Management of Financial Medical Records</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Summer Session:
HCT 82 Professional Practice Internship/ Certification . 5.0

Third Semester:
HIT 73A ICD-10-CM Coding . 2.0
HIT 75 Organization and Management in Health . 3.0
MED 73 Advanced Medical Manager . 1.5
Total: . 59.5 – 64.5

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, hospital outpatient clinic, medical clinic, or health center. Students are eligible to sit for the Certified Professional Coder (CPC) or Certified Coding Specialist Physician Office (CCS-P) examinations. Students must maintain a grade of “C” or higher in each course.

Learning Outcomes
Upon completion of this program, students will be able to:

- Receive, communicate with, and support patients and staff.
- Apply the principles of medical coding and billing to insurance claims and other financial documents.
- Use computer applications to create documents and perform medical record and billing activities.
- Apply the principles of health care ethics and professional conduct with patients, staff, and the community.
- Apply for and pass the Certified Professional Coder (CPC) examination.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 Fall/Spring semesters, plus one Summer semester. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Medical Administrative Assisting

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>Required course:</td>
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</tr>
<tr>
<td>PSYC 1 General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following Anatomy and Physiology options:</td>
<td></td>
</tr>
<tr>
<td>OPTION 1:</td>
<td></td>
</tr>
<tr>
<td>BIO 106 Introduction to Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>OPTION 2:</td>
<td></td>
</tr>
<tr>
<td>BIO 108 General Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>AND choose one of the following Physiology courses:</td>
<td></td>
</tr>
<tr>
<td>BIO 111 Human Physiology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 112 Introduction to Human Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>First Semester:</td>
<td></td>
</tr>
<tr>
<td>HCT 61 Introduction to Health Care</td>
<td>3.0</td>
</tr>
<tr>
<td>HCT 104 Phlebotomy Technician</td>
<td>6.0</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3.0</td>
</tr>
<tr>
<td>HCT 67 Computer Applications in the Health</td>
<td></td>
</tr>
<tr>
<td>Care Setting</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4.0</td>
</tr>
<tr>
<td>MED 56 Administrative Procedures</td>
<td>3.5</td>
</tr>
<tr>
<td>Second Semester:</td>
<td></td>
</tr>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2.0</td>
</tr>
<tr>
<td>HIT 57 Disease Process</td>
<td>3.0</td>
</tr>
<tr>
<td>HIT 76 CPT Coding</td>
<td>3.0</td>
</tr>
<tr>
<td>HIT 73A ICD-10-CM Coding</td>
<td>2.0</td>
</tr>
<tr>
<td>HIT 75 Organization and Management in Health</td>
<td>3.0</td>
</tr>
<tr>
<td>MED 49 Clinical Procedures</td>
<td>5.5</td>
</tr>
<tr>
<td>MED 62 Communication and Professionalism in Health Care</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 70 Medical Insurance Billing</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 71 Electronic Management of Financial Medical Records</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total: . 59.5 – 64.5
MED 55 The Electronic Health Record .................. 4.0
MED 56 Administrative Procedures .................. 3.5

Second Semester:
HIT 50B Medical Terminology II .................. 2.0
HIT 57 Disease Process .................. 3.0
HIT 73A ICD-10-CM Coding .................. 2.0
HIT 76 CPT Coding .................. 3.0
MED 62 Communication and Professionalism in Health Care .................. 2.0
MED 70 Medical Insurance Billing .................. 2.0
MED 71 Electronic Management of Financial Medical Records .................. 2.0

Summer Session:
HCT 82 Professional Practice Internship/ Certification .................. 5.0

Third Semester:
HIT 75 Organization and Management in Health .................. 3.0
MED 72 Advanced Medical Insurance Billing .................. 2.0
MED 73 Advanced Medical Manager .................. 1.5
Total: ............................... 50.0 – 55.0

Medical 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 (MAERB). 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).

Learning Outcomes
Upon completion of this program, students will be able to:

• Effectively perform clinical procedures, laboratory tests, and phlebotomy, and diagnostic studies.
• Use computer applications to create documents and perform medical record and billing activities.
• Practice infection control and adhere to OSHA regulations.
• Receive, communicate with, and support patients and staff.
• Collaborate in a culturally diverse health care environment and apply the principles of health care ethics and professional conduct with patients, staff, and the community.
• Apply for and pass the Certified Medical Assistant (CMA) examination or other approved medical assisting certification examination.
• Apply for and pass the Certified Phlebotomy Technician Examination (CPT-I).

Prior to enrolling in the program, students must complete ENGL 91 or ENGL 86 or ESL 150 or place into ENGL 95 or ENGL 88 or ESL 160. Students must complete each course with a grade of “C” or higher. Students must hold a valid AHA HealthCare Provider CPR and First Aid card to complete the Internship.

The minimum time for completion of this certificate is 3 semesters (including Summer). Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Medical Assisting

Course ....................................................... Units
Required courses:
PSYC 1 General Psychology .................. 3.0

Choose one of the following Anatomy and Physiology options:
OPTION 1:
BIO 106 Introduction to Human Anatomy and Physiology .................. 4.0

OPTION 2:
BIO 108 General Human Anatomy .................. 4.0

AND one of the following Physiology courses:
BIO 111 Human Physiology .................. 5.0
BIO 112 Introduction to Human Physiology .................. 4.0

First Semester:
HCT 61 Introduction to Health Care .................. 3.0
HCT 104 Phlebotomy Technician .................. 6.0
HIT 50A Medical Terminology I .................. 3.0
HCT 67 Computer Applications in the Health Care Setting .................. 2.0
MED 55 The Electronic Health Record .................. 4.0
MED 56 Administrative Procedures .................. 3.5

Second Semester:
HIT 50B Medical Terminology II .................. 2.0
HIT 57 Disease Process .................. 3.0
HIT 73A ICD-10-CM Coding .................. 2.0
HIT 76 CPT Coding .................. 3.0
MED 49 Clinical Procedures .................. 5.5
MED 62 Communication and Professionalism in Health Care .................. 2.0
MED 70 Medical Insurance Billing .................. 2.0
MED 71 Electronic Management of Financial Medical Records .................. 2.0

Summer Session:
HCT 82 Professional Practice Internship/ Certification .................. 5.0
Total: ............................... 55.0 – 60.0

Medical Biller Certificate
This certificate program prepares students to complete medical insurance claims for physician offices and outpatient medical facilities. Students learn CPT and ICD-9-CM coding, medical terminology, disease process, computer bookkeeping procedures, and manual and computer insurance billing for commercial insurance, Medicaid, Medicare, Worker’s Compensation, and managed care plans. Students must complete each course with a grade of “C” or higher.

Learning Outcomes
Upon completion of this program, students 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 and sit for the Certified Professional Coder (CPC) examination.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.
Courses Required for the Certificate of Achievement in Medical Biller

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester:</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 106 Introduction to Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3.0</td>
</tr>
<tr>
<td>HCT 67 Computer Applications in the Health Care Setting</td>
<td>2.0</td>
</tr>
<tr>
<td>HIT 76 CPT Coding</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 70 Medical Insurance Billing</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 71 Electronic Management of Financial Medical Records</td>
<td>2.0</td>
</tr>
<tr>
<td>MATH 30 Prealgebra with Basic Mathematics</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Second Semester:</strong></td>
<td></td>
</tr>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2.0</td>
</tr>
<tr>
<td>HIT 57 Disease Process</td>
<td>3.0</td>
</tr>
<tr>
<td>HIT 73A ICD-10-CM Coding</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4.0</td>
</tr>
<tr>
<td>MED 72 Advanced Medical Insurance Billing</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 73 Advanced Medical Manager</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Second Semester: choose one of the following courses:</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 95 Academic Reading and Writing Intensive</td>
<td>6.0</td>
</tr>
<tr>
<td>ENGL 96 Academic Writing and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>ESL 160 High-Advanced Academic ESL</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>38.5 - 41.5</td>
</tr>
</tbody>
</table>

Medical Clinic Assisting Certificate

Students who complete this certificate successfully are prepared to hold positions as clinic assistants. Students have the option of completing additional courses for a Certificate of Achievement in Medical Assisting. Students receive training in anatomy and physiology, medical terminology, computer applications and administrative procedures, the electronic health record, disease processes, communication and professionalism, and clinical procedures. Students will complete an internship and must hold a valid CPR Health Provider card and a HIPAA Awareness Training certificate.

Learning Outcomes

Upon completion of this program, students will be able to:
- Practice infection control and adhere to OSHA regulations.
- Perform clinical procedures effectively, including injections and skin punctures, laboratory tests, and diagnostic studies.
- Use computer applications to create documents, communicate with, and support patients and staff.
- Collaborate in a culturally diverse health care environment, applying the principles of health care ethics and professional conduct.

The minimum time for completion of this certificate is two semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Certificate of Achievement in Medical Clinic Assisting

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First semester required courses:</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 106 Introduction to Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Fall Semester:</strong></td>
<td></td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3.0</td>
</tr>
<tr>
<td>HCT 67 Computer Applications in the Health Care Setting</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4.0</td>
</tr>
<tr>
<td>MED 62 Communication and Professionalism in Health Care</td>
<td>2.0</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 neighborhood 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, phlebotomy, and computer applications. Students will complete an internship and must hold a valid CPR Health Provider card and a HIPAA Awareness Training certificate.

Learning Outcomes

Upon completion of this program, students will be able to:
- Effectively perform clinical procedures, laboratory tests, phlebotomy, and diagnostic studies.
- Practice infection control and adhere to OSHA regulations.
- Receive, communicate with, and support patients and staff.
- Collaborate in a culturally diverse health care environment and apply the principles of health care ethics and professional conduct with patients, staff, and the community.
- Apply for the Certified Phlebotomy Technician examination (CPT-1).

Students may obtain the Certificate of Achievement for MEA by completing each of the following courses with a grade of “C” or higher. The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

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><strong>Fall Semester:</strong></td>
<td></td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3.0</td>
</tr>
<tr>
<td>HCT 67 Computer Applications in the Health Care Setting</td>
<td>2.0</td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4.0</td>
</tr>
<tr>
<td>MED 62 Communication and Professionalism in Health Care</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Fall Semester: choose one of the following Anatomy and Physiology options:

OPTION 1:
- BIO 106 Introduction to Human Anatomy and Physiology | 4.0
### Medical Receptionist Certificate

This certificate program prepares students for employment as a receptionist in a physician's office, outpatient clinic, or other medical facility. Students receive training in computer applications, appointment scheduling, telephone etiquette, communication and professionalism, medical record preparation, medical terminology, business correspondence, insurance policies and claims completion, and first aid and CPR. Students must complete each course with a grade of “C” or higher.

#### Learning Outcomes

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

- Receive, communicate with, and support patients and staff.
- Use computer applications to create documents and perform medical record and billing activities.
- Apply the principles of health care ethics and professional conduct with patients, staff, and the community.
- Apply the principles of procedural coding and billing to insurance claims and other financial documents.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

<table>
<thead>
<tr>
<th>Courses Required for the Certificate of Achievement in Medical Receptionist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course</td>
</tr>
<tr>
<td>Fall Semester: choose one of the following Anatomy and Physiology options:</td>
</tr>
<tr>
<td>OPTION 1:</td>
</tr>
<tr>
<td>BIO 106 Introduction to Human Anatomy and Physiology</td>
</tr>
<tr>
<td>OPTION 2:</td>
</tr>
<tr>
<td>BIO 108 General Human Anatomy</td>
</tr>
<tr>
<td>AND choose one of the following Physiology options:</td>
</tr>
<tr>
<td>BIO 111 Human Physiology</td>
</tr>
<tr>
<td>BIO 112 Introduction to Human Physiology</td>
</tr>
<tr>
<td>Fall Semester required courses:</td>
</tr>
<tr>
<td>HCT 61 Introduction to Health Care</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
</tr>
<tr>
<td>HCT 67 Computer Applications in the Health Care Setting</td>
</tr>
<tr>
<td>MED 56 Administrative Procedures</td>
</tr>
</tbody>
</table>

#### Spring Semester:

- HIT 50B Medical Terminology II | 2.0 |
- HIT 76 CPT Coding | 3.0 |
- MED 55 The Electronic Health Record | 4.0 |
- MED 62 Communication and Professionalism in Health Care | 2.0 |
- MED 70 Medical Insurance Billing | 2.0 |
- MED 71 Electronic Management of Financial Medical Records | 2.0 |

#### Summer Session:

- HCT 82 Professional Practice Internship/ Certification | 5.0 |

Total: 41.5 - 46.5

### Pharmacy Technician Certificate

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.

#### Learning Outcomes

Upon completion of this program, students 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.

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 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B.
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 Campus, 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 tuberculosis 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:

**Courses Required for the Certificate of Achievement in Pharmacy Technician**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester required courses:</td>
<td></td>
</tr>
<tr>
<td>HCT 61 Introduction to Health Care</td>
<td>3.0</td>
</tr>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3.0</td>
</tr>
<tr>
<td>HCT 67 Computer Applications in the Health Care Setting</td>
<td>2.0</td>
</tr>
<tr>
<td>Total:</td>
<td>35.5 – 40.5</td>
</tr>
</tbody>
</table>

**Spring Semester:**

- HIT 50B Medical Terminology II | 2.0 |
- HIT 76 CPT Coding | 3.0 |
- MED 55 The Electronic Health Record | 4.0 |
- MED 62 Communication and Professionalism in Health Care | 2.0 |
- MED 70 Medical Insurance Billing | 2.0 |
- MED 71 Electronic Management of Financial Medical Records | 2.0 |

**Summer Session:**

- HCT 82 Professional Practice Internship/ Certification | 5.0 |

Total: 35.5 – 40.5
Upon completion of this program, students 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.
- Demonstrate professional behavior and team work skills in the health care environment.

**Admission Requirement**: High school diploma, GED, or high school proficiency certificate.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Noncredit Certificate in Unit Coordinator (Hospital)/Ward Clerk**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHWC 9183 Unit Coordinator</td>
<td>108.0</td>
</tr>
</tbody>
</table>

Total: 108.0

**Announcement of Courses**

**Credit, Degree Applicable Courses:**

**Echocardiography**

**ECHO 101. Echocardiography (7)**

Lec-105, Lab-52.5

Prereq.: ANAT 14 or BIO 106 or ANAT 25 or BIO 108; ENGL 96 or ENGL 88 or ENGL 88B or ESL 160 or placement in ENGL 1A

Coreq.: CVT 101 and CVT 110

Advise: Background check, drug screening, immunization records and TB testing required by the medical centers for internship attendance

Cardiac anatomy and physiology. Standard presentation of Two Dimensional (2D) Echo and M-Mode images of normal and abnormal echocardiograms. Color flow, pulse and continuous wave Doppler findings of normal and cardiac pathology identify valvular stenosis and regurgitation. Description of cardiac pathology and associated 2D findings, Doppler patterns, and related calculations for determining severity. CSU

STUDENTS MUST SUBMIT AN APPLICATION AND BE ACCEPTED INTO THE CVT/ECHO PROGRAM PRIOR TO REGISTRATION. REQUIRED BACKGROUND CHECK AND DRUG SCREENING. REQUIRED CURRENT IMMUNIZATION RECORDS AND TB TESTING.

Offered in alternate fall semesters

**ECHO 201. Advanced Echocardiography Technician (7)**

Lec-87.5, Lab-105

Prereq.: ECHO 101

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, pulmonary hypertension, right ventricular methods of evaluation, masses and tumors, endocarditis, prosthesis, aortic root diseases, and cardiac transplants. Transesophageal Echo: standard views, and Doppler identification. CSU

Offered in alternate spring semesters

**ECHO 301. Advanced Cardiac Abnormalities (5)**

Lec-70, Lab-52.5, field trips

Prereq.: ECHO 201

Description and Echocardiographic findings of advanced cardiac abnormalities including: pulmonary hypertension, pulmonary emboli, endocarditis, prosthetic valves, cardiac masses, transplant, and aortic
Offered in alternate Fall semesters

ECHO 401. Advanced Echocardiographic Studies (6)
Lec-105
Prereq: ECHO 101, ECHO 201, ECHO 301, ECHO 301, ECHO 310
Course content introduces advanced cardiac ultrasound technologies and assessment methods including 3D Echocardiography, Cardiac Resynchronization Therapy, Ventricular Assist Devices, Transesophageal Echocardiography, Electrophysiology Studies, Strain-Strain Rate and Speckle Tracking. Emphasis on carotid ultrasound imaging, Doppler, and characteristics of carotid pathology. CSU
Offered in alternate Spring semesters

CVT 101. Cardiovascular Technician (3)
Lec-52.5
Prereq.: ANAT 14 or BIO 106 or ANAT 25 or BIO 108; ENGL 96 or ENGL 88 or ENGL 88B or ESL 160 or Placement in ENGL 1A
Coreq.: ECHO 101 and CVT 110
Cardiac anatomy and the cardiac electrical conduction system. Electrocardiogram (ECG) identification and measurements, action potential curve, basic cardiac dysrhythmia, myocardial ischemia and infarction patterns. Interpretation techniques of 12 leads ECG, long term ECG recording and exercise stress testing protocols, procedures, and analysis. CSU
Offered in alternate Fall semesters

CVT 110. Cardiovascular Skills (7)
Lec-105, Lab-52.5
Prereq.: ANAT 14 or BIO 106 or ANAT 25 or BIO 108; ENGL 88 or ENGL 88B or ENGL 96 or ESL 160 or Placement in ENGL 1A
Coreq.: ECHO 101 and CVT 101
Develop technical imaging skills to perform echocardiograms and manipulate ultrasound system instrumentation. Identify cardiac structures and locations of standardized measurements. Complete electrocardiogram (ECG) and assess rhythm strips and 12 lead electrocardiograms. CSU
Offered in alternate Fall semesters

CVT 201. Advanced Cardiovascular Technician (4)
Lec-52.5, Lab-52.5
Prereq.: CVT 101
Advanced complex cardiac rhythms including heart blocks, bundle branch blocks, and accessory pathways. Includes cardiac pharmacology, pacemaker technology, exercise treadmill exams, and stress echo indications; procedures and analysis. CSU
Offered in alternate Spring semesters

CVT 210. Advanced Cardiovascular Skills (7)
Lec-87.5, Lab-105
Prereq.: CVT 110
Theory and 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
Offered in alternate Spring semesters

CVT 301. Physics of Cardiac Ultrasound (3)
Lec-52.5, field trips
Prereq.: CVT 201
Description and analysis of ultrasound physics as applied to sound waves, transducers, two-dimensional images, Doppler, hemodynamic principles, system functions, ultrasound artifacts and biosafety concerns. CSU
Offered in alternate Fall semesters

CVT 310. Clinical Experience in Cardiac Ultrasound (9)
Lec-70, Lab-262.5
Prereq.: CVT 310
Provide students with experience in performing echocardiograms on adults in the lab and clinical setting. Emphasis is on the development of ultrasound scanning techniques, application of measurements, Doppler interrogation, and interpretation of results in the clinical setting. CSU
Offered in alternate Spring semesters

ECG Technician

ECGT 101. ECG Technician I (4)
Lec-52.5, Lab-70
Prereq.: ENGL 91 or ENGL 86 or ESL 150 or Placement in ENGL 88 or 95 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-52.5, Lab-52.5
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

ECGT 103A. Electrocardiography Professional Experience (1)
Lec-17.5
Prereq.: ECGT 102
Coreq.: ECGT 103B
Covers professional requirements relating to supervised experience in a Non-Invasive Cardiology Department performing cardiovascular procedures. Cardiovascular Credentialing International (CCI) Registry Exam application and preparation skills. CSU
ECGT 103B. Electrocardiography Professional Practice (3)
Work-180, field trips P/NP only
Prereq.: ECGT 102; Approval of Health Care Technology Department.
Coreq.: ECGT 103A
Provide students with supervised professional experience in a Non-Invasive Cardiology Department performing cardiovascular procedures. Emphasis on performing electrocardiograms and exercise stress tests on inpatients and outpatients. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU

**Emergency Medical Technician**

**EMT 11A. Pediatric CPR and First Aid (5)**
Lec-9 P/NP available
Training for child care personnel in pediatric CPR & AED and first aid including the practice of universal precautions and early activation of the EMS system. Qualified participants are awarded the American Heart Association Adult/Child and Infant Heartsaver CPR and City College of San Francisco Pediatric First Aid cards. This course fulfills the partial requirement of the AR243 mandated Health and Safety Training established by the State EMS Authority for Childcare Providers. CSU

*Students enrolled in this course will be assessed a $5 lab/material fee for CPR and First Aid cards*

**EMT 12. Basic Life Support for Healthcare Providers (5)**
Lec-9 P/NP available
American Heart Association (AHA) Basic Life Support cardiopulmonary resuscitation (CPR) with AED certification course. Instruction and practice in the identification and the care of cardiac arrest and choking in adults, children, and infants. AHA BLS Provider cards issued for those who meet competency standards. CSU

*Students enrolled in this course will be assessed a $5 lab/material fee for AHA BLS Provider certification card.*

**EMT 13. Standard First Aid (5)**
Lec-9 P/NP available
Standard First Aid includes how to activate the Emergency Medical Services System, recognize the need for emergency care, resuscitation, and specific care for certain medical, traumatic, and environmental emergencies on infants, children, and adult patients. American Heart Association (AHA) Heartsaver First Aid CPR AED card awarded to those who meet AHA competency standards. CSU

*Students enrolled in this course will be assessed a $5 lab/material fee for AHA Heartsaver First Aid/CPR/AED card. Offered on occasion*

**EMT 14. Advanced First Aid and Basic Life Support (2)**
Lec-36 P/NP available
Emergency care for one and two-rescuer adult, child, and infant CPR with bag mask ventilation and AED; life-threatening, medical, environmental, and traumatic emergencies such as bleeding, burns, musculoskeletal injuries, seizures, strokes and neurological emergencies, poisonings and emergency childbirth. Qualified participants earn an American Heart Association Basic Life Support card and Heartsaver First Aid CPR AED card. UC/CSU

*Satisfies requirements for public safety personnel as stated in Title 22, Division 9, California Code of Regulations. There is an additional charge for the CPR and First Aid cards*

**EMT 99. National Registry EMT Exam Preparation Course (1)**
Lec-18 P/NP only
Advise: EMT 100
Preparation for the computer-adaptive examination used by the National Registry of Emergency Medical Technicians (NREMT) to verify cognitive competency of a basic level Emergency Medical Technician. This course assists students with test-taking skills on scenario-based exams. CSU

**EMT 100. Emergency Medical Technician (8)**
Lec-105, Lab-105, work-24
Prereq.: Current AHA Healthcare Provider CPR card
Advise: Certified background check, immunization screening, drug screening, and enrollment in certified background system are required for all enrolled students before being placed on clinical rotations.

Designed to meet the requirements of the State and National Emergency Medical Services (EMS) Education Standards for the Emergency Medical Technician (EMT) basic level provider. Students acquire the cognitive, psychomotor, and affective skills required to provide emergency care and transportation of the ill and injured. Includes required clinical experience on ambulance. CSU

*Offered Fall semesters*

**EMT 101A. EMT Theory and Skills I (4)**
Lec-70, field trips
Explores the knowledge and skills of basic Emergency Medical Services workers. Content introduces skills of the basic Emergency Medical Technician (EMT) including history of EMS and foundations of prehospital care. The first of two classes that prepares students to enter an EMT program. CSU

*Offered Fall semesters*

**EMT 101B. EMT Theory and Skills II (4)**
Lec-70, field trips
Prereq.: EMT 101A
Coreq.: Completion/Concurrent enrollment in EMT 102
The second portion of EMT theory and skills provides the knowledge and skills required to manage emergencies in the prehospital setting. Emphasis on the assessment and management of various medical and traumatic emergencies. CSU

*Offered Spring semesters*

**EMT 104. Advanced Skills for EMS providers (4)**
Lec-70
Prereq.: EMT 100
This course is a review of the advanced life support psychomotor competency portfolio approved by the National Registry of Emergency Medical Technicians (NREMT) at the paramedic level. The course incorporates advanced diagnostic and treatment competencies into the systematic assessment of critical and non-critical medical and trauma patients in simulated scenarios. CSU

**EMT 105. ECG Interpretation in Emergency Medical Services (3)**
Lec-52.5
Advise: Completion of or concurrent enrollment in: EMT 100
Designed to prepare basic level EMS providers with the foundation of ECG interpretation prior to entering paramedic level training. Includes dysrhythmias, 12-Lead, and axis interpretation related to patients treated in the prehospital setting. CSU
Noncredit Courses:
EMT 5000. Heartsaver First Aid/CPR/AED (8 hrs)
Cardiopulmonary resuscitation (CPR) and first aid training for laypersons who may require a completion card for their workplace. The course consists of the early recognition, management of a victim of a medical, environmental, or traumatic injury, performance of CPR with an automated external defibrillator (AED), and relief of airway obstruction. An American Heart Association Heartsaver First Aid/ CPR/AED card will be awarded upon successful completion and requires a $5 fee for the card.

EMT 5005. EMT Refresher (48 hrs)
Prereq.: current EMT certification and current CPR certification
This course meets the State of California requirements for the Emergency Medical Technician (EMT) refresher, providing the course content and skills verification necessary as an EMT at the basic level. Students must hold current California EMT certification to be enrolled in this course.

Paramedic Program
Students must submit an application and be accepted into the Paramedic Program prior to registration.

EMTP 120. Human Systems and Patient Assessment (5)
Lec-87.5
Prereq.: EMT 100
This course reviews the fundamentals of human anatomy, physiology and pathophysiology and the language and terminology of emergency medicine. Organ systems will be reviewed along with related clinical case studies. 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 prehospital emergency medical care. CSU

EMTP 121. Introduction to EMS (2)
Lec-36, field trips
Prereq.: EMT-P 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 EMT-P 101.
Offered Fall semesters

EMTP 122. Pharmacology and Ventilatory Mgt (2)
Lec-42, field trips
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
Offered Fall semesters

EMTP 123. Trauma Emergencies (4)
Lec-72, field trips
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
Offered Fall semesters

EMTP 124. Trauma Certification (1.5)
Lec-32
Prereq.: EMTP 123
This course meets the requirements for trauma certification according to national, state and local standards. CSU
Offered Fall semesters

EMTP 125. Cardiorespiratory Emergencies (4.5)
Lec-84, field trips
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
Offered Fall semesters

EMTP 126. Neuroendocrine Emergencies (3)
Lec-35, Lab-52.5
Prereq.: Acceptance into the Paramedic Program
Prehospital assessment and management of patients with altered mental status, seizures, strokes, diabetes, and other dysfunctions of the neuroendocrine systems. CSU
Offered Spring semesters

EMTP 127. Medical Emergencies (3)
Lec-35, Lab-52.5
Prereq.: Acceptance into the Paramedic Program
Prehospital assessment and management of patients with medical emergencies, including allergic, anaphylactic, gastrointestinal, genitourinary, hematologic, toxicologic, psychiatric, environmental, infectious, and immunologic emergencies. CSU
Offered Spring semesters

EMTP 128. OB/GYN & Pedi Emergencies (4)
Lec-52.5, Lab-52.5
Prereq.: Acceptance into Paramedic Program
Prehospital assessment and management of gynecological, obstetric, neonatal and pediatric emergencies. CSU
Offered Spring semesters

EMTP 129. Special Populations, EMS Ops (4)
Lec-52.5, Lab-52.5
Prereq.: Acceptance into Paramedic Program
Prehospital assessment and management of patients with special healthcare challenges. Special populations topics include geriatrics, abuse/neglect, homelessness, poverty, hospice, and home care. Also reviews EMS operations, including crime scene awareness, and patient and scene management at multiple casualty incidents. CSU
Offered Spring semesters

EMTP 130. Clinical and Field Internship (12)
Lec-52.5, Lab-52.5
Prereq.: EMTP 129
Advise: Paramedic student must pass final written examination and demonstrate clinical competency to be approved for field internship.
Paramedic program didactic review, simulation lab, and clinical rotations in emergency departments, operating room, labor and delivery, psychiatric emergency, pediatrics, intensive care unit and
other settings. Prehospital field internship on an advanced life support ambulance is the final phase. CSU

Formerly EMT-P 110

Offered only in Summer semesters

EMTP 131. Simulation in Emergency Medical Services Education (2)
Lec-35, field trips
Advise: Completion of or concurrent enrollment in: EMT 100 or EMTP 121
Introduction to the history, design, and facilitation of healthcare simulation in Emergency Medical Services (EMS) education and training. Adult learning theory, varieties of healthcare simulation, objectives, and practical application and practice across a range of simulation types. CSU

Health Care Technology

HCT 61. Introduction to Health Care (3)
Lec-35, Lab-105
Prereq.: ESL 150 or ENGL 91 or ENGL 86 or placement in ESL 160 or ENGL 95 or ENGL 88
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, outpatient, and physician office record content; numbering and filing systems; and electronic health record adoption. CSU

HCT 66. Medical Typing/Transcription (4)
Lec-35, Lab-105
Using Microsoft Office Suite software, students will complete medical correspondence/reports and transcripts, as well as spreadsheet, presentation, and database exercises. Students will select and define appropriate medical terminology and abbreviations by system and/or specialty. Medicolegal requirements are integrated into the preparation and correction of medical typing/transcription assignments. CSU

HCT 67. Computer Applications in the Health Care Setting (2)
Lec-17.5, Lab-52.5
Prereq.: Completion of or concurrent enrollment in: ENGL 91 or ENGL 86 or ESL 150 or placement in ESL 88 or ESL 160
An introduction to the various types of computer systems and their use in health care. Instruction will include word processing, spreadsheets, presentation materials, databases, the Internet, and the Health Information Exchange. Importance of data accuracy, consistency, completeness, letter and memo presentation, and database security are emphasized. CSU

Formerly HIT 67

HCT 82. Professional Practice Internship/ Certification (5)
Lec-21, Lab-35, Work-196
Prereq.: HIT 50B and MED 56; MED 70; MED 71; MED 55; MED 49
Students can repeat once (total 2 enrollments)
A supervised experience in developing a professional relationship with patients and health care professionals in physician offices, hospital outpatient clinics, and health centers 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

Offered only in Summer semesters

HCT 100. Introduction to Residential Services (3)
Lec-52.5
Instruction in the laws and regulations of the State of California for entry level administrators and direct staff to enable them to work effectively in a service program for developmentally challenged persons. CSU

Offered Spring semesters

HCT 104. Phlebotomy Technician (6)
Lec-105
Prereq.: ESL 160 or ENGL 86 or ENGL 91 or placement in ENGL 88
Advise: EMT 100 or (EMT 101A and EMT 101B)
Theory and skills competencies 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 108. Everyday Healing Foods and Herbs (3)
Lec-52.5
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

Offered on occasion

Health Information Technology

HIT 50A. Medical Terminology I (3)
Lec-52.5
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-35
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
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-52.5
Prereq.: ANAT 14, HIT 50A
Instructs students in the general principles of disease processes with...
emphasis on the 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-35, Lab-52.5
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 (ERR), and healthcare information systems. CSU
Offered Spring semesters

HIT 65. Organization of Health Data (2)
Lec-17.5, Lab-52.5
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 healthcare management, including various methods of presenting data; calculation of common rates and percentages. CSU
Offered Spring semesters

HIT 72. Legal Aspects of HIM (3)
Lec-35, Lab-52.5
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
Offered Fall semesters

HIT 73A. ICD-10-CM Coding (2)
Lec-35, Lab-17.5
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-52.5, Lab-52.5, field trips
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
Offered Spring semesters

HIT 74. Introduction to Quality Improvement (2)
Lec-17.5, Lab-52.5
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
Offered Fall semesters

HIT 75. Organization and Management in Health (3)
Lec-52.5
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
Offered Fall semesters

HIT 76. CPT Coding (3)
Lec-52.5
The Current procedural terminology (CPT) coding system is used to describe services and procedures provided by healthcare providers in the outpatient setting to include evaluation and management, surgery, radiology, pathology, laboratory, and medicine. The class includes an overview of the HCPCS and the ambulatory classification systems. CSU

HIT 77A. Professional Practice I (5)
Lec-52.5, Lab-105
Coreq.: 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 (5)
Lec-52.5, Lab-105
Prereq.: HIT 77A
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
Recommended to be taken in student's last semester

HIT 78. Reimbursement Methods in HIM (2)
Lec-35
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
Offered Spring semesters

Medical Assisting

MED 49. Clinical Procedures (5.5)
Lec-87.5, Lab-35
Prereq.: ANAT 14 AND HIT 50A
Advise: MATH E1 OR MATH E3 OR BSMA G, H, OR J OR PLACEMENT IN MATH 40
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-52.5, Lab-52.5
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. CSU

MED 56. Administrative Procedures (3.5)
Lec-52.5, Lab-35
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 about future health care trends. CSU

Offered Fall semesters

MED 62. Communication and Professionalism in Health Care (2)
Lec-35
Prereq.: ENGL 91 or ENGL 86 or ESL 160 or placement in ENGL 88 or ENGL 95
Communication and professionalism play an increasingly important role in the success of health care professionals today. Effective communication will be explored from both personal and professional points of view. Critical thinking skills and setting goals will be emphasized. This course will also explore the roles of health care professionals as the patient coaches and advocates of today. CSU

Offered Spring semesters

MED 70. Medical Insurance Billing (2)
Lec-35, Lab-17.5
Prereq.: Completion of or concurrent enrollment in: HIT 76 and MED 71
A comprehensive and intensive study of the financial activities of 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 to include commercial, Medicare, Medicaid, worker’s compensation, and disability insurance, and managed care claims. CSU

Offered Spring semesters

MED 71. Electronic Management of Financial Medical Records (2)
Lec-17.5, Lab-52.5
Advise: MED 70 and HIT 76
An introduction to medical office financial applications. Students use medical office software to create new accounts, post charges, payments, and adjustments to accounts, create and produce financial activity reports and patient statements, complete collection procedures and insurance claim forms, schedule appointments, and enter hospital rounds information. CSU

Offered Spring semesters

MED 72. Advanced Medical Insurance Billing (2)
Lec-35, Lab-17.5
Prereq: MED 70 and completion of or concurrent enrollment in: HIT 76
An advanced insurance billing course which concentrates on commercial, Medicare, and Medicaid insurance claims. The course focuses on specialty billing to include internal medicine, cardiology, general surgery, dermatology, neurology, OB/GYN, and orthopedics. Students learn how to manage capitated accounts, obtain preauthorizations and referrals, complete secondary insurance billing, and handle claim appeals and disputes. CSU

Offered Fall semesters

MED 73. Advanced Medical Manager (1.5)
Lec-17.5, Lab-35, 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

Offered Fall semesters

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-157.5
Prereq.: MATH 840; ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
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

Offered Fall semesters

PHTC 102. Pharmacy Technician I - Clinical (7)
Lec-70, Lab-160
Coreq.: PHTC 101
Application of pharmaceutical knowledge, pharmacy law, pharmaceutical calculations, and terminology to a lab and clinical setting as well as storage and labeling of drug requirements, sterile and non-sterile products preparation, and computerized record keeping. CSU

Offered Fall semesters

PHTC 102A. Health Care Mathematics (2)
Lec-36
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

Offered only in Summer semesters

PHTC 103. Pharmacy Technician II - Theory (9)
Lec-157.5
Prereq.: PHTC 101
Advanced drug classification, mechanism of action, indications, 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, and pharmacy law as they pertain to pharmacy practice. CSU

Offered Spring semesters

PHTC 104. Pharmacy Technician II - Clinical (5)
Lec-35, Lab-164
Prereq.: PHTC 102
Coreq.: PHTC 103
Application of advanced drug preparation skills to various clinical settings as well as maintaining inventory, storage requirements, drug selection, preparation and filling of prescriptions. Emphasis on quality assurance and the use of automated technology as related to preparation of IV admixtures and chemotherapeutic agents. CSU

Offered Spring semesters

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)
Advise: TRST 2421
Instruction in the community health care environment; ethical responsibilities; 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)
Advise: completion of or concurrent enrollment in: A Health Care Technology course
Instruction in one or more health care software applications for students enrolled in applicable Health Care Technology courses. These programs include the Microsoft Office Suite, Harris CareTracker Practice Management (PM) and Electronic Medical Record (EMR), AHIMA Registered Health Information Technician (RHIT) Examination Preparation, Health Information Management and Technology Flashcards, etc.

Health Education

Office: MUB 353
Phone Number: (415) 239-3220
Web Site: www.ccsf.edu/hlted
Formerly Health Science

Announcement of Curricula

General Information

The Health Education Department is committed to promoting individual, 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 workforce.

To this end, we offer a Health Education Major, an Associate Degree for Transfer in Public Health Sciences, and the following certificates for students interested in health-related careers:

- Community Health Worker Certificate, with specialty areas in Youth Advocacy, Re-entry, HIV/HCV Navigation and Elder Advocacy
- Community Mental Health Certificate
- Drug and Alcohol Studies Certificate
- Health Care Interpreter Certificate
- Nutrition Assistant Certificate

Metro Transfer Academies (Metro) is a school-wide transfer program housed in the Health Education Department. Metro prepares students for transfer, community engagement and meaningful careers. Students in Metro take general education classes together, building close relationships among peers and faculty. The Metro program includes academic counseling, a student resource room, tutoring and an emphasis on social justice and developing strong academic skills. Metro’s outreach is geared towards high schools, community based organizations, and classes that serve students who are first-generation, low-income and/or historically underrepresented. For more information, please visit www.ccsf.edu/metro, email metro@ccsf.edu or call 415-452-5237.

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 prepare them 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 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: 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 approved electives described below. Requirements for Bachelor's 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, PSYC 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 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, students 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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Health Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HLTH 54 Introduction to Public Health</td>
<td>3.0</td>
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Choose one of the following required courses:

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>HLTH 53 Health in Society</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 27 Men's Health</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 25 Women's Health</td>
<td>3.0</td>
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</table>

Choose one of the following required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIO 9 Human Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 11 The Science of Living Organisms</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Choose one of the following required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PSYC 5 Statistics for Behavioral Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>ECON 5 Introductory Statistics for Economics, Business and Social Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 80 Probability and Statistics</td>
<td>5.0</td>
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</tbody>
</table>

Choose six units from the following elective courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HLTH 10 Health and Aging</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 30 Drugs and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 36 Shifting Paradigms in Weight Science</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 38 Trauma Response and Recovery</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 48 Violence as a Public Health Issue: Prevention Strategies</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 50 Tai Chi for Health</td>
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<td>HLTH 64 Health Education Practice</td>
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<td>HLTH 65 Youth Development &amp; Leadership</td>
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<td>HLTH 67 HIV and Hepatitis Navigation Skills</td>
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<tr>
<td>HLTH 72 Cultural Dimensions in Substance Abuse</td>
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<td>HLTH 73 Case Management/Individual Intervention</td>
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<td>HLTH 80 Interpreting in Health Care</td>
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<td>HLTH 91C Hepatitis ABCs</td>
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<td>HLTH 95 Transgender Health: Working with Clients and Communities</td>
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<td>HLTH 102 Helping Relationships: Recovery and Wellness</td>
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<td>HLTH 103 Community and Group Forums</td>
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<td>HLTH 110 Health Impacts of Incarceration</td>
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<tr>
<td>HLTH 116 Conflict Resolution in the Health Care Workplace</td>
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<td>HLTH 221 Health and Social Justice</td>
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<td>HLTH 231 Urban Health Policy</td>
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<td>BIO 108 General Human Anatomy</td>
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<td>CDEV 67 Child, Family, and Community</td>
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<td>CDEV 100 Violence and Its Impact on Children and Their Families</td>
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<tr>
<td>IDST 17 Human Sexuality</td>
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<tr>
<td>IDST 37 Introduction to Ethnic Studies</td>
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<td>LBCS 81 Organizing for Economic and Social Justice</td>
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<tr>
<td>WOMN 54 The Politics of Sexual Violence</td>
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Total: 20.0 – 21.0

Below you will find specific information for each certificate program.

Community Health Worker Certificate

Community Health Workers (CHW) provide health education, case management and client advocacy in both community-based and health care settings. CHWs serve as a two-way bridge between communities and key health and social resources. They play a vital role in reducing health inequalities among underserved communities by reducing barriers to access in a culturally appropriate way.

The San Francisco Department of Public Health accepts the certificate of achievement to satisfy six out of twelve months of experience that is required as minimum qualification for hiring as a Health Worker 1-3. For more information, an application or a form for documenting work experience, go to www.ccsf.edu/chw.

Learning Outcomes

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

- Analyze and evaluate public health concepts and information for health promotion.
- Assess and integrate professional skills necessary for employment in the CHW field.
- Evaluate and implement entry-level proficiency in CHW core...
Upon completion of this program, students will be able to:

Learning Outcomes

- Analyze and evaluate public health concepts and information for health promotion.
- Develop and integrate professional skills necessary for employment in the CHW field.
- Evaluate and implement entry-level proficiency in CHW core competencies for working effectively with diverse individuals, groups and communities.
- Analyze and apply key concepts and skills for working with incarcerated and formerly incarcerated clients and communities.

Admission to the program is based on:
1) The completion of HLTH 59 "Introduction to Community Health Work" with a grade of "C" or better
or
2) Documented successful experience as a Community Health Worker and submission of a Completed Program Application by the stipulated deadline.

Any student who receives a grade less than a "C" in HLTH 201 must re-apply for admission to the program.

Requirements for the Certificate of Achievement

To receive the Certificate of Achievement, in addition to the general requirements for all certificates, the following must be satisfied:

1. Successful completion of 128 internship hours during HLTH 203
2. All courses must be completed within a 3 year period, starting from the first semester of enrollment in HLTH 201. Any student planning to take HLTH 203 six months or more after completing HLTH 201, are strongly advised to meet with the CHW program Coordinator and complete required internship paperwork before H203 begins.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Certificate of Achievement in Community Health Worker

Course ................................................. Units
Required courses:
HLTH 201 CHW Principles & Practice 1 ............... 5.0
HLTH 202 CHW Principles & Practice 2 ............... 5.0
HLTH 203 CHW Internship Placement and
Performance ............................................. 4.0
HLTH 64 Health Education Practice ..................... 3.0
HLTH 66 Chronic Conditions Management ............. 3.0
Total: .................................................. 20.0

Community Health Worker, Re-Entry Specialist Certificate

The Community Health Worker, Re-Entry Specialist Certificate of Achievement is part of the Community Health Worker Program. This 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 cultural humility and providing client-centered assessment, education, counseling and care management services. As part of their education, students will complete an internship with a local agency.

The San Francisco Department of Public Health accepts the certificate of achievement to satisfy six out of twelve months of experience that is required as minimum qualification for hiring as a Health Worker 1-3.

For more information, an application or a form for documenting work experience, go to www.ccsf.edu/chw.

Learning Outcomes

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

- Analyze and evaluate public health concepts and information for health promotion.
- Develop and integrate professional skills necessary for employment in the CHW field.
- Evaluate and implement entry-level proficiency in CHW core competencies for working effectively with diverse individuals, groups and communities.
- Analyze and apply key concepts and skills for working with incarcerated and formerly incarcerated clients and communities.

Admission to the program is based on:
1) The completion of HLTH 59 "Introduction to Community Health Work" with a grade of "C" or better
or
2) Documented successful experience as a Community Health Worker and submission of a completed Program Application by the stipulated deadline.

Any student who receives a grade less than a "C" in HLTH 201, must re-apply for admission to the program.

Requirements for the Certificate of Achievement

To receive the Certificate of Achievement, in addition to the general requirements for all certificates, the following must be satisfied:

1. Successful completion of 128 internship hours during HLTH 203
2. All courses must be completed within a 3 year period, starting from the first semester of enrollment in HLTH 201. Students planning to take HLTH 203 six months or more after completing HLTH 201 are strongly advised to meet with the CHW program Coordinator and complete required internship paperwork before H203 begins.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Certificate of Achievement in Community Health Worker, Re-Entry Specialist

Course ................................................. Units
Required courses:
HLTH 201 CHW Principles & Practice 1* ............... 5.0
HLTH 202 CHW Principles & Practice 2** ............... 5.0
HLTH 203 CHW Internship Placement and
Performance ............................................. 4.0
HLTH 66 Chronic Conditions Management ............. 3.0
HLTH 110 Health Impacts of Incarceration ............. 3.0
* HLTH 201 is taken in the first semester.
** HLTH 202 is taken in the second semester.
Total: .................................................. 20.0

Community Health Worker, Youth Advocate Specialist Certificate

The Community Health Worker (CHW), Youth Advocate Specialist Certificate of Achievement is part of the Community Health Worker Program. It is designed to prepare individuals for positions working with youth and young adults with community health and social service agencies and programs. CHW Youth Advocate Specialists 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 San Francisco Department of Public Health accepts the certificate of achievement to satisfy six out of twelve months of experience that is required as minimum qualification for hiring as a Health Worker 1-3.

For more information, go to www.ccsf.edu/chw.

**Learning Outcomes**

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

- Analyze and evaluate public health concepts and information for health promotion.
- Assess and integrate professional skills necessary for employment in the CHW field.
- Evaluate and implement entry-level proficiency in CHW core competencies for working effectively with diverse individuals, groups and communities.
- Analyze and apply key concepts and skills for working with youth and young adults.

**Admission to the program is based on:**

1) The completion of HLTH 59 "Introduction to Community Health Work" with a grade of "C" or better

or

2) Documented successful experience as a Community Health Worker and submission of a completed Program Application by the stipulated deadline.

Any student who receives a grade less than a "C" in HLTH 201 must re-apply for admission to the program.

**Requirements for the Certificate of Achievement**

To receive the Certificate of Achievement, in addition to the general requirements for all certificates, the following must be satisfied:

1. Successful completion of 128 internship hours during HLTH 203

2. All courses must be completed within a 3 year period, starting from the first semester of enrollment in HLTH 201. Students planning to take HLTH 203 six months or more after completing HLTH 201 are strongly advised to meet with the CHW program Coordinator and complete required internship paperwork before HLTH 203 begins.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

**Courses Required for the Certificate of Achievement in Community Health Worker, Youth Advocate Specialist**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Required courses:</td>
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</tr>
<tr>
<td>HLTH 201 CHW Principles &amp; Practice 1*</td>
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</tr>
<tr>
<td>HLTH 202 CHW Principles &amp; Practice 2**</td>
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<tr>
<td>HLTH 203 CHW Internship Placement and Performance</td>
<td>4.0</td>
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<tr>
<td>HLTH 65 Youth Development &amp; Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 64 Health Education Practice</td>
<td>3.0</td>
</tr>
</tbody>
</table>

* HLTH 201 is taken in the first semester.
** HLTH 202 is taken in the second semester.

Total: ........................................ 20.0

**Community Mental Health Worker Certificate**

The curriculum for the 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 affirming 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.

**Learning Outcomes**

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

- Comprehend, apply, and evaluate information on wellness and recovery promotion, mental health management, evidence-based approaches, and community-defined practices.
- Demonstrate entry-level proficiency in skills including care brokerage, advocacy, outreach, systems navigation and linkage, documentation, and counseling.
- Demonstrate the ability to work with members in diverse communities, including children/youth, adults/older adults, families, and consumers of mental health services, using principles of wellness and recovery and cultural humility.
- Demonstrate the behavioral, ethical, and professional interpersonal skills necessary for employment in the field.

**Requirements for the Certificate of Accomplishment**

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.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the Certificate of Accomplishment in Community Mental Health Worker**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Required Courses</td>
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<tr>
<td>HLTH 88 Family Systems</td>
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<td>HLTH 102 Helping Relationships: Recovery and Wellness</td>
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<td>HLTH 103 Community and Group Forums</td>
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<td>HLTH 104 Internship Preparation and Professional Conduct in Mental Health</td>
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<tr>
<td>HLTH 105 Internship Placement and Performance</td>
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Total: ........................................ 17.0

**Drug and Alcohol Studies Certificate**

The Drug and Alcohol Studies Certificate is accredited by the California Association for Alcohol and Drug Educators (CAADE). For more information about this agency, see the "Overview of the College" section of this Catalog.

The curriculum for the Certificate in Drug and Alcohol Studies is designed to prepare individuals for work in alcohol and other drug counseling. 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.

Courses in the Drug and Alcohol Studies Program are sequenced based on skills and information that are acquired as students move through the program. The prerequisites for each course ensure that students will be able to succeed in the target course.

In addition to the spring and fall semesters, HLTH 100 and HLTH 90B are frequently offered in the Summer. Please consult the current CCSF Summer Class Schedule to confirm availability.

Learning Outcomes

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

- Distinguish the ethical skills necessary for professional employment as a substance use treatment counselor in healthcare settings.
- Explain the content and skills necessary for the Certified Addiction Treatment Counselor Certificate exam.
- Synthesize client-centered counseling skills, harm reduction and motivational counseling concepts, and cultural humility.
- Integrate substance use and recovery research into professional practice.

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 Achievement

The certificate requires the completion of 37.5 units. At least 27.5 units and both internships must be completed at City College of San Francisco.

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.

The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Drug and Alcohol Studies

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<tr>
<th>Course</th>
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<td>HLTH 70 Physiological Effects of Addiction</td>
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<td>HLTH 72 Cultural Dimensions in Substance Abuse</td>
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<td>HLTH 73 Case Management/Individual Intervention</td>
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<td>HLTH 75 Treatment Modalities</td>
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<td>HLTH 77 Co-Occurring Disorders</td>
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<td>HLTH 78 Ethics and Drug Counseling</td>
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<td>HLTH 79A Drug and Alcohol Studies Fieldwork I</td>
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<tr>
<td>HLTH 79B Drug and Alcohol Studies Fieldwork II</td>
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<td>HLTH 83 Motivational Counseling Skills</td>
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<td>HLTH 90B Harm Reduction and Health</td>
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<td>HLTH 91C Hepatitis ABCs</td>
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<td>HLTH 86 Group Treatment for Recovery</td>
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Health Care Interpreter Certificate

The curriculum for the 16-unit Health Care Interpreter (HCI) 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 interpreting skills in English and a Language Of Service (LOS). Both California and National Standards of Practice are included in the instruction. Graduates find employment interpreting in hospitals, clinics, or freelancing for remote and onsite interpreting agencies. This program complies with all training standards described by the National Council for Interpreting in Health Care. Up to four different languages are offered each semester depending on number of applicants. Maximum of fifteen students (who share the same language-pair) will be admitted during any semester.

Learning Outcomes

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

- Interpret accurately between English and LOS in various healthcare settings; integrating appropriate medical terminology in both languages and enhancing communication between a provider and patient during routine and complex medical encounters.
- Manage the flow of communication through a variety of interpreting techniques.
- Apply and demonstrate the four principle roles of the interpreter in health care as described in professional HCI standards of practice.
- Bridge cultural gaps and assist Limited English Proficient (LEP) patients and providers to appreciate diverse cultural beliefs and practices regarding health and healthcare.
- Demonstrate and apply appropriate ethical standards in Healthcare Interpreting as promulgated by the California Healthcare Interpreting Association (CHIA) and the National Council for Interpreting in Health Care (NCIHC).
- Develop personal learning objectives, a plan for developing and improving interpreting skills, and produce a professional resume geared towards healthcare job market.

Admission Requirements

1. Proficiency in English and an additional language
2. Passing grade required in introductory course—HLTH 84, Introduction to Healthcare Interpreting (.5 unit)
3. Submission of written application distributed at HLTH 84
4. Priority is given to those who have successfully completed at least three units of the following recommended course: ANAT 14, HIT 51; HLTH 6, 10, 25, 27, 53, 66, 67, 91C, 95, 171; PHYS 12. HLTH 5410, a noncredit course, may also meet this requirement.
5. Assignment by program coordinator to a specific LOS group with a proposed semester of admission

Requirements for the Certificate of Accomplishment

Each required course must be completed with a grade of C or higher. Where applicable, grades of Pass may be used. Students who are multilingual must participate in their strongest LOS.

All courses must be completed within a two-year period. Any student who withdraws from the program after successfully completing HLTH 80 must submit a HCI program withdrawal form.

Any student wishing to take HLTH 81 and 82 twelve months or more after completing HLTH 80 must submit a written reinstatement.
Admission to the program is based on the following:

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

Learning Outcomes
- Apply learner-centered facilitation skills for group and individual nutrition education.

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 HLTH 170, Introduction to Dietetics Profession, with a grade of "C" or higher.
3. Recommended completion of ENGL 91 or ENGL 86 or ESL 150, or placement in ENGL 93 or 95 or ENGL 88 or ESL 160.

All applicants to the program must enroll in HLTH 170 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.

Requirements for the Certificate of Achievement: Each course must be completed with a final grade of "C" or higher and a "P" grade in HLTH 175L.

Internship: Students must complete HLTH 175, Nutrition Assistant Field Experience, a 10-week long internship of at least 160 hours with an agency providing nutrition services, under the mentorship of registered dietitians or other qualified nutrition professionals, and HLTH 175L, Nutrition Assistant Clinic providing 16 hours lab experience at the CCSP Student Health Center.

The minimum time for completion of this certificate is 2 semesters plus 1 month. The field experience is a late-start course that extends 5 weeks past the end of the regular semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Health Care Interpreter

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<td>HLTH 80 Interpreting in Health Care I</td>
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<tr>
<td>HLTH 81 Interpreting in Health Care II</td>
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</tr>
<tr>
<td>HLTH 82 Field Experience in Health Care Interpreting</td>
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</tr>
<tr>
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</tr>
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General Information
The Nutrition Assistant Program is a two-semester certificate program designed to develop competency in the delivery of nutrition-related services. Graduates of the program work as entry-level nutrition staff in public health and health care settings.

Nutrition Assistant Certificate

The Nutrition Assistant Program values the promotion of healthy living through education, nutrition resources, meal programs, outreach, and referral in our diverse multi-ethnic populations. The program is committed to train students to provide culturally sensitive, quality nutrition care to help clients achieve optimal health and well-being at every stage of life. Graduates of the program work as entry-level nutrition staff in public health and health care settings, such as Women, Infants, & Children (WIC) Supplemental Nutrition Programs, senior nutrition programs, public health agencies, University of California Cooperative Extension, schools and child care settings, hospitals and other health care facilities. Others may continue their educational pathway to transfer, or pursue a degree in dietetics, public health, or other related fields.

Learning Outcomes
Upon completion of this program, students will be able to:
- Plan and facilitate nutrition-related services for entry-level employment.
- Describe and apply basic nutrition and food safety principles.
- Apply learner-centered facilitation skills for group and individual nutrition education.

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 HLTH 170, Introduction to Dietetics Profession, with a grade of "C" or higher.

3. Recommended completion of ENGL 91 or ENGL 86 or ESL 150, or placement in ENGL 93 or 95 or ENGL 88 or ESL 160.

All applicants to the program must enroll in HLTH 170 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.

Requirements for the Certificate of Achievement: Each course must be completed with a final grade of "C" or higher and a "P" grade in HLTH 175L.

Internship: Students must complete HLTH 175, Nutrition Assistant Field Experience, a 10-week long internship of at least 160 hours with an agency providing nutrition services, under the mentorship of registered dietitians or other qualified nutrition professionals, and HLTH 175L, Nutrition Assistant Clinic providing 16 hours lab experience at the CCSP Student Health Center.

The minimum time for completion of this certificate is 2 semesters plus 1 month. The field experience is a late-start course that extends 5 weeks past the end of the regular semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Nutrition Assistant

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>HLTH 170 Introduction to Dietetics Profession</td>
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<td>HLTH 171 Nutrition for Health</td>
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<td>HLTH 172 Foodways, Nutrition &amp; Health</td>
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<td>Total</td>
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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
Credit, Degree Applicable Courses:
HLTH 6. End of Life Issues in the U.S. (3)
Lec-52.5

ADVISOR: ENGL 93 or ENGL 95 or ESL 150 or placement in ESL 160 or ENGL 93 or higher

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 US. UC/CSU

OFFERED ON OCCASION
HLTH 10. Health and Aging (3)
Lec-52.5 P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
Introduction to gerontology for students pursuing careers in the aging field and those who will work with older adults in varied work settings. Employs a multidisciplinary perspective, incorporating biology, psychology, sociology, and public health approaches. It uses gerontology theory, research, and practice with social justice and multicultural perspectives. UC/CSU

HLTH 25. Women’s Health (3)
Lec-52.5, field trips P/NP available
Advise: ENGL 91 or ENGL 86 or ESL 150 or placement in ENGL 88 or ENGL 95 or ESL 160
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. UC/CSU

HLTH 27. Men’s Health (3)
Lec-52.5 P/NP available
Advise: ENGL 91 or ENGL 86 or ESL 150 or placement in ENGL 88 or ENGL 95 or ESL 160
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. UC/CSU

HLTH 30. Drugs and Society (3)
Lec-52.5, field trips
Prereq.: HLTH 100
This course offers an examination of the history of alcohol, tobacco and drug use. Students will analyze and critically examine the war on drugs, drug policies and the impact on low income and communities of color. This is a required course in the Drug and Alcohol Studies Certificate Program. CSU

HLTH 33. Introduction to Health and Wellness (2)
Lec-35
Advise: ESL 140 or ESL 184 or placement in ESL 150 or ESL 186 or completion of or concurrent enrollment in ENGL 90
Introduction to the causes and consequences of illness and the promotion of individual, family and community health based on research in public health, social and behavioral sciences. Examination of the causes, consequences, available treatments and strategies for prevention of major health conditions across the life cycle. UC/CSU

HLTH 36. Shifting Paradigms in Weight Science (3)
Lec-52.5 P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 150 or placement in ENGL 96 or ENGL 88B or ESL 160
This course critically examines common assumptions about body weight and weight loss within science, health care and popular culture, and introduces the Health at Every Size paradigm, which supports people of all sizes and other diverse identities in feeling respected and taking care of their bodies. CSU

Offered on occasion

HLTH 38. Trauma Response and Recovery (3)
Lec-52.5 P/NP available
This course is designed for students in the health, justice, or social service fields. Students will review definitions of trauma, identify 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

Offered Fall semesters

HLTH 48. Violence as a Public Health Issue: Prevention Strategies (3)
Lec-52.5 P/NP available
Advise: ESL 150 or ENGL 86 or ENGL 91 or placement in ESL 160 or ENGL 93 or ENGL 88
Public health perspectives on diverse types of violence, with a focus on trends over time, causes and risk factors of violence, in order to develop strategies for violence prevention. Trauma and other consequences of violence will be examined. Community-based prevention skills such as educational outreach and policy advocacy are introduced and practiced in this course. CSU

Offered Spring semesters

HLTH 50. Tai Chi for Health (3)
Lec-44, Lab-26, 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. UC/CSU

Offered on occasion

HLTH 52. Critical Perspectives in Global Health (3)
Lec-52.5 P/NP available
Advise: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
Explores the primary determinants of global health, inequalities in health status among nations, and current challenges, controversies and public policy priorities. UC/CSU

Offered on occasion

HLTH 53. Health in Society (3)
Lec-52.5, field trips P/NP available
Advise: ESL 92 or ESL 150 or placement in ENGL 93; 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. UC/CSU

HLTH 54. Introduction to Public Health (3)
Lec-52.5 P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 150 or placement in ENGL 96 or ENGL 88B or ESL 160
An introduction to public health approaches and tools, drawn from epidemiology, health policy, behavioral health, environmental health, community organizing, maternal and child health and other public health disciplines. Students examine contemporary health challenges with an emphasis on addressing social determinants to improve health for all. UC/CSU

HLTH 54 meets Area G1 and Area D for graduation requirement. UC/CSU transferable.

HLTH 59. Introduction to Community Health Work (1)
Lec-17.5
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-52.5
Principles and practice of health education planning, promotion, delivery and evaluation. This course covers basic theories, and participatory methods with a focus on meeting the diverse needs of communities and adult learners. Application of skills and management strategies covering such topics as group facilitation and community and group dynamics. CSU

Offered Spring semesters

HLTH 65. Youth Development and Leadership (3)
Lec-52.5, field trips
Prerequisite: HLTH 100
This course is an introduction to the principles of youth development and significant health issues affecting today’s youth. The course focuses on strategies and skills to engage and involve young people in their own decision-making and advocacy. It prepares youth workers to support youth in their growth and empowerment. CSU

Offered Spring semesters

HLTH 66. Chronic Conditions Management (3)
Lec-52.5
Prepares front-line health and public health workers to support patients in the self-management of chronic health conditions through the use of client-centered concepts and skills. CSU

HLTH 67. HIV and Hepatitis Navigation Skills (3)
Lec-52.5
Prepares frontline workers to provide navigation services to those at risk for and living with HIV and hepatitis diseases and common co-occurring conditions informed by a public health and social justice framework. CSU

Offered Fall semesters

HLTH 70. Physiological Effects of Addiction (3)
Lec-52.5
Prerequisite: HLTH 100
This course provides an overview of basic physiology and pharmacology including how chemicals are administered and metabolized. The systemic, behavioral, and psychological effects of addiction, along with the latest clinical research and evidence-based treatment practices, are reviewed. CSU

HLTH 72. Cultural Dimensions in Substance Abuse (3)
Lec-52.5, field trips
Prerequisite: HLTH 100
This course addresses cultural aspects that may impact the manner in which substance use is viewed, as well as patterns of substance abuse within certain communities. This course will examine how culture can impact communication, trust and rapport between counselor and client. CSU

HLTH 73. Case Management/Individual Intervention (3)
Lec-52.5, field trips
Prerequisite: HLTH 75 and 78 (for Drug & Alcohol Cert. students only); HLTH 67 and 91C (for Infectious Disease Prevention in Priority Populations Certificate students only)

This course offers an introduction to case management, intake and data collection, client record management, client-centered counseling, documentation and referrals. It prepares students to work in the field of substance abuse and community behavioral health services. CSU

Offered Spring semesters

HLTH 75. Treatment Modalities (3)
Lec-52.5
Prerequisite: HLTH 100
This course is designed to examine the different approaches and structures in the treatment continuum for substance use disordered clients. CSU

HLTH 77. Co-Occurring Disorders (3)
Lec-52.5, field trips
Prerequisite: HLTH 100
This course will help students to identify substance use disorders and common mental health disorders and their interactions. Examination of the Diagnostic Statistical Manual (DSM-5), practical strategies and interventions for working with individuals with co-occurring disorders and field research will be included. CSU

Offered Fall semesters

HLTH 78. Ethics and Drug Counseling (2)
Lec-35
Prerequisite: HLTH 100
Introduction to ethical and legal issues in counseling people with problematic drug use. Develops frameworks for addressing ethical and legal issues that include a variety of sociocultural models. Develops understanding of laws, code of ethics, and client rights. The relationship between personal values and professional behavior will be explored. CSU

HLTH 79A. Drug and Alcohol Studies Fieldwork I (5)
Lec-52.5, work-125, field trips
Prerequisite: HLTH 30 and HLTH 70 and HLTH 75 and HLTH 78
This course prepares students to acquire practical field experience in agencies and programs for alcohol and drug prevention and treatment. Emphasis will be placed on developing learning objectives based on the counselor core competencies. Students will complete an internship in alcohol and drug prevention and treatment programs. CSU

Offered Fall semesters

HLTH 79B. Drug and Alcohol Studies Fieldwork II (5)
Lec-52.5, work-125
Prerequisite: HLTH 79A and HLTH 83
This course prepares students toward completing all internship requirements as required by California Association for Alcohol/Drug Educators (CAADE). Students will complete an internship in alcohol and drug prevention and treatment programs. CSU

Formerly Advanced Fieldwork

Offered Spring semesters

HLTH 80. Interpreting in Health Care I (6.5)
Lec-105, Lab-27, field trips
Prerequisite: HLTH 84
Training for bilingual individuals to develop awareness, knowledge, and skills necessary for effective language interpretation in healthcare settings. Emphasis on the standards of practice of a healthcare interpreter, basic knowledge of common medical conditions, treatments, and procedures, cultural competency for specific communities necessary in the art of interpretation. CSU
HLTH 81. Interpreting in Health Care II (6.5)  
Lec-105, Lab-27, field trips P/NP available  
Prereq.: HLTH 80  
Coreq.: HLTH 82  
Advise: ENGL 86 or ESL 160 or Placement in ENGL 88  
Advanced training for bilingual individuals as integral members of healthcare teams, bridging linguistic and cultural gaps between clients and providers. A focus on specialty areas, such as, genetics, mental health, physical medicine and issues related to diverse populations. Advanced skills development in ethical decision making, memory development, advocacy, active listening, and the art of feedback. Continued development of cultural competency and intercultural communication. CSU

HLTH 82. Field Experience in Health Care Interpreting (3.5)  
Lec-52.5, work-43.75, field trips P/NP available  
Coreq.: HLTH 81  
Supervised practicum provides students an opportunity to observe working interpreters, be observed and receive feedback while carrying out professional responsibilities. Knowledge and technical interpreting skills studied in the classroom are applied in healthcare settings. Students provide interpreting for special populations including mental health clients, LGBTQ individuals, the elderly and others. CSU

HLTH 83. Motivational Counseling Skills (3)  
Lec-52.5  
Prereq.: HLTH 75 and 78  
An examination of models and techniques used to counsel clients in addiction treatment settings with an emphasis on Motivational Counseling. CSU  
Offered Spring semesters

HLTH 84. Introduction to Interpreting in Health Care (.5)  
Lec-9  
Advise: ESL 142 and Excellent proficiency in a second language such as Spanish, Cantonese, Arabic or Korean  
Bilingual students are introduced to the field of healthcare interpreting. Required for CCSF's Health Care Interpreting (HCI) Certificate Program, students are introduced to the California HCI Standards, and explore the roles, scopes and practice of health care interpreters. The HCI program will be explained and linguistic proficiencies will be assessed. CSU  
Offered Spring semesters

HLTH 86. Group Treatment for Recovery (3)  
Lec-52.5  
Prereq.: HLTH 75 and HLTH 78  
This course offers an introduction to group facilitation skills for addiction treatment, including group dynamics, action planning, leadership and facilitation skills. It prepares students for competence in group treatment facilitation toward the Certified Addictions Treatment Counselor credential, as required by the California Association for Alcohol and Drug Educators (CAADE) CSU  
Offered Fall semesters

HLTH 87. Assessment and Services for Older Adults (3)  
Lec-52.5 P/NP available  
Prereq.: HLTH 201  
This course looks at assessment as a process in which advocates work in partnership with older adults to understand what is needed to meet elders' goals for independent living. It includes collecting information on the physical, mental, emotional, familial, and social factors that play a role in realizing those goals; identifying services; determining eligibility; and developing skills in creating person-centered plans. CSU  
Offered Spring semesters

HLTH 88. Family Systems (3)  
Lec-52.5 P/NP available  
Prereq.: HLTH 102  
An introduction to the applied principles of the wellness and recovery model when working with families in behavioral health settings. The course examines the implications of cultural humility, human development, counseling principles, assessment, supportive resources, and the impact of the system of care in applied practice. CSU  
Offered Fall semesters

HLTH 89. Individual Study in Health Education (1-3)  
Lab-52.5 to 157.5 P/NP available  
Supervised individual or group study on topics and issues in public and community health. CSU  
Offered on occasion

HLTH 90B. Harm Reduction and Health (.5)  
Lec-9  
Basic principles and practices of harm reduction. CSU

HLTH 90C. Introduction to Trauma and Recovery (.5)  
Lec-9 P/NP available  
Students will review definitions of trauma, identify common traumatic events and analyze the ways in which trauma experiences affect the health of survivors. Students will discuss diverse approaches to recovering from traumatic events. CSU

HLTH 91C. Hepatitis ABCs (1)  
Lec-18  
Overview of viral hepatitis with a focus on hepatitis C as a current public health issue. Emphasis on harm reduction, prevention, navigation and advocacy related to the relationships among substance use, HIV and hepatitis. CSU

HLTH 91D. Recovery Model in Mental Health (1)  
Lec-17.5 P/NP available  
Introduction to the Community Mental Health Certificate and wellness and recovery model in mental health, including the shifting role of service providers and consumers, and practical methods used by communities to promote wellness, recovery and resiliency. CSU

HLTH 91H. Elder Abuse Prevention (1)  
Lec-17.5 P/NP available  
Elder abuse, its varied forms, and physical, behavioral and environmental indicators of elder abuse. Social aspects of aging, multicultural perspectives, and methods of prevention. CSU  
Formerly HLTH 9A  
Offered Fall semesters

HLTH 91K. Language Access Strategies and Effective Collaboration with Healthcare Interpreters (1)  
Lec-18 P/NP only  
Language and cultural barriers can impede the health of individuals and can be costly for health systems. This course provides language access strategies and the effective collaboration with interpreters across language and cultural barriers in healthcare settings CSU  
Offered on occasion
HLTH 91M. Mindful Stress Reduction (1)  
Lec-18  P/NP available  
This course is based on Mindfulness-Based Stress Reduction (MBSR) program components including stress response and the impact of mindfulness meditation and body awareness and movement practices. Application of stress reduction practices in everyday life will be supported through in-class practice of mindfulness techniques and shared self-reflection. CSU  
**Offered Fall semesters**

HLTH 91N. Coaching Healthcare Interpreters (1)  
Lec-17.5  P/NP only  
**Prereq.:** Healthcare Interpreter Certificate from CCSF or other California Community College; and/or National Healthcare Interpreter Certificate, (such as CHIâ”¢ or CoreCHIâ”¢ or CMI from the National Board of Certification For Medical Interpreters); Documented employment as a healthcare interpreter for one year at 20 hrs/week  
Students will learn how to coach emerging interpreters in integrating medical terminology in various languages to their vocabulary, how to create activities that assist the memorization of terminology and how to set up, facilitate and debrief role-plays in which the skills of interpreting are practiced. The course is designed for fully certified working healthcare interpreters who would like to coach emerging interpreters. CSU  
**Offered on occasion**

HLTH 95. Transgender Health: Working with Clients and Communities (1)  
Lec-17.5  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  
**Offered Spring semesters**

HLTH 97. Stress and Resilience (3)  
Lec-52.5  P/NP available  
**Advise:** ENGL 86 or ESL 186 or ESL 150 or Placement in ENGL 88 or ESL 188 or ESL 160  
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  
**Offered on occasion**

HLTH 100. Introduction to Drug & Alcohol Studies (1)  
Lec-17.5  
This course provides an overview of the Drug and Alcohol Counseling field and an orientation to the requirements of the Drug and Alcohol Studies Certificate Program. Students will identify necessary skills and potential challenges to succeeding in the field. CSU

HLTH 102. Helping Relationships: Recovery and Wellness (3)  
Lec-52.5  P/NP available  
**Prereq.:** HLTH 91D  
This course offers an 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. CSU  
**Offered Spring semesters**

HLTH 103. Community and Group Forums (3)  
Lec-52.5  
**Prereq.:** HLTH 91D  
This course offers an introduction to group facilitation skills, community evaluation methods, community and group dynamics, action planning and community-based leadership development. It prepares students to work in the fields of behavioral health, wellness and recovery, and related fields. CSU  
**Offered Spring semesters**

HLTH 104. Internship Preparation and Professional Conduct in Mental Health (3)  
Lec-52.5  
**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. CSU  
**Offered Spring semesters**

HLTH 105. Internship Placement and Performance (5)  
Lec-52.5, field trips  
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. CSU  
**Offered Fall semesters**

HLTH 110. Health Impacts of Incarceration. (3)  
Lec-52.5  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  
**Offered Fall semesters**

HLTH 116. Conflict Resolution in the Health Care Workplace (1)  
Lec-17.5  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 120. Health and Educational Justice (3)  
Lec-52.5, field trips  P/NP available  
Exploration of educational equity, public health and social justice on the individual and community level. Course integrates academic success skills. CSU  
**Offered on occasion**

HLTH 170. Introduction to Dietetics Profession (1)  
Lec-17.5  
Focuses on the scope and nature of work in the nutrition field, including higher education pathways, career opportunities, professional
health 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

**Offered Fall semesters**

HLTH 171. Nutrition for Health (3)
Lec-52.5
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 & Health (3)
Lec-52.5
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 optimal use of the food dollar will also be covered. CSU Formerly HOEC 100

**Offered Fall semesters**

HLTH 173. Life Span Nutrition & Assessment (4)
Lec-70
Prereq.: HLTH 170 and HLTH 171 and HLTH 172
Nutritional needs and special nutrition issues common at different periods of the life cycle from conception, pregnancy and lactation, infancy, childhood, adolescence, young, middle and late adulthood. Also covers nutrition screening parameters to assess nutrition risk for each life stage. CSU

**Offered Spring semesters**

HLTH 174. Clinical & Community Nutrition (4)
Lec-70
Prereq.: HLTH 171
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

**Offered Spring semesters**

HLTH 174A. Intro to Clinical Nutrition (2)
Lec-35
Prereq.: HLTH 171 and HLTH 172
This course focuses on the basic principles of medical nutrition therapy, covering the relationships among diseases, disorders and nutrition, and examines how diet therapy by itself or along with other treatment modalities promotes recovery and achievement of optimal nutritional status. CSU

**Offered Spring semesters**

HLTH 174B. Community Nutrition (2)
Lec-35
Prereq.: HLTH 171 and HLTH 172
This course focuses on nutrition applications in public health, including food and nutrition assistance programs and resources, nutrition-related problems in the community, learner-centered education strategies and group facilitation skills for effective nutrition education outreach. CSU

**Offered Spring semesters**

HLTH 175. Nutrition Assistant Field Experience (4.5)
Lec-35, work-160 (total hrs)
Prereq.: HLTH 170 and HLTH 171 and HLTH 172 and HLTH 173 and HLTH 174
Coreq.: HLTH 175L
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, Cooperative Extension, senior nutrition programs, public health agencies, or other health care settings. CSU Formerly HOEC 106

**Offered Spring semesters**

HLTH 175L. Nutrition Assistant Clinic (.5)
Lec-3.5, Lab-16 P/NP only
Prereq.: HLTH 172 and HLTH 173 and HLTH 174 and Completion of or concurrent enrollment in: HLTH 175
As part of the field experience of the Nutrition Assistant Program, the Nutrition Clinic will provide the opportunity to conduct nutrition counseling services for the campus community, including intake, assessment, motivational interviewing, diet analysis, nutrition education, and documentation under the supervision of registered diettitian faculty. CSU

**Offered Spring semesters**

HLTH 176. Sports Nutrition (3)
Lec-52.5
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, and nutritional ergogenics. UC/CSU

HLTH 176=PE 20

**Offered on occasion**

HLTH 177. Introduction to Child Nutrition (3)
Lec-52.5
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 & Practice 1 (5)
Lec-87.5
Prereq.: HLTH 59 Certificate Program
Prepares students for Community Health Worker (CHW) positions in the health and social service fields. The course emphasizes skill development in areas such as cultural humility and client-centered assessment, health education and counseling. CSU
HLTH 202. CHW Principles & Practice 2 (5)
Lec-87.5
Prereq.: HLTH 201
Students will continue to develop core CHW competencies such as cultural humility and client-centered health education, counseling and care management services. They will continue to enhance professional skills essential for success in the field, and will study concepts and skills for providing group and community-centered assessment, education, support and advocacy services.

HLTH 203. CHW Internship Placement and Performance (4)
Lec-35, work-128 (total hrs)
Prereq: Completion of or concurrent enrollment in: HLTH 202
This course mentors students through the process of completing all internship placement requirements and provides opportunities to practice Community Health Worker core competencies in health and social service agencies. Emphasis is also placed on professionalism in the workplace and job readiness. CSU

HLTH 221. Health and Social Justice (3)
Lec-52.5
P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or PLACEMENT IN ENGL 1A
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. UC/CSU
Offered Fall semesters

HLTH 231. Urban Health Policy (3) (3)
Lec-52.5, field trips
P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or PLACEMENT IN ENGL 96 or ENGL 88B
Explore the main determinants for health and health disparities in diverse and low-income communities in the United States. Become familiar with current policy issues in urban community health and the process for influencing policy. Develop skills to serve as an effective advocate for community health. UC/CSU
Offered on occasion

Noncredit Courses:
HLTH 5018. Tai Chi for Health (35-70 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 5122. Nutrition for the Later Years (35 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. This short-term course will focus on consumer skills related to food purchasing, label reading, stretching the food dollar, meal planning, food safety, and health literacy.

History
Office: Batmale 656
Phone Number: (415) 239-3330
Web Site: www.ccsf.edu/socialsci

Announcement of Curricula

History Major (AA-T)

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 program, 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.

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 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. Assuming students start this AA-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AA-T in History

Course ........................................ Units

Required courses:
HIST 17A The United States ...................... 3.0
HIST 17B The United States ...................... 3.0
HIST 4A Western Civilization .................. 3.0
HIST 4B Western Civilization .................. 3.0

Choose one of the following Diversity courses for United States Under-Represented Groups:
HIST 9 Immigrants in American History .......... 3.0
HIST 12A United States Women's History: Pre-colonial
Through 1880s .................................. 3.0
HIST 12B United States Women's History:
1890-Present ................................... 3.0
HIST 15A History of the American Indian:
Eastern Tribes .................................. 3.0
HIST 15B History of the American Indian:
Western Tribes .................................. 3.0
HIST 21 History of the Mexican American/Chicano . . . . . . 3.0
HIST 41A The African American in the United States
From the Colonial Era to the Civil War .......... 3.0
HIST 41B The African American in the United States
From the Reconstruction to the Present ........ 3.0
HIST 45 LGBT American History ................ 3.0

Choose one of the following courses:
HIST 18A The Colonial History of Latin America . . . . . . 3.0
HIST 18B History of Latin America ............. 3.0
HIST 20 History of Mexico ..................... 3.0
HIST 34 The History of Japan ................... 3.0
HIST 35A Chinese History ...................... 3.0
HIST 35B History of China ...................... 3.0
HIST 37 History of the Philippines ................ 3.0

Choose one of the following courses:
HIST 1 The United States Since 1900 ............ 3.0
HIST 5 Europe Since 1900 ....................... 3.0
HIST 37 History of the Philippines ................ 3.0
HIST 31 The History Of England ............... 3.0
HIST 49 History of San Francisco ................ 3.0
Any of the previously listed course electives not already completed
Total: ........................................ 21.0

Announcement of Courses

Credit, Degree Applicable Courses:
HIST 1. The United States Since 1900 (3)
Lec-52.5
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. UC/CSU

HIST 4A. Western Civilization (3)
Lec-52.5
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. UC/CSU

HIST 4B. Western Civilization Since 1600 (3)
Lec-52.5
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 consolidation of nation states, and the development of parliamentary democracy and scientific, intellectual, and cultural developments. UC/CSU

HIST 5. Europe Since 1900 (3)
Lec-52.5
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. UC/CSU

HIST 9. Immigrants in American History (3)
Lec-52.5 P/NP available
Comparison of selected Asian, African, 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. UC/CSU

HIST 12A. United States Women's History: Pre-colonial Through 1880s (3)
Lec-52.5 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 across racial, ethnic, and class lines. UC/CSU

HIST 12B. United States Women's History: 1890-Present (3)
Lec-52.5 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 across racial, ethnic, and class lines. UC/CSU

HIST 15A. History of the American Indian: Eastern Tribes (3)
Lec-52.5 P/NP available
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 UC/CSU

HIST 15B. History of the American Indian: Eastern Tribes (3)
Lec-52.5 P/NP available
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 UC/CSU

Offered Fall semesters
HIST 15B. History of the American Indian: Western Tribes (3)
Lec-52.5 P/NP available
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 since the Civil War. UC/CSU

HIST 15A is not prerequisite to 15B. Emphasis on Indians west of the Mississippi.

Offered Spring semesters

HIST 17A. The United States (3)
Lec-52.5
The history of the United States from the indigenous civilizations to the present. A survey of the more important political, economic, social, artistic, and cultural aspects of American life as well as the role of the United States in world affairs. History 17A: Indigenous civilizations through Reconstruction. UC/CSU

C-ID HIST 130

HIST 17A is not prerequisite to 17B. HIST 17A covers from the pre-colonial period to the end of the Civil War.

HIST 17B. The United States (3)
Lec-52.5
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. UC/CSU

C-ID HIST 140

HIST 17A is not prerequisite to 17B. HIST 17B covers from the end of the Civil War to the present.

HIST 18A. The Colonial History of Latin America (3)
Lec-52.5 P/NP available
A survey of the colonial history of Latin America. Students examine historical, cultural, political, socio-economic and artistic elements from the conquest to independence. UC/CSU

HIST 18A is not prerequisite to 18B

HIST 18B. History of Latin America (3)
Lec-52.5 P/NP available
Survey of Latin-American history from independence in the 19th century to the present. UC/CSU

HIST 18A is not prerequisite to 18B

HIST 20. History of Mexico (3)
Lec-52.5 P/NP available
A survey of the history of Mexico from the indigenous, colonial and modern eras. UC/CSU

HIST 21. History of the Mexican American/Chicano (3)
Lec-52.5 P/NP available
A survey of the history of Mexican Americans/Chicanos in the United States. Students examine historical, cultural, political, socio-economic and artistic elements. UC/CSU

HIST 31. The History of England (3)
Lec-52.5 P/NP available
English history, culture and art from Norman times to the present. UC/CSU

Offered on occasion

HIST 34. The History of Japan (3)
Lec-52.5 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. UC/CSU

Offered on occasion

HIST 35A. History of China (3)
Lec-52.5 P/NP available
HIST 35 A is not prerequisite to 35B Intellectual, social, political, and economic development of China. HIST 35A: Chinese history form ancient times to the Qiang Dynasty, approximately 1900. HIST 35B: Emphasis on Chinese history during the twentieth century, concentrating on the rise of nationalism and Communist rule on the Mainland UC/CSU

HIST 35A covers from ancient times to approximately 1900.

HIST 35B. History of China (3)
Lec-52.5 P/NP available
Intellectual, social, political, and economic development of China from 1900 to the present. Emphasis is on twentieth-century China, concentrating on the rise of nationalism and Communist rule on the Mainland. UC/CSU

HIST 35A is not prerequisite to 35B. HIST 35B covers from 1900 to the present.

Offered on occasion

HIST 37. History of the Philippines (3)
Lec-52.5 P/NP available
This course covers the historical development of the Philippines from the pre-colonial period to present day. The evolution of national culture, political and social institutions, and foreign relations will also be examined. UC/CSU

HIST 41A. The African American in the United States From the Colonial Era to the Civil War. (3)
Lec-52.5 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. UC/CSU

HIST 41B. The African American in the United States From the Reconstruction to the Present (3)
Lec-52.5 P/NP available
The political, social, artistic, and cultural history of the African American people in the United States from the Civil War to the present. UC/CSU

HIST 45. LGBT American History (3)
Lec-52.5, field trips P/NP available
Survey of the origins, development, and current status of the Lesbian, Gay, Bisexual, and Transgender reform and liberation movements in the United States, with particular emphasis since WWII. Includes the lives the lives, communities, organizations, and resistance movements created by LGBT peoples form diverse racial, ethnic, and class background. UC/CSU

HIST 46. Independent Studies in History (1)
Lab-52.5
An individualized reading or research program where students work one-on-one with a faculty member on topics in History. CSU (UC upon review) CSU

UC upon review
HIST 49. History of San Francisco (3)
Lec-52.5, 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

Humanities
Office: Art 213
Phone Number: (415) 452-7257
Web Site: www.ccsf.edu/english

Announcement of Courses
Credit, Degree Applicable Courses:

HUM 7. Comparative Religions (3)
Lec-52.5, field trips P/NP available
A survey of the religions: Hinduism, Buddhism, Taoism, Judaism, Christianity, and Islam. An analysis of the origins of these religions as well as their cultural contexts and present-day issues. UC/CSU

HUM 8. Philosophies of Religion (3)
Lec-52.5, field trips P/NP available
ADVISE: ENGL 93 OR ENGL 95 OR ENGL 88 OR ENGL 88A OR PLACEMENT IN ENGL 96 OR ENGL 88B
A close reading of the sacred scriptures of six of the world's great religions (Hinduism, Buddhism, Daoism, Judaism, Christianity, and Islam), including their influences on their cultures and today's world. UC/CSU

Offered Spring semesters

HUM 11. Music/Art/Literature: Traditional (3)
Lec-52.5, field trips P/NP available
ADVISE: ENGL 95 OR ENGL 93 OR ENGL 88 OR ENGL 88A OR ESL 160 OR PLACEMENT IN ENGL 88B OR ENGL 96
An introduction to traditional concepts in the humanities, embracing the visual arts, music, literature, and the cross-cultural life of the community, including exposure to the Bay Area’s artistic communities. UC/CSU

Offered Fall semesters

HUM 12. Music/Art/Literature: Modern (3)
Lec-52.5, field trips P/NP available
ADVISE: ENGL 93 OR ENGL 95 OR ENGL 88 OR ENGL 88A OR ESL 160 OR PLACEMENT IN ENGL 88B OR ENGL 96
An introduction to modern concepts in the humanities, embracing the visual arts, music, literature, and the cross-cultural life of the community, including exposure to the Bay Area’s artistic communities. UC/CSU

Offered Spring semesters

HUM 20. Bay Area Arts (3)
Lec-52.5, field trips P/NP available
ADVISE: ENGL 88 OR ENGL 88A OR ENGL 93 OR ENGL 95 OR ESL 160 OR PLACEMENT IN ENGL 96 OR ENGL 88B
Explores how Bay Area artists’ achievements in architecture, arts, music, literature, and other aesthetic expressions define our regional culture and our position in the broader international field of the arts. UC/CSU

HUM 25. Women in the Arts (3)
Lec-52.5, field trips P/NP available
ADVISE: ENGL 93 OR ENGL 95 OR ENGL 88 OR ENGL 88A OR ESL 160 OR PLACEMENT IN ENGL 96 OR ENGL 88B
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. UC/CSU

Offered Fall semesters

HUM 41A. Western Cultural Values: Pre-history to the Renaissance (3)
Lec-52.5, field trips P/NP available
ADVISE: ENGL 96 OR ENGL 88 OR ENGL 88B 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. UC/CSU

HUM 41A not prerequisite to 41B.

Offered Fall semesters

HUM 41B. Western Cultural Values (3)
Lec-52.5, field trips P/NP available
ADVISE: ENGL 96 OR ENGL 88 OR ENGL 88B OR PLACEMENT IN ENGL 1A
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. UC/CSU

HUM 41A not prerequisite to 41B.

Offered Spring semesters

HUM 48. African-American Music, Art and Literature (3)
Lec-52.5, field trips P/NP available
ADVISE: ENGL 95 OR ENGL 93 OR ENGL 88 OR ENGL 88A OR ESL 160 OR PLACEMENT IN ENGL 96 OR ENGL 88B
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. UC/CSU

Offered on occasion

IGETC
Website: www.ccsf.edu/artic

Announcement of Curricula

IGETC Certificate

Students who complete the approved IGETC transfer pattern may obtain the Certificate of Achievement in Intersegmental General Education Transfer Curriculum (IGETC). Details of the course requirements and learning outcomes are available in the Transfer Information section of this catalog. Students are strongly encouraged to consult with a counselor for further information.

(See also CSU GE-Breadth Certificate)
Interdisciplinary Studies
Office: Batmale 211
Phone Number: (415) 452-5343
Web Site: www.ccsf.edu/IDST

Critical Pacific Islands & Oceania Studies
Major (AA)
The Critical Pacific Islands & Oceania Studies Associate of Arts degree introduces students to a substantive and critical analysis of Pacific peoples and cultures in the U.S. diaspora and beyond. Centering on the voices of native Pacific Islanders, this interdisciplinary curriculum examines historical and contemporary topics, including colonization, militarization, social movements, diversity, social justice, and immigration. All required courses meet University of California (UC) and California State University (CSU) transfer requirements and/or City College of San Francisco General Education (GE) area requirements A (Communication & Analytical Thinking), C (Natural Sciences), D (Behavioral and Social Sciences) E (Humanities), G-1 (Health Knowledge), and H1 (Ethnic Studies).
The program appeals to diverse students, including international students, who are planning careers in many areas in the Humanities and Social Sciences with an emphasis in Critical Pacific Islands & Oceania Studies such as Religious Studies, International Relations, International Law, Global Studies, Political Science, Ethnic Studies, History, Language and Literature, Diversity and Social Justice, and Physical and Biological Sciences. The program is ideal for those whose work involves interacting with native Pacific Islanders and other communities of color such as service providers, health practitioners, law enforcement officers, researchers, teachers, and administrators and staff-members in community-based organizations, and social and government agencies.

Learning Outcomes
Upon completion of this program, students will be able to:

- Evaluate the methods of inquiry used in the study of indigenous Pacific Islander communities including social science, behavioral science, and indigenous epistemologies.
- Compare and contrast the expression of the ocean aesthetic across Pacific Islander cultural practices such as architecture, arts, dance, film, language, literature, music, poetry, sports, and theater.
- Apply analytical skills, problem-solving, and decision-making techniques to improve study strategies, wellness, and life-long learning.
- Describe the intersectionality and interrelatedness of distinct forms of social oppression in the United States, such as anti-semitism and anti-arabism, adulthood, ageism, ableism, classism, heterosexism, racism, sexism, and transphobia.
- Analyze and assess the relationships between human environments and scientific aspects of physical, natural environments.

Each course must be completed with a grade of C or higher, or pass. Minimum time for completion is four semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Critical Pacific Islands & Oceania Studies
Course ........................................ Units
Required core courses:
IDST 45 Pacific Islanders in the U.S. .............. 3.0
IDST 46 Fāa Pasefika: Interdisciplinary Cultural Expressions of Oceania ......................... 3.0
IDST 50/LERN 50 College Success ................... 3.0
HLTH 33 Introduction to Health and Wellness .......... 2.0

Choose two (2) units from the following Diversity and Social Justice courses:
IDST 80A Diversity and Social Justice: Racism ........ 0.5
IDST 80C Diversity and Social Justice: Sexism .......... 0.5
IDST 80D Diversity and Social Justice: Heterosexism .... 0.5
IDST 80E Diversity and Social Justice: Ableism ......... 0.5
IDST 80F Diversity and Social Justice: Class and Classism ........................................ 0.5
IDST 80G Diversity and Social Justice: Transphobia .... 0.5
IDST 81A Diversity: Ageism and Adultism (Age-based Oppression) ................................ 1.0
IDST 81B Diversity and Social Justice: Anti-Semitism/ Anti-Arabism .................................. 1.0

Choose one of the following Life, Land, Ocean, and Cosmos science course combinations:
Options listed below are all combinations of lecture and lab. When you choose an option, you must choose the lecture and lab that go together as indicated with the “and.”
ASTR 19 Galaxies and the Universe .................... 3.0
and ASTR 16 Observational Astronomy ............ 1.0
BIO 32 Marine Biology .................................. 3.0
and BIO 32L Marine Biology Laboratory .......... 1.0
ENRG 3 Introduction to Alternative Energy ......... 3.0
and ENRG 3L Introduction to Alternative Energy Laboratory .................. 1.0
GEOG 1 Physical Geography .......................... 3.0
and GEOG 1L Physical Geography Laboratory .... 1.0
GEOL 10 Physical Geology ............................ 3.0
and GEOL 10L Physical Geology Lab .............. 2.0
OCAN 1 Oceanography .................................. 3.0
and OCAN 1L Oceanography Lab .................... 2.0
P SC 11 Conceptual Physical Science ................. 3.0
and P SC 11L Physical Science Laboratory ......... 1.0
SUST 3I/BIO 3I/GEOG 3I Introduction to Environmental Science .................. 3.0
and SUST 3IL /BIO 3IL /GEOG 3IL Environmental Science Laboratory .................. 1.0

Choose three (3) units from the following Social Justice Studies courses:
IDST 37 Introduction to Ethnic Studies .............. 3.0
LGBT 5 Introduction to Lesbian, Bisexual, Gay, and Transgender Studies .................. 3.0
WOMN 25 Introduction to Women’s Studies: Feminism Demystified .................. 3.0
SOC 25 Sex and Gender in American Society ....... 3.0

Choose three (3) units from the following elective courses (if not used to fulfill the Social Justice Studies requirement):
ANTH 15 Philippine Culture and Society ........... 3.0
ASAM 8 Filipino American Community ............... 3.0
Courses Required for the AA-T in Social Justice Studies: Ethnic Studies

**Course** ........................................ Units
**Required core course:**
IDST 37 Introduction to Ethnic Studies. ............... 3.0

**Choose one of the following core courses:**
LGBT 5 Introduction to Lesbian, Bisexual, Gay, and Transgender Studies. ............... 3.0
WOMN 25 Introduction to Women's Studies: Feminism Demystified. ...................... 3.0

**Choose one of the following major preparation core courses:**
AFAM 30 African American Consciousness. ........... 3.0
ASAM 20 Asian American Experience Since 1820. .... 3.0
HIST 15A History of the American Indian: Eastern Tribes. ................................. 3.0
LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States. ........... 3.0

**Area Courses—Select 3 Courses from at least 2 areas for a minimum of 9 units. Courses used in one area cannot be used to fulfill a requirement for another area:**

**Area 1: History and Government**
ASAM 20 Asian American Experience Since 1820. .... 3.0
HIST 9 Immigrants in American History. ............... 3.0
HIST 18A The Colonial History of Latin America. .... 3.0
HIST 12B United States Women's History: 1890-Present. ................................... 3.0
HIST 15A History of the American Indian: Eastern Tribes. ................................. 3.0
HIST 15B History of the American Indian: Western Tribes. .................................. 3.0
HIST 20 History of Mexico. .............................. 3.0
HIST 21 History of the Mexican American/Chicano. 3.0
HIST 37 History of the Philippines. ........................ 3.0

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It is advised that students interested in Social Justice Studies majors or related careers meet with an affiliated counselor or department chair to discuss educational goals, course options, and transfer issues.

**Learning Outcomes**

Upon completion of this program, students will be able to:
- Evaluate the methods of inquiry and analysis used by the social and behavioral sciences in the study of racial, ethnic, and cultural formations.
- Analyze how the intersections of social class, gender, sexuality and ability pervade racial and ethnic identity formations.
- Evaluate the changing definitions of race and ethnicity and their impacts on cultures and societies.
- Appraise artistic and cultural representations that speak to race and ethnicity.
- Compare and contrast the struggles for social justice of diverse ethnic and racial groups in the United States.

Students who wish to earn the Associate of Arts in Social Justice: Ethnic Studies for Transfer (AA-T) must complete 60 CSU transferable units with at least a 2.0 grade point average. 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.

Minimum time for completion is four semesters. Completion time will vary based on student preparation and number of units completed per semester.
HIST 41A The African American in the United States
From the Colonial Era to the Civil War. 3.0
HIST 41B The African American in the United States
From the Reconstruction to the Present. 3.0
IDST 7 Introduction to the United Nations. 3.0
LBCS 70A Who Built America? From the Colonial Era to the
Civil War and Reconstruction. 3.0
LBCS 70B Who Built America? From Reconstruction to the
Present. 3.0
LALS 1 Latino/a Diaspora: The Impact of Latinos Living
in the United States. 3.0
LALS 11 Drug Wars in the Americas. 3.0
LALS 13 Latin American & Latino/a Cross-Border Social
Movements. 3.0
POLS 12 Ethnic Politics in the United States. 3.0
POLS 45 Governments and Politics of the Middle East. 3.0

Area 2: Arts and Humanities
AFAM 30 African American Consciousness. 3.0
AFAM 40 The Black Experience in California. 3.0
AFAM 60 African American Women in the US. 3.0
ASAM 6 Asian American Issues through Literature. 3.0
ASAM 10 Asian American Popular Culture. 3.0
ASAM 30 Asian American Issues Through Film. 3.0
ASAM 35 Asian American Women. 3.0
HIST 15A History of the American Indian:
Eastern Tribes. 3.0
HIST 15B History of the American Indian:
Western Tribes. 3.0
HIST 18A The Colonial History of Latin America. 3.0
HIST 18B History of Latin America. 3.0
HIST 20 History of Mexico. 3.0
HIST 21 History of the Mexican American/Chicano. 3.0
HIST 37 History of the Philippines. 3.0
HIST 41A The African American in the United States
From the Colonial Era to the Civil War. 3.0
HIST 41B The African American in the United States
From the Reconstruction to the Present. 3.0
IDST 3 Introduction to Museum Studies. 3.0
IDST 14 American Cultures in Literature and Film. 3.0
IDST 27A Asian Humanities: Classical Period. 3.0
IDST 27B Asian Humanities: Contemporary. 3.0
IDST 30 Demystifying the Middle East. 3.0
IDST 31 Women in the Middle East. 3.0
IDST 36 Poetry for the People. 3.0
IDST 42 Introduction to Philippine Arts. 3.0
IDST 45 Pacific Islanders in the US. 3.0
IDST 46 Fa’a Pasefika: Interdisciplinary Cultural
Expressions of Oceania. 3.0
LALS 1 Latino/a Diaspora: The Impact of Latinos
Living in the United States. 3.0
LALS 14 Diego Rivera; Art and Social Change in
Latin America. 3.0
LGBT 11 Film Expression: History of Queer Film. 3.0
LGBT 20 LGBT U.S. Art and Culture. 3.0
LGBT 55 Contemporary Global LGBT Art and Culture. 3.0
PHST 30 Philippine Society and Culture Through Film. 3.0

Area 3: Social Science
AFAM 30 African American Consciousness. 3.0
AFAM 42 The Origins and History of Race Theory and
Modern Racism. 3.0
AFAM 60 African American Women in the US. 3.0

ANTH 3C Introduction to Cultural Anthropology:
Focus on American Cultures. 3.0
ANTH 12 North American Indian Cultures. 3.0
ANTH 20 Lesbian Gay Bisexual Transgender
Anthropology. 3.0
ANTH 25 Culture, Gender and Sexuality. 3.0
ASAM 8 Filipino American Community. 3.0
ASAM 20 Asian American Experience Since 1820. 3.0
ASAM 22 Community Issues & Leadership. 3.0
ASAM 27 Asian American Race Relations. 3.0
ASAM 30 Asian American Issues Through Film. 3.0
ASAM 35 Asian American Women. 3.0
ASAM 40 Chinese American Community. 3.0
ASAM 42 Southeast Asians in the U.S. 3.0
BCST 104 Race and Media. 3.0
ECON 30 Economics of the African American
Community. 3.0
IDST 40 Contemporary Issues in the Filipino
Community. 3.0
IDST 45 Pacific Islanders in the U.S. 3.0
LALS 1 Latino/a Diaspora: The Impact of Latinos
Living in the United States. 3.0
LALS 10 Latinas in the U.S./VOCES. 3.0
LGBT 5 Introduction to Lesbian, Bisexual, Gay, and
Transgender Studies. 3.0
LGBT 9/LALS 9 The Latin American and Latina/o
LGBT Experience. 3.0
LGBT 50 Lesbian/Gay/Bisexual/Transgender/Communities
of Color in the U.S. 3.0
POLS 12 Ethnic Politics in the United States. 3.0
PSYC 23 Psychology of Race and Ethnic Relations. 3.0
WOMN 25 Introduction to Women’s Studies: Feminism
Demystified. 3.0

Area 4: Quantitative Reasoning & Research Methods
LALS 5 Introduction to Statistical Methods in Latin
American and Latino/a Studies. 5.0

Area 5: Major Preparation (if not used to fulfill core or area
requirements)
AFAM 30 African American Consciousness. 3.0
ASAM 20 Asian American Experience Since 1820. 3.0
HIST 15A History of the American Indian:
Eastern Tribes. 3.0
LALS 1 Latino/a Diaspora: The Impact of Latinos
Living in the United States. 3.0
Total: 18.0 – 20.0

Collaborative Design Certificate*

The certificate program in Collaborative Design provides students with
a strong foundation in multidisciplinary approaches to design and
collaboration.

*See Maker Studies section of the catalog.

Critical Middle East /South West Asia and North
Africa Studies Certificate

The Critical Middle East Studies Certificate of Accomplishment intro-
duces students to an analysis of the history, politics, society, culture
and religions of the Middle East I South West Asia and North Africa
(SWANAs) with attention to major events in the region and their rep-
resentations and impacts across the Diaspora, especially in the United
States. The program integrates area studies, ethnic studies, gender
studies, and interdisciplinary methodologies. The required courses

IDST 3 Introduction to Museum Studies. 3.0
IDST 4 American Cultures in Literature and Film. 3.0
IDST 27A Asian Humanities: Classical Period. 3.0
IDST 27B Asian Humanities: Contemporary. 3.0
IDST 30 Demystifying the Middle East. 3.0
IDST 31 Women in the Middle East. 3.0
IDST 36 Poetry for the People. 3.0
IDST 42 Introduction to Philippine Arts. 3.0
IDST 45 Pacific Islanders in the US. 3.0
IDST 46 Fa’a Pasefika: Interdisciplinary Cultural
Expressions of Oceania. 3.0
LALS 1 Latino/a Diaspora: The Impact of Latinos
Living in the United States. 3.0
LALS 14 Diego Rivera; Art and Social Change in
Latin America. 3.0
LGBT 11 Film Expression: History of Queer Film. 3.0
LGBT 20 LGBT U.S. Art and Culture. 3.0
LGBT 55 Contemporary Global LGBT Art and Culture. 3.0
PHST 30 Philippine Society and Culture Through Film. 3.0

Area 3: Social Science
AFAM 30 African American Consciousness. 3.0
AFAM 42 The Origins and History of Race Theory and
Modern Racism. 3.0
AFAM 60 African American Women in the US. 3.0

ANTH 3C Introduction to Cultural Anthropology:
Focus on American Cultures. 3.0
ANTH 12 North American Indian Cultures. 3.0
ANTH 20 Lesbian Gay Bisexual Transgender
Anthropology. 3.0
ANTH 25 Culture, Gender and Sexuality. 3.0
ASAM 8 Filipino American Community. 3.0
ASAM 20 Asian American Experience Since 1820. 3.0
ASAM 22 Community Issues & Leadership. 3.0
ASAM 27 Asian American Race Relations. 3.0
ASAM 30 Asian American Issues Through Film. 3.0
ASAM 35 Asian American Women. 3.0
ASAM 40 Chinese American Community. 3.0
ASAM 42 Southeast Asians in the U.S. 3.0
BCST 104 Race and Media. 3.0
ECON 30 Economics of the African American
Community. 3.0
IDST 40 Contemporary Issues in the Filipino
Community. 3.0
IDST 45 Pacific Islanders in the U.S. 3.0
LALS 1 Latino/a Diaspora: The Impact of Latinos
Living in the United States. 3.0
LALS 10 Latinas in the U.S./VOCES. 3.0
LGBT 5 Introduction to Lesbian, Bisexual, Gay, and
Transgender Studies. 3.0
LGBT 9/LALS 9 The Latin American and Latina/o
LGBT Experience. 3.0
LGBT 50 Lesbian/Gay/Bisexual/Transgender/Communities
of Color in the U.S. 3.0
POLS 12 Ethnic Politics in the United States. 3.0
PSYC 23 Psychology of Race and Ethnic Relations. 3.0
WOMN 25 Introduction to Women’s Studies: Feminism
Demystified. 3.0

Area 4: Quantitative Reasoning & Research Methods
LALS 5 Introduction to Statistical Methods in Latin
American and Latino/a Studies. 5.0

Area 5: Major Preparation (if not used to fulfill core or area
requirements)
AFAM 30 African American Consciousness. 3.0
ASAM 20 Asian American Experience Since 1820. 3.0
HIST 15A History of the American Indian:
Eastern Tribes. 3.0
LALS 1 Latino/a Diaspora: The Impact of Latinos
Living in the United States. 3.0
Total: 18.0 – 20.0

Collaborative Design Certificate*

The certificate program in Collaborative Design provides students with
a strong foundation in multidisciplinary approaches to design and
collaboration.

*See Maker Studies section of the catalog.

Critical Middle East /South West Asia and North
Africa Studies Certificate

The Critical Middle East Studies Certificate of Accomplishment intro-
duces students to an analysis of the history, politics, society, culture
and religions of the Middle East I South West Asia and North Africa
(SWANAs) with attention to major events in the region and their rep-
resentations and impacts across the Diaspora, especially in the United
States. The program integrates area studies, ethnic studies, gender
studies, and interdisciplinary methodologies. The required courses
are University of California and California State University transferable and collectively meet graduation area requirements in D-Social Sciences, E-Humanities, and H1-Diversity.

The program appeals to diverse students, including international students, who plan careers in many areas in the Humanities and Social Sciences with an emphasis in the Middle East I SWANA such as Religious Studies, International Relations, International Law, Global Studies, Political Science, Ethnic Studies, History, Language and Literature. The program primarily serves students who are transferring to a four-year university and additionally serves as professional development for employers, community-based organizations and social and government agencies.

Learning Outcomes

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

- Describe the major religions of the Middle East I SWANA with an emphasis on the role of Islam in ideology and culture.
- Compare and contrast the political systems of the Middle East I SWANA within the historical and social context of empires, colonialism, independence, authoritarian states, Islamism, secularism and revolutions.
- Examine social and cultural expressions through architecture, arts, dance, film, language, literature, music and poetry within Middle Eastern I SWANA societies and Diaspora communities in the U.S. and globally.
- Analyze the relationship of diverse minorities, including women, in relation to the state and society in the Middle East SWANA and within Diaspora communities in the U.S. and globally.
- Evaluate and challenge assumptions and stereotypes of anti-Semitic and anti-Arab discrimination, Islamophobia and all forms of oppression.

Admission: The Critical Middle East Studies Certificate is open to any student enrolled at the City College of San Francisco.

Requirements for the Certificate of Accomplishment: The certificate requires completion of a series of courses. Each course must be completed with a grade of "C" or higher, or a pass. The series can be completed in one to two semesters.

Credit towards graduation: Credit earned to obtain the certificate satisfies areas D, E, H1.

Credit towards other certificates: In addition to counting towards the Critical Middle East Studies Certificate, courses in the series fulfill requirements for the Diversity and Social Justice Certificate and the Political Science and Women’s Studies majors.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Critical Middle East/South West Asia and North Africa Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core courses:</td>
<td></td>
</tr>
<tr>
<td>IDST 29 Introduction to Islam</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 45 Governments and Politics of Middle East</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 30 Demystifying the Middle East</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 31 Women in the Middle East</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 81B Diversity and Social Justice: Anti-Semitism/</td>
<td>1.0</td>
</tr>
<tr>
<td>Anti-Arabism</td>
<td></td>
</tr>
</tbody>
</table>

Choose 3 units from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 104 Asian Art History</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 3IA History of Architecture</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 3IB History of Architecture</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 104 Race and Media</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 6 International Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 44A Survey of World Literature, Part I:</td>
<td>3.0</td>
</tr>
<tr>
<td>Ancient, Medieval, and Early Modern</td>
<td></td>
</tr>
<tr>
<td>ENGL 44B Survey of World Literature, Part II:</td>
<td>3.0</td>
</tr>
<tr>
<td>Early Modern to the Present</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 4 Cultural Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST 48 African History</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 7 Comparative Religions</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 8 Philosophies of Religion</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 4 Ways of Faith</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 14 American Cultures in Literature and Film</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 36 Poetry for the People</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 37 Introduction to Ethnic Studies</td>
<td>3.0</td>
</tr>
<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: Class and</td>
<td></td>
</tr>
<tr>
<td>Classism</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 80G Diversity and Social Justice: Transphobia</td>
<td>0.5</td>
</tr>
<tr>
<td>LGBT 55 Contemporary Global LGBT Art and Culture</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS 41 African Drumming Ensemble</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 2 Comparative Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 5 International Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>WOMN 25 Introduction to Women's Studies: Feminism</td>
<td></td>
</tr>
<tr>
<td>Demystified</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: .................................... 16.0

Critical Pacific Islands Studies Certificate

The Critical Pacific Islands Studies Certificate of Accomplishment introduces students to a critical analysis of Pacific peoples and cultures in the U.S. diaspora and beyond. Privileging the voices of native Pacific Islanders, the interdisciplinary curriculum explores a plethora of historical and contemporary topics, including colonization, militarization, social movements, and immigration, through the use of academic and community-based scholarship. All required courses are University of California (UC) and California State University (CSU)-transferable and meet City College of San Francisco General Education (GE) area requirements A (Communication & Analytical Thinking), C (Natural Sciences), D (Behavioral and Social Sciences) E (Humanities), H1 (Ethnic Studies).

While the certificate program is ideal for those whose work involves native Pacific Islanders and other communities of color such as service providers, health practitioners, law enforcement, researchers, teachers, and other professionals, the primary goal is to encourage students to further their educational aspirations through the completion of an associate’s degree and successfully transferring to a four-year university.

Learning Outcomes

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

- Evaluate behavioral, social, and indigenous theories and methodologies used in the study of Pacific Islander communities in relation to their cultural, economic, educational, health, immigration, political, and social conditions.
- Compare and contrast the expression of the ocean aesthetic across Pacific Islander cultural practices including architecture,
Diversity and Social Justice Certificate

The Diversity and Social Justice Certificate of Accomplishment is a series of short courses that provide a consciousness-raising analysis and evaluation of specific forms of social oppression and social justice interventions in the United States. The certificate examines the intersectionality of sexism, classism, racism, anti-Semitism/anti-Arabism, heterosexism, ableism, transphobia, and adulthood/ageism (age-based oppression). Addressing individual, institutional, and socio-cultural elements of diversity and social justice, the certificate provides foundational training for City College of San Francisco students and faculty.

The certificate also serves professional development needs for employers, community based organizations, and social and government agencies such as the San Francisco Unified School District and the Police Academy.

Learning Outcomes

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

- Describe and analyze systems of oppression and privilege related to social identity or status.
- Assess biases and stereotypes in relation to diversity and social justice.
- Examine individual and collective ways of taking action in response to oppression.
- Explain the intersectionality of distinct forms of social oppression.

The minimum time for completion of this certificate is two semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Certificate of Accomplishment in Diversity and Social Justice

<table>
<thead>
<tr>
<th>Course</th>
<th>Required courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDST 80A</td>
<td>Diversity and Social Justice: Racism</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 80C</td>
<td>Diversity and Social Justice: Sexism</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 80D</td>
<td>Diversity and Social Justice: Heterosexism</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 80E</td>
<td>Diversity and Social Justice: Ableism</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 80F</td>
<td>Diversity and Social Justice: Class and Classism</td>
<td>0.5</td>
</tr>
<tr>
<td>IDST 81B</td>
<td>Diversity and Social Justice: Anti-Semitism/ Anti-Arabism</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Choose two (2) units of Diversity & Social Justice courses:

Choose three (3) units from the following elective courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Required courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASAM 8</td>
<td>Filipino American Community</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 15</td>
<td>Philippine Culture and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 32</td>
<td>Marine Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>CINE 22</td>
<td>The Documentary Tradition</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 4</td>
<td>Cultural Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 14</td>
<td>American Cultures in Literature and Film</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 29</td>
<td>Introduction to Islam</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 30</td>
<td>Demystifying the Middle East</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 36</td>
<td>Poetry for the People</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 37</td>
<td>Introduction to Ethnic Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 40</td>
<td>Contemporary Issues in the Filipino Community</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 9/LGBT 9</td>
<td>The Latin American and Latina/o LGBT Experience</td>
<td>3.0</td>
</tr>
<tr>
<td>PHST 20</td>
<td>The Filipino Family</td>
<td>3.0</td>
</tr>
<tr>
<td>PHST 30</td>
<td>Philippine Society and Culture Through Film</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 17.0

Trauma Prevention and Recovery Certificate

The Trauma Prevention and Recovery Certificate of Achievement prepares students for work in the field of violence prevention and trauma response (or in education, health and human services more broadly) by providing knowledge of dynamics of trauma, strategies to prevent violence and skills to support survivors.

This interdisciplinary curriculum provides students with a broad understanding of violence, its causes and its impact on individuals, families, communities and societies. Students develop skills to critically analyze social constructs that contribute to violence, listen with empathy, offer appropriate referrals, and provide culturally sensitive peer support.
Learning Outcomes

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

- Analyze the causes and consequences of violence and trauma.
- Compare programmatic approaches and/or community resources and assess their utility in diverse situations involving trauma.
- Examine historic and aesthetic approaches to understanding trauma.
- Demonstrate peer counseling and client-centered communication skills for working with victims and survivors.
- Explain how identity, status and structural oppression relate to trauma.
- Demonstrate self awareness in relation to vicarious trauma, the healing process and the helper role.

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.

Each course must be completed with a final grade of C or higher, or Pass.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

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>IDST 47 Trauma and the Arts: An Interdisciplinary Approach</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 38 Trauma Response and Recovery</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 48 Violence as a Public Health Issue: Prevention Strategies</td>
<td>3.0</td>
</tr>
<tr>
<td>WOMN 54 The Politics of Sexual Violence</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 90C Introduction to Trauma and Recovery</td>
<td>0.5</td>
</tr>
<tr>
<td>CDEV 100 Violence and Its Impact on Children and Their Families</td>
<td>3.0</td>
</tr>
<tr>
<td>or CDEV 101 Intro to Violence Intervention</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following required diversity courses:

- IDST 80A Diversity and Social Justice: Racism ........................................ 0.5
- IDST 80C Diversity and Social Justice: Sexism ...................................... 0.5
- IDST 80D Diversity and Social Justice: Heterosexism ................................ 0.5
- IDST 80E Diversity and Social Justice: Ableism ...................................... 0.5
- IDST 80F Diversity and Social Justice: Class and Classism ......................... 0.5
- IDST 80G Diversity and Social Justice: Transphobia ................................ 0.5

Choose three (3) units from the following elective courses. Courses counted as a required course above cannot be used to fulfill an elective:

- ADMJ 64 Progressive Policing in the 21st Century .................................. 3.0
- CDEV 72 Supervised Field Experience in Early ........................................... 3.0
- CDEV 78 Supervised Field Experience in Community Youth Organizations ......... 3.0
- CDEV 100 Violence and Its Impact on Children and Their Families .................. 3.0
- CDEV 101 Intro to Violence Intervention ...................................................... 3.0
- HLTH 91H Elder Abuse Prevention ............................................................... 1.0
- HLTH 97 Stress and Resilience ................................................................. 3.0
- HLTH 116 Conflict Resolution in the Health Care Workplace ....................... 1.0

Announcement of Courses

Interdisciplinary Studies

Credit, Degree Applicable Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDST 3. Intro to Museum Studies (3) Lec-52.5, field trips</td>
<td>P/NP</td>
</tr>
</tbody>
</table>

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. UC/CSU

May not be offered every semester. Specific times, topics, and instructors will be announced through campus media.

Offered Spring semesters

IDST 4. Ways of Faith (3) Lec-52.5 P/NP available

ADVISE: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A

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. UC/CSU

IDST 7. Intro to the United Nations (3) Lec-52.5 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. UC/CSU

Offered Spring semesters

IDST 14. American Cultures in Literature and Film (3) Lec-52.5, field trips P/NP available

ADVISE: ENGL 96 or placement in ENGL 1A

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. UC/CSU

**IDST 17. Human Sexuality (3)**

Lec-52.5  
P/NP available  
ADVISE: ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or PLACEMENT IN ESL 150 or ESL 186 or ENGL 95 or ENGL 88  
A human sexuality course that integrates content and methodology from the disciplines of anthropology, biology, ethics, health education, history, jurisprudence, and psychology. UC/CSU  
C-ID PSY 130

**IDST 27A. Asian Humanities (3)**

Lec-52.5, field trips  
P/NP available  
ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or PLACEMENT IN ENGL 96 or ENGL 88B  
Survey of Asian civilization from the classical period to 1800 C.E., especially Arabic-Islamic, Hindu, Chinese and Japanese cultures. Emphasis on literature, religion, the arts. Provides an interdisciplinary and cross-cultural approach to the differences and underlying unity of Asian cultures. UC/CSU  
IDST 27A not prerequisite to 27B No knowledge of foreign languages required  
Offered on occasion

**IDST 27B. Asian Humanities (3)**

Lec-52.5, field trips  
P/NP available  
ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or PLACEMENT IN ENGL 96 or ENGL 88B  
Survey of Asian cultures of modern to contemporary period, especially Arabic-Islamic, Indian, Chinese and Japanese cultures. Emphasis on literature, philosophy, religion, and the arts. Provides an interdisciplinary and cross-cultural approach to the differences and underlying unity of Asian cultures. UC/CSU  
IDST 27A not prerequisite to 27B No knowledge of foreign languages required  
Offered on occasion

**IDST 29. Islam: Identity & Culture (3)**

Lec-52.5, field trips  
P/NP available  
ADVISE: ESL 150 or ENGL 86 or ENGL 91 or PLACEMENT IN ESL 160 or ENGL 88  
An interdisciplinary survey of Muslim identity and 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. UC/CSU  
Offered Fall semesters

**IDST 30. Demystifying the Middle East (3)**

Lec-52.5  
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. UC/CSU  
Offered Fall semesters

**IDST 31. Women in the Middle East (3)**

Lec-52.5, field trips  
P/NP available  
An interdisciplinary survey of women in the Middle East focusing on diversity, colonization, nationalism, religion, gender, sexuality, family, law, literature, music, art, and film. UC/CSU  
Offered Spring semesters

**IDST 36. Poetry for the People (3)**

Lec-52.5  
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. UC/CSU

**IDST 37. Introduction to Ethnic Studies (3)**

Lec-52.5  
P/NP available  
An introduction to concepts, theories, and social policy related to the history, culture, concerns, and conditions of American ethnic and racial groups. Examines cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, and patterns of interaction between various racial and ethnic groups. UC/CSU  
C-ID SOCI 150

**IDST 40. Contemporary Issues in the Filipino Community (3)**

Lec-52.5, 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. UC/CSU  
Offered on occasion

**IDST 42. Introduction to Philippine Arts (3)**

Lec-52.5, field trips  
P/NP available  
Critical understanding of the aesthetics and development of Philippine visual, performing, literary, and media arts in the context of the country's history. UC/CSU  
Offered Spring semesters

**IDST 45. Pacific Islanders in the United States (3)**

Lec-52.5, field trips  
P/NP available  
This course examines Pacific Islander migrations to the United States mainland including the history, culture, and development of Hawai‘i and U.S. Pacific territories. It explores indigenous cultures and immigration experiences of Pacific Islanders from Guam, Palau, Marshall Islands, Fiji, Vanuatu, Tuvalu, Samoa, Tonga, Tahiti, New Zealand, Australia, and the Philippines. UC/CSU

**IDST 46. Fa’a Pasefika: Interdisciplinary Cultural Expressions of Oceania (3)**

Lec-52.5, field trips  
P/NP available  
ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or PLACEMENT IN ESL 150 or ESL 186 or ENGL 95 or ENGL 88  
A survey of traditional and contemporary art across Oceania (Pacific Islands). Emphasis on literature, dance, music, visual arts, film, and museums. Using an interdisciplinary and cross-cultural approach, the course explores the underlying unity of Pacific cultures, including their
engagement with both western and non-western societies, colonization, and diasporic communities. UC/CSU

IDST 47. Trauma and the Arts: An Interdisciplinary Approach (3) Lec-52.5, 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. UC/CSU

IDST 50. College Success (3) Lec-52.5 P/NP available Integrates personal growth and values, study strategies, and communication and critical analysis in to 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, note taking, textbook reading, test-taking, library skills, problem-solving. UC/CSU IDST 50 = LERN 50

IDST 80A. Diversity and Social Justice: Racism (.5) Lec-9 P/NP available ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 93 or ENGL 88 A consciousness-raising analysis and evaluation of race-based oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about racism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

IDST 80C. Diversity and Social Justice: Sexism (.5) Lec-9 P/NP available A consciousness raising analysis and evaluation of sexism on individual, institutional, and cultural levels in the United States. Expanding one's knowledge about sexism, increasing personal awareness of one's own sexism and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

IDST 80D. Diversity and Social Justice: Heterosexism (.5) Lec-9 P/NP available ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 93 or ENGL 88 A consciousness-raising analysis and evaluation of homophobia and heterosexism (discrimination based on perceived or real sexual orientation and identity) oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about heterosexism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

IDST 80E. Diversity and Social Justice: Ableism (.5) Lec-9 P/NP available A consciousness raising analysis and evaluation of ableism (disability-based oppression) on individual, institutional, and cultural levels in the US. Expanding knowledge about ableism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

Offered Fall semesters

IDST 80F. Diversity and Social Justice: Class and Classism (.5) Lec-9 P/NP available ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88 A consciousness-raising analysis and evaluation of class oppression and classism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about class, class oppression and classism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

Offered Spring semesters

IDST 80G. Diversity and Social Justice: Transphobia (.5) Lec-9 P/NP available ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88 A consciousness-raising analysis and evaluation of transphobia and gender oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about transphobia and gender diversity, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

Offered Fall semesters

IDST 81A. Diversity and Social Justice: Ageism and Adulthood (Age-based Oppression) (1) Lec-18 P/NP available ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88 A consciousness-raising analysis and evaluation of age-based bias, discrimination and oppression (adultism and ageism) on individual, institutional, and cultural levels in the U.S. Expanding knowledge about adulthood and ageism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

Offered Spring semesters

IDST 81B. Diversity and Social Justice: Anti-Semitism/Anti-Arabism (1) Lec-18 P/NP available ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88 A consciousness-raising analysis and evaluation of anti-Semitism and anti-Arabism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about anti-Semitism and anti-Arabism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

Offered Spring semesters

Design

DSGN 101. Design Fundamentals (3) Lec-35, Lab-70, field trips P/NP available ADVISE: ENGL 93 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B Foundational 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. UC/CSU DSGN 101 = VMD 101 = PHOT 100

IDST 50 = LERN 50

Communication, diversity, financial literacy, health, memory, concentration, note taking, textbook reading, test-taking, library skills, problem-solving. UC/CSU

IDST 50. College Success (3) Lec-52.5 P/NP available Integrates personal growth and values, study strategies, and communication and critical analysis in to 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, note taking, textbook reading, test-taking, library skills, problem-solving. UC/CSU IDST 50 = LERN 50
DSGN 105. Survey of Collaborative Design (3)
Lec-52.5, 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 and the benefits of design thinking when problem-solving. UC/CSU

Offered Spring semesters

DSGN 110. Design Drawing Techniques (1.5)
Lec-17.5, Lab-35 P/NP available
Advise: DSGN 101 or VMD 101 or PHOT 100; ESL 160 or ENGL 93 or ENGL 88 or ENGL 88A or Placement in ENGL 96 or ENGL 88B
Quick sketching methods for ideation and visual problem solving for designers, animators, illustrators and makers. Terminology, techniques and conventions of rapid visualization are covered, with hands-on practice with line, shape, form, perspective, lighting, shade and shadow. UC/CSU

DSGN 110 = VMD 112

Offered Fall semesters

DSGN 150. Color in Design (3)
Lec-35, Lab-70 P/NP available
Advise: Completion of or concurrent enrollment in: DSGN 101 or VMD 101 or PHOT 100 and VMD 105
An exploration and application of the historical, cultural symbolic personal and professional uses of color through individual and collaborative projects. Topics include the properties and theory of color; creating color relationships and harmonies; and optical, psychological and spatial uses of color in various media and design disciplines. UC/CSU

DSGN 150 = VMD 118

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)
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 program, students will be able to:

- 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.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Italian
Course............................................Units
Choose 15 units from the following core courses:
ITAL 2 Continuation of Elementary Italian...........5.0
or ITAL 2A Continuation of Elementary Italian........3.0
and ITAL 2B Continuation of Elementary Italian........3.0
ITAL 3A Continuation of Intermediate Italian........3.0
and ITAL 3B Continuation of Intermediate Italian........3.0
ITAL 4A Continuation of Intermediate Italian..........3.0
and ITAL 4B Continuation of Intermediate Italian........3.0

Choose an additional three (3) units from the following elective courses:
ITAL 1 Elementary Italian..........................5.0
or ITAL 1A Elementary Italian.......................3.0
and ITAL 1B Elementary Italian.....................3.0
ITAL 10B Beginning Conversational Italian...........3.0
ITAL 10C Intermediate Conversational Italian.........3.0
ITAL 10D Intermediate Conversational Italian.........3.0
ITAL 15A Advanced Conversational Italian............3.0
ITAL 15B Advanced Conversational Italian............3.0

Total:.............................................18.0

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. Each course must be completed with a final grade of C or higher or Pass.

Learning Outcomes
Upon completion of this program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Italian
Course............................................Units
Choose 9 units from the following core courses:
ITAL 1 Elementary Italian.........................5.0
ITAL 2A + 2B = ITAL 2
Continuation of Elementary Italian (3)
Lec-52.5  P/NP available
Prereq.: 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. UC/CSU
ITAL 2A + 2B = ITAL 2
ITAL 2B. Continuation of Elementary Italian (3)
Lec-52.5  P/NP available
Prereq.: 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. UC/CSU
ITAL 2A + 2B = ITAL 2
ITAL 3A. Intermediate Italian (3)
Lec-52.5  P/NP available
Prereq.: ITAL 2 or ITAL 2B or demonstration of exit skills.
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. UC/CSU
MAY BE TAKEN NON-SEQUENTIALLY
ITAL 3B. Intermediate Italian (3)
Lec-52.5  P/NP available
Prereq.: ITAL 2 or ITAL 2B or demonstration of exit skills.
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. UC/CSU
MAY BE TAKEN NON-SEQUENTIALLY
OFFERED ON OCCASION
ITAL 4A. Continuation of Intermediate Italian (3)
Lec-52.5  P/NP available
Prereq.: ITAL 3A and ITAL 3B or demonstration of exit skills.
Intensive review of grammar and essay composition, constant practice in the comprehension and use of the spoken language to build on the introduction to intermediate Italian established in Italian 3a/3b. Conducted in Italian. ITAL 4A and ITAL 4B may be taken non-sequentially. UC/CSU
MAY BE TAKEN NON-SEQUENTIALLY
OFFERED ON OCCASION
ITAL 4B. Continuation of Intermediate Italian (3)
Lec-52.5  P/NP available
Prereq.: ITAL 3A and ITAL 3B or demonstration of exit skills.
Intensive review of grammar and essay composition, constant practice in the comprehension and use of the spoken language to build on the introduction to intermediate Italian established in Italian 3a/3b. Conducted in Italian. ITAL 4A and ITAL 4B may be taken non-sequentially. UC/CSU
MAY BE TAKEN NON-SEQUENTIALLY
OFFERED ON OCCASION
ITAL 10A. Beginning Conversational Italian (3)
Lec-52.5  P/NP available
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
NOT RECOMMENDED FOR NATIVE SPEAKERS OF ITALIAN.
ITAL 10B. Continuation of Beginning Conversational Italian (3)
Lec-52.5  P/NP available
Advise: ITAL 10A
Second semester course. Continuation of oral practice of structures and vocabulary of spoken Italian. CSU
NOT RECOMMENDED FOR NATIVE SPEAKERS OF ITALIAN.
ITAL 10C. Intermediate Conversational Italian (3)
Lec-52.5 P/NP available
Advise: ITAL 10B
Continuation of oral practice of advanced structures and vocabulary of spoken Italian. CSU
Not recommended for native speakers of Italian.

ITAL 10D. Continuation of Intermediate Conversational Italian (3)
Lec-52.5 P/NP available
Advise: ITAL 10C
Continuation of oral practice of advanced structures and vocabulary of spoken Italian. CSU
Not recommended for native speakers of Italian. Recommended for students enrolled in ITAL 2B or 3.

ITAL 11A. Advanced Intermediate Conversational Italian (3)
Lec-52.5 P/NP available
Advise: ITAL 10D or 2 or 2A+2B
Continuation of extensive oral training in Italian. Designed for students who wish to acquire more intermediate skills in conversational Italian. The major difference between ITAL 11A and 11B is in reading and oral assignments. The courses focus on specific topics (literature, fine arts, and current affairs) but include different grammar topics. CSU
Offered on occasion

ITAL 11B. Advanced Intermediate Conversational Italian (3)
Lec-52.5 P/NP available
Advise: ITAL 10D or 2 or 2A+2B
Continuation of extensive oral training in Italian. Designed for students who wish to acquire more intermediate skills in conversational Italian. The major difference between ITAL 11A and 11B is in reading and oral assignments. The courses focus on specific topics (literature, fine arts, and current affairs) but include different grammar topics. CSU
Offered on occasion

ITAL 15A. Advanced Conversational Italian (3)
Lec-52.5 P/NP available
Advise: ITAL 3 or (ITAL 3A and ITAL 3B)
Continuation of extensive oral training in Italian. Designed for students who wish to acquire more advanced skills in conversational Italian. The major difference between ITAL 15A and 15B is in reading and oral assignments. The courses focus on specific topics (literature, fine arts, current affairs) but include different grammar topics. UC/CSU
ITAL 15A not prerequisite to 15B
Offered on occasion

ITAL 15B. Advanced Conversational Italian (3)
Lec-52.5 P/NP available
Advise: ITAL 3 or (ITAL 3A and ITAL 3B)
Continuation of extensive oral training in Italian. Designed for students who wish to acquire more advanced skills in conversational Italian. The major difference between ITAL 15A and 15B is in reading and oral assignments. The courses focus on specific topics (literature, fine arts, current affairs) but include different grammar topics. UC/CSU
ITAL 15A not prerequisite to 15B
Offered on occasion
Japanese Certificate

The Certificate of Accomplishment in Japanese provides students, prospective employers and others with documented evidence of perseverance and academic accomplishment in the language. Each course must be completed with a final grade of C or higher or Pass.

Learning Outcomes

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

- Deal with most situations likely to arise while traveling in an area where the language is spoken.
- 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.
- Write simple connected texts on topics which are familiar or of personal interest or personal letters describing experiences and impressions.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Japanese

Course ................................................................. Units

Choose 9 units from the following core courses:

JAPA 1 Elementary Japanese ...................................... 5.0
or JAPA 1A Elementary Japanese .............................. 3.0
and JAPA 1B Elementary Japanese ............................... 3.0
JAPA 2 Continuation of Elementary Japanese ........ 5.0
or JAPA 2A Continuation of Elementary Japanese ....... 3.0
and JAPA 2B Continuation of Elementary Japanese ... 3.0
JAPA 3 Intermediate Japanese .................................. 5.0
or JAPA 3A Intermediate Japanese ........................... 3.0
and JAPA 3B Intermediate Japanese ............................ 3.0
JAPA 4 Continuation of Intermediate Japanese .... 5.0
JAPA 4A Continuation of Intermediate Japanese ........... 3.0
and JAPA 4B Continuation of Intermediate Japanese ... 3.0
JAPA 16 Beginning Kanji for Reading and Writing ...... 3.0

Choose 6 units from the following elective courses:

JAPA 10A Beginning Conversational Japanese .......... 3.0
JAPA 10B Beginning Conversational Japanese ........... 3.0
JAPA 10C Intermediate Conversational Japanese ...... 3.0
JAPA 39 Japanese Culture and Civilization ............... 3.0

Total: ..................................................................... 15.0

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 (3)
Lec-87.5 P/NP available
ADVICE: ESL 160 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B or any City College or University foreign language course

Beginner's course in grammar, composition, and reading. Practice in speaking and understanding Japanese. UC/CSU

JAPA 1A + IB = JAPA 1

JAPA 1A. Elementary Japanese (3)
Lec-52.5 P/NP available
ADVICE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B or any City College or University foreign language course

Beginner's course in grammar, composition, and reading. Practice in speaking and understanding Japanese. UC/CSU

JAPA 1A + IB = JAPA 1

JAPA 1B. Elementary Japanese (3)
Lec-52.5 P/NP available
PREREQ.: JAPA 1A or DEMONSTRATION OF JAPA 1A EXIT SKILLS.

Beginner's course in grammar, composition, and reading. Practice in speaking and understanding Japanese. UC/CSU

JAPA 1A + IB = JAPA 1

JAPA 2. Continuation of Elementary Japanese (5)
Lec-87.5 P/NP available
PREREQ.: JAPA 1 or IB or DEMONSTRATION OF JAPA 1/IB EXIT SKILLS.

Second semester course. Grammar, composition, reading and writing. Continued practice in speaking and understanding Japanese. UC/CSU

JAPA 2A = JAPA2

JAPA 2A. Continuation of Elementary Japanese (3)
Lec-52.5 P/NP available
PREREQ.: JAPA 1 or IB or DEMONSTRATION OF JAPA 1/IB EXIT SKILLS.

Grammar, composition, reading and writing; emphasis on speaking and understanding Japanese. UC/CSU

JAPA 2A + 2B = JAPA 2

JAPA 2B. Continuation of Elementary Japanese (3)
Lec-52.5 P/NP available
PREREQ.: JAPA 2A or DEMONSTRATION OF JAPA 2A EXIT SKILLS.

Grammar, composition, reading and writing; emphasis on speaking and understanding Japanese. UC/CSU

JAPA 2A + 2B = JAPA 2

JAPA 3. Intermediate Japanese (5)
Lec-87.5 P/NP available
PREREQ.: JAPA 2 or 2B or DEMONSTRATION OF JAPA 2/2B EXIT SKILLS.

Third semester course. Grammar, composition, reading and writing. Practice in speaking and understanding Japanese. UC/CSU

JAPA 3A = JAPA 3

JAPA 3A. Intermediate Japanese (3)
Lec-52.5 P/NP available
PREREQ.: JAPA 2 or 2B or DEMONSTRATION OF JAPA 2/2B EXIT SKILLS.

Grammar, composition, reading and writing. Practice in speaking and understanding Japanese. UC/CSU

JAPA 3A + 3B = JAPA 3

JAPA 3B. Intermediate Japanese (3)
Lec-52.5 P/NP available
PREREQ.: JAPA 3A or DEMONSTRATION OF JAPA 3A EXIT SKILLS.

Grammar, composition, reading and writing. Practice in speaking and understanding Japanese. UC/CSU

JAPA 3A + 3B = JAPA 3
JAPA 4. Continuation of Intermediate Japanese (5)
Lec-87.5
Prereq.: JAPA 3 OR 3B OR DEMONSTRATION OF JAPA 3/3B EXIT SKILLS
Fourth semester course. Grammar, reading and writing with emphasis on speaking and understanding of Japanese culture. Conducted in Japanese. UC/CSU
Offered Spring semesters

JAPA 4A. Continuation of Intermediate Japanese (3)
Lec-52.5
Prereq.: JAPA 3 OR 3B OR DEMONSTRATION OF JAPA 3/3B EXIT SKILLS
Grammar, reading and writing with emphasis on speaking and understanding of Japanese culture. Conducted in Japanese. UC/CSU
JAPA 4A + 4B = JAPA 4
Offered Spring semesters

JAPA 4B. Continuation of Intermediate Japanese (3)
Lec-52.5
Prereq.: JAPA 4A OR DEMONSTRATION OF JAPA 4A EXIT SKILLS
Grammar, reading and writing with emphasis on speaking and understanding of Japanese culture. Conducted in Japanese. UC/CSU
JAPA 4A + 4B = JAPA 4
Offered Spring semesters

JAPA 10A. Beginning Conversational Japanese (3)
Lec-52.5
This is a beginner's course and the first of a series of three conversational courses. This course offers intensive oral practice of basic structures and vocabulary most often used in conversation and is designed for students who wish to acquire basic skills of spoken Japanese. CSU
Recommended all beginning students of Japanese. Not recommended for native speakers of the language.

JAPA 10B. Beginning Conversational Japanese (3)
Lec-52.5
Advise: JAPA 10A OR DEMONSTRATION OF EXIT SKILLS
This is the beginner's course and the second of a series of three conversational courses. The course offers intensive oral practice of basic structures and vocabulary most often used in conversation and is designed for students who wish to acquire basic skills of spoken Japanese. CSU
Not recommended for native speakers of Japanese.
Offered Spring semesters

JAPA 10C. Intermediate Conversational Japanese (3)
Lec-52.5
Advise: JAPA 10B OR DEMONSTRATION OF EXIT SKILLS
This is the intermediate course and the third of a series of three conversational courses. This course offers intensive oral practice of basic sentence structure and vocabulary most often used in conversation and is designed for students who wish to acquire more advanced skills of spoken Japanese. CSU
Recommended for all intermediate learners of Japanese. Not recommended for native speakers of the language.
Offered on occasion

JAPA 16. Kanji for Reading and Writing (3)
Lec-52.5
Advise: JAPA 1 OR 1B OR DEMONSTRATION OF JAPA 1/1B EXIT SKILLS
Intensive study of kanji characters to increase competence in reading and writing Japanese and in understanding authentic materials. UC/CSU

JAPA 17. Cont. Beg. Kanji for Reading and Writing (3)
Lec-52.5
Prereq: 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. UC/CSU
Offered on occasion

JAPA 18. Intermediate Kanji for Reading and Writing (3)
Lec-52.5
Prereq: 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. UC/CSU
Offered on occasion

JAPA 19. Continuation of Intermediate Kanji for Reading and Writing (3)
Lec-52.5
Intensive study of the second level of intermediate kanji characters to increase competence in reading and writing Japanese and in understanding authentic materials. UC/CSU
Offered on occasion

JAPA 20. Continuation of Intermediate and Advanced Kanji for Reading and Writing (3)
Lec-52.5
Intensive study of the continuation of intermediate kanji characters to increase competence in reading and writing Japanese and in understanding authentic materials. UC/CSU
Offered on occasion

JAPA 39. Japanese Culture and Civilization (3)
Lec-52.5
Advise: ENGL 96 or ENGL 88 or ENGL 88B OR PLACEMENT IN ENGL 1A
A consideration of the major achievements of Japanese culture as reflected in language, literature, art, religion and daily life. UC/CSU
No knowledge of Japanese required.
Offered on occasion

Journalism
Office: Bungalow 615
Phone Number: (415) 239-3446
Web Site: www.ccsf.edu/journal

Announcement of Curricula
General Information
The Journalism Program prepares students for a two-year degree, transfer to a four-year program, or professional development in select areas of study. All journalism courses are credit courses and are offered on the Ocean Campus and Mission Center. Enrollment in the various program areas is open to all interested students. Prospective students are encouraged to meet with a program adviser to discuss program specifics and articulation agreements.
Journalism Major (AA-T)

The AA-T in Journalism offers students a basic foundation for further study at a four-year university. It specifically prepares students who wish to transfer and pursue a baccalaureate degree in Journalism at California State University campuses that leads to a career in the profession.

Learning Outcomes

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

- Research, write, and edit news and feature stories for publication in print and in multimedia platforms.
- Produce journalistic content that demonstrate good news judgment, appropriate sourcing, accuracy and completeness, technical competence, and adherence to ethical, legal and style guidelines.
- Demonstrate good work habits, time management and while working collaboratively and under deadline pressure to produce news content.
- Critically discuss the role of journalists in modern society.

Degree Requirements: Students who wish to earn the Associate in Arts in Journalism for Transfer 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.

Assuming students start this AA-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AA-T in Journalism

Course .............................................. Units
Required courses:
JOUR 19 Contemporary News Media. ................. 3.0
JOUR 21 News Reporting and Writing. ................. 3.0

Choose one of the following courses:
JOUR 24 Newspaper Laboratory. ...................... 4.0
JOUR 29A Introduction to Magazine Editing and Production .............................................. 3.0

Choose one of the following courses:
JOUR 26 Fundamentals of Public Relations .......... 3.0
JOUR 35 Internet Journalism .......................... 3.0
JOUR 36 Advanced Reporting .......................... 3.0
JOUR 37 Introduction to Photojournalism ............ 3.0

Choose two of the following courses:
BCST 110 Introduction to Writing for Electronic Media . 3.0
ECON 1 Principles of Macroeconomics .............. 3.0
or ECON 3 Principles of Microeconomics .......... 3.0
ECON 5 Introductory Statistics for Economics, Business and Social Sciences . .......... 5.0
or MATH 80 Probability and Statistics .............. 4.0
or PSYC 5 Statistics for Behavioral Sciences . .... 5.0
ENGL 1B Writing about Literature ................... 3.0
or ENGL 1C Writing about Nonfiction .............. 3.0
or CMST 2 Introduction to Rhetorical Criticism .. 3.0
JOUR 22 Feature Writing ............................ 3.0
JOUR 23 Electronic Copy Editing ..................... 3.0
PHIL 40 Introduction to Logic: Critical Thinking .. 3.0
PHOT 51 Beginning Photography .................... 3.0
POLS 1 American Government ....................... 3.0
POLS 2 Comparative Government ................... 3.0
CMST 3 Argumentation and Debate .................. 3.0
ASAM 8 Filipino American Community ............... 3.0
or ASAM 20 Asian American Experience Since 1820 . 3.0
or BCST 104 Race and Media ....................... 3.0
or HIST 41A The African American in the United States From the Colonial Era to the Civil War . . . . . . . . 3.0
or HIST 41B The African American in the United States From the Reconstruction to the Present .... 3.0
or LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States ......................... 3.0
or LGBT 15 From Greece to Stonewall: Global LGBT Literature, Art and Culture ......................... 3.0
or LGBT 50 Lesbian/Gay/Bisexual/Transgender/Communities of Color in the U.S. ......................... 3.0
or WOMN 25 Introduction to Women's Studies: Feminism Demystified. .............................. 3.0
Total: .................................................. 18.0 – 21.0

Journalism Major (AA)

City College offers a degree in Journalism that gives the research, writing, and production skills that are essential to a career in journalism. Current technology, from online research to electronic pagination, will be taught during the first two semesters. Third and fourth semester students use these skills to write, design, and edit The Guardsman and/or Etc. Magazine. They cover a beat within the larger college community, learning the art and applying the crafts of journalism.

Learning Outcomes

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

- 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.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Journalism

Course .............................................. Units
First Semester:
JOUR 19 Contemporary News Media. ................ 3.0
JOUR 21 News Reporting and Writing. ............... 3.0
VMD 105 Visual Media Digital Skills ................ 3.0
LIBR 51 Introduction to Libraries and Library Resources .............................................. 3.0
Second Semester:
JOUR 22 Feature Writing ................................ 3.0
JOUR 35 Internet Journalism .......................... 3.0
JOUR 37 Introduction to Photojournalism ............ 3.0
VMD 100 Orientation to Visual Media Design ...... 1.0
Third Semester:
JOUR 23 Electronic Copy Editing ..................... 3.0
JOUR 24 Newspaper Laboratory ...................... 4.0
JOUR 38 Intermediate Photojournalism .......................... 3.0
BCST 110 Introduction to Writing for Electronic Media .......................... 3.0

Fourth Semester:
JOUR 29A Introduction to Magazine Editing and Production .......................... 3.0
JOUR 25 Editorial Management .......................... 3.0
JOUR 26 Fundamentals of Public Relations .......................... 3.0

Recommended additional coursework:
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 advisor and become familiar with college wide course offerings.
BCST 135 Audio for the Web .......................... 1.0
CINE 20A Film History: Evolution of Film Expression .......................... 3.0
CINE 20B Film History: Contemporary Film Expression .......................... 3.0
ENGL 44A Survey of World Literature, Part I: Ancient, Medieval, and Early Modern .......................... 3.0
ENGL 44B Survey of World Literature, Part II: Early Modern to the Present .......................... 3.0
VMD 122 Graphic Design II .......................... 3.0
HIST 1 The United States Since 1900 .......................... 3.0
IDST 37 Introduction to Ethnic Studies .......................... 3.0
VMD 191 Social Media for Professionals .......................... 1.0
MRKT 170 Advertising and Integrated Marketing Communication .......................... 3.0
PHOT 57 Photography for the Web .......................... 3.0
PHOT 102B Documentary/News Photography .......................... 2.0
PHOT 51 Beginning Photography .......................... 3.0
PSYC 32 Social Psychology .......................... 3.0
Total: ........................................ 44.0

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 program, 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.

The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Editorial Management and Design

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>JOUR 19 Contemporary News Media</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 21 News Reporting and Writing</td>
<td>3.0</td>
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<tr>
<td>VMD 105 Visual Media Digital Skills</td>
<td>3.0</td>
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<tr>
<td>LIBR 51 Introduction to Libraries and Library Resources</td>
<td>3.0</td>
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<tr>
<td>Second Semester:</td>
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<tr>
<td>JOUR 22 Feature Writing</td>
<td>3.0</td>
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<tr>
<td>LIBR 56 Computers in Libraries</td>
<td>3.0</td>
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<tr>
<td>VMD 122 Graphic Design II</td>
<td>3.0</td>
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<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3.0</td>
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<tr>
<td>Total:</td>
<td>42.0</td>
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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 this program, 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.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in On-line Research

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>JOUR 19 Contemporary News Media</td>
<td>3.0</td>
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<td>VMD 122 Graphic Design II</td>
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<tr>
<td>PHOT 51 Beginning Photography</td>
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<td>Total:</td>
<td>42.0</td>
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</tbody>
</table>
JOUR 23 Electronic Copy Editing .......................... 3.0
JOUR 35 Internet Journalism ................................. 3.0
Total: ................................................. 33.0

Announcement of Courses

Credit, Degree Applicable Courses:

JOUR 19. Contemporary News Media (3)
Lec-52.5, 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. UC/CSU

JOUR 21. News Writing and Reporting (3)
Lec-52.5, field trips
Prereq.: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
The course focuses on techniques of newspaper reporting, developing and writing a news story, training in information gathering and interviewing sources. It also examines career opportunities in the industry. CSU
C-ID JOUR 110

JOUR 22. Feature Writing (3)
Lec-52.5
Prereq.: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
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-52.5
P/NP available
Advise: JOUR 21
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
Offered Spring semesters

JOUR 24. Newspaper Laboratory (4)
Lec-52.5, Lab-52.5
P/NP available
Prereq.: JOUR 21
Advise: JOUR 22
Beginning newspaper laboratory course focused on the publication of the college newspaper The Guardsman. Provides a practical understanding of the various elements involved in producing a newspaper. CSU
C-ID JOUR 130
Offered Fall semesters

JOUR 25. Editorial Management (3)
Lec-52.5, 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
Offered Spring semesters

JOUR 26. Fundamentals of Public Relations (3)
Lec-52.5
Advise: JOUR 24, and VMD 105
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
C-ID JOUR 150

JOUR 29A. Introduction to Magazine Editing and Production (3)
Lec-35, Lab-52.5, field trips
Advise: JOUR 21 or JOUR 22 or JOUR 37
An introduction to the process of creating a magazine publication. Students work as part of a staff of writers and photographers, focusing on writing and photographing feature stories suitable for publication in the campus magazine. They study the editorial production process and the skills required for publishing a campus magazine. Appropriate for students interested in creative writing, graphic arts, photojournalism and journalism who have not yet taken a campus magazine publishing class. CSU
Formerly JOUR 29.

JOUR 31. Internship Experience (2)
Lec-17.5, work-60 to 75 (total)
Advise: JOUR 24
Repeat: Maximum credit: 4 units
Supervised on-campus or off-campus employment in a branch of journalism or a closely allied field to which the student shows himself 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 32. Independent Study (.5)
Lec-5, Lab-15
The student will conduct special research, assignments, or experimental projects with faculty supervision. Projects can vary in format, but must be media-related. CSU
Offered on occasion

JOUR 35. Internet Journalism (3)
Lec-52.5, Lab-17.5
P/NP available
Advise: 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
C-ID JOUR 120

JOUR 36. Advanced Reporting (3)
Lec-52.5, field trips
Advise: 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
C-ID JOUR 210
JOUR 37. Introduction to Photojournalism (3)
Lec-52.5
Advise: PHOT 51 or demonstration of equivalent knowledge
Emphasizes concepts of photojournalism such as news and feature photography. Assignments will involve photographing people and visual storytelling at an intermediate level. Assignments will involve photographing people and visual storytelling 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 38. Intermediate Photojournalism (3)
Lec-52.5
Prereq.: JOUR 37
Advise: BCST 119 or demonstration of equivalent knowledge
Emphasizes concepts of photojournalism at an intermediate level. Assignments will involve photographing people and visual storytelling 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

Offered Fall semesters

Labor and Community Studies
Office: Evans
Phone Number: (415) 550-4459
Web Site: www.ccsf.edu/islab

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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Labor and Community Studies
Course .............................................. Units

Required courses:
LBCS 70A Who Built America? From the Colonial Era to the Civil War and Reconstruction .................. 3.0
LBCS 70B Who Built America? From Reconstruction to the Present ............................................. 3.0
LBCS 81 Organizing for Economic and Social Justice ........ 3.0
LBCS 98A/MUS 48A Beginning Labor Heritage
Chorus ................................................. 3.0
Recommended additional coursework:

- ASAM 20 Asian American Experience Since 1820
- BCST 104 Race and Media
- CDEV 93 Cultural Diversity in Early Childhood Education
- ECON 25 Women in the Economy
- ECON 30 Economics of the African American Community
- ENGL 57 Survey of Women's Literature
- HLTH 221 Health and Social Justice
- HIST 12A United States Women's History: Pre-colonial Through 1880s
- HIST 12B United States Women's History: 1890-Present
- HIST 15A History of the American Indian: Eastern Tribes
- HIST 15B History of the American Indian: Western Tribes
- HIST 21 History of the Mexican American/Chicano
- HIST 41A The African American in the United States From the Colonial Era to the Civil War
- HIST 41B The African American in the United States From the Reconstruction to the Present
- HIST 45 LGBT American History
- IDST 36 Poetry for the People
- IDST 37 Introduction to Ethnic Studies
- IDST 45 Pacific Islanders in the U.S.
- JOUR 21 News Reporting and Writing
- LALS 12 Ethnic Politics in the United States
- PSYC 23 Psychology of Race and Ethnic Relations
- 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 81B Diversity and Social Justice: Anti-Semitism
- IDST 81C Diversity and Social Justice: Anti-Arabism

Total: 24.0

Announcement of Courses

Credit, Degree Applicable Courses:

LBCS 15. Latin American Workers in the Americas (3)
Lec-52.5
ADVISOR: ENGL 88 or ENGL 88A or ENGL 93 or ENGL 95 or ESL 150 or PLACEMENT IN ENGL 96 or ESL 88 or ESL 160
This course bridges labor studies and Latin American/Latino/a Studies by comparing the histories of realities of Latin American workers in the US and Latin America. Traces the parallel histories of Latin American and Latino workers and the ways in which politics, economics and social movements shape their experiences. UC/CSU

LBCS 94D. Labor Relations in Workforce Education (1)
Lec-17.5
ADVISOR: ENGL 93 or ENGL 95 or ESL 88 or ESL 88A or ESL 150 or PLACEMENT IN ENGL 96 or ESL 88 or ESL 160
A study of United States labor relations and employment rights. Includes labor history, economics and law, as well as contemporary issues in various industries. Labor relations and employment rights as they have shaped American society. UC/CSU

LBCS 96C. Labor Relations in the Modern American Workplace (3)
Lec-52.5
ADVISOR: ENGL 93 or ENGL 95 or ESL 88 or ESL 88A or ESL 150 or PLACEMENT IN ENGL 96 or ESL 88 or ESL 160
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. UC/CSU
LCRS 97C. Current Issues in Labor Relations (.5)
Lec-9
P/NP available
A study of contemporary labor relations issues in various industries. Topics will include patterns of ownership, the structure of the workplace, the changing work force, management practices, unionization, workers’ rights and special concerns. An introductory analysis to labor relations as they affect the workplace and society. CSU
Offered on occasion

LCRS 98A. Beginning Labor Heritage Chorus (3)
Lec-52.5, field trips
P/NP available
The beginning study of choral techniques and performances of 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. UC/CSU
LBCS 98A = MUS 48A

LCRS 98B. Intermediate Labor Heritage Chorus (3)
Lec-52.5, field trips
P/NP available
Prereq.: LBCS 98A/MUS 48A
Intermediate Labor Chorus is designed to further develop choral music and knowledge of labor songs from various periods in American history, as presented in MUS 48A. Students will develop more complex choral techniques and repertoire. There is an increased focus on individual achievement within the chorus. UC/CSU
LBCS 98B = MUS 48B

LCRS 98C. Advanced Labor Heritage Chorus (3)
Lec-52.5
P/NP available
Prereq.: LBCS 98B/MUS 48B
Advanced Labor Chorus is designed to further develop choral music and knowledge of labor songs from various periods in American history. Students will develop advanced choral techniques and repertoire with an increased focus on the development of a self-directed creative process within the labor song tradition. UC/CSU
LBCS 98C = MUS 48C

LCRS 103. Peer Counseling-the Basics (1)
Lec-18
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
Offered on occasion

Noncredit Courses:
LCRS 9802. Workers’ Rights (18 hrs)
This course covers students’ rights on the job under federal, state and local law and in the union and nonunion workplace. It examines wage and hour, job security, anti-discrimination, health and safety and collective bargaining protections. Students will learn how to organize effectively for fair conditions at work.
Offered Fall semesters

LCRS 9805. San Francisco Labor Today - Its Issues (5 hrs)
An overview of the various organizations within the San Francisco labor community, their work and their issues. Unions, workers’ centers and community-based advocacy organizations. Organizing for a better work life, building labor-community coalitions and telling working people’s stories. People of color, immigrant, women’s and LGBT workers’ rights. The “Si, Se Puede” spirit in Bay Area labor today.
Offered on occasion

LCRS 9806. Workers’ Advocacy Training (3 hrs)
Offered on occasion

Latin American and Latino/a Studies
Office: Science 186
Phone Number: (415) 239-3126
Web Site: www.ccsf.edu/lals

Latin American & Latino/a Studies Major (AA)
The Latin American and Latino/a Studies major is a program that offers courses in the Humanities, Ethnic Studies, Area Studies and 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 core units and elective units. In the core 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 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
Upon completion of this program, students will be able to:

- Understand and analyze the Latino/a national and transnational experience in the state of California and the United States.
- Understand and analyze the political, social, cultural and economic realities of Latin America and its people.
- Understand and analyze the intersections of race, class, gender, ethnicity and sexuality within Latina/o experience in the United States and Latin America.
- To apply theories and methodologies in Latin American and Latino

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Latin American & Latino/a Studies
Course: LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States
Units: 3.0

Required courses:
LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States
Latin American & Latino/a Studies Certificate

The Certificate of Achievement in LALS is a program that introduces the Latino/a experience in the United States. The certificate is comprised of a 3-unit core course combined with elective units, providing students with theoretical and methodological tools to understand and analyze the complexity of Latino/a lives in the United States. It is designed for students who wish to pursue a specialization in Latino/a Studies and for professionals in the public, private and nonprofit sector and/or who work with or wish to learn about Latino/a communities in the United States to further their career goals.

Learning Outcomes

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

- Understand and analyze the Latino/a national and transnational experience in the state of California and the United States.
- Compare and contrast Latin American cultures and societies.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Latin American & Latino/a Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States</td>
<td>3.0</td>
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Choose 9 units from the following courses:

- LALS 9/LGBT 9 The Latin American and Latina/o LGBT Experience
- LALS 10 Latinas in the U.S./VOCES
- LALS 11 Drug Wars in the Americas
- LALS 13 Latin American & Latino/a Cross-Border Social Movements
- LALS 14 Diego Rivera; Art and Social Change in Latin America
- LALS 15/LBCS 15 Latin American Workers in the Americas
- ART 106 Latin American Art History
- ANTH 11 Latin American Cultures and Societies
- HIST 21 History of the Mexican American/Chicano
- MUS 25 Music of Latin America and the Caribbean

Total: 12.0

Announcement of Courses

Credit, Degree Applicable Courses:

LALS 1. Latino/a Diaspora: The Impact of Latinos Living in the United States (3) (3)
Lec-52.5 P/NP available
Prereq.: MATH 92 or MATH 60 or placement in MATH 90
ADVICE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
The impact of the Latino/a diaspora on the culture, identity, history and politics of the US. The course will emphasize an analysis of the Latino/a diaspora’s effect on the American system and institutions. UC/CSU

LALS 5. Introduction to Statistical Methods in Latin American and Latino/a Studies (5)
Lec-87.5 P/NP available
Prereq.: MATH 92 or MATH 60 or placement in MATH 90
ADVICE: ENGL 93 or ESL 160 or placement in ENGL 93
Emphasizes statistical applications for summarizing Latin American and U.S. Latino data such as social, economic and political growth, foreign direct investment, income inequality, poverty; descriptive statistics: organization of data, measures of central tendency; probability, statistical inference; Understand Latin American and U.S. Latino data about how social, political and economic indicators influences outcomes for Latinos in the United States and in Latin America, as well as the impact of race, class and gender. UC/CSU
Offered Spring semesters

LALS 9. The Latin American and Latina/o LGBT Experience (3)
Lec-52.5 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. UC/CSU
LALS 9=LGBT 9
Offered Fall semesters

LALS 10. Latinas in the U.S./VOCES (3)
Lec-52.5 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. UC/CSU
LALS 11. Drug Wars in the Americas (3)
Lec-52.5 P/NP available
Analyzes the impact of drug production and trafficking on Latin America, and the United States; evaluates past and current US drug policy and initiatives and law enforcement strategies; studies the link between transnational organized crime and the connection between drug trafficking, insurgency and terrorism in Latin America. UC/CSU

LALS 13. Latin American & Latino/a Cross-Border Social Movements (3)
Lec-52.5 P/NP available
Advised: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 150 or placement in ENGL 96 or ENGL 88B or ESL 160
The course bridges Latin American and Latino/a politics by analyzing the experiences and struggles of social movements in Latin America and the United States, Social movements relationship to rebellions and revolutions in Latin America and the emergence of the U.S. based Latino/a cross border social movements will be analyzed, UC/CSU

LALS 14. Diego Rivera; Art and Social Change in Latin America (3)
Lec-52.5, field trips P/NP available
Mexican muralist Diego Rivera's work exemplifies the use of art to create an 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. UC/CSU

LALS 15. Latin American Workers in the Americas (3)
Lec-52.5 P/NP available
Advised: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 150 or placement in ENGL 96 or ENGL 88B or ESL 160
This course bridges labor studies and Latin American/ Latino/a Studies by comparing the histories of realities of Latin American workers in the US and Latin America. Traces the parallel histories of Latin American and Latino workers and the ways in which politics, economics and social movements shape their experiences. UC/CSU

LALS 70. Individual Study in Latin American and Latino/a Studies (1-3)
Lab-52.5 to 157.5 P/NP available
Advised: 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

ANTH 11. Latin American Cultures and Societies (3)
Lec-52.5, field trips P/NP available
Advised: ENGL 86 or ENGL 91 or ESL 160 or placement in ENGL 93 or ENGL 88
Comprehensive and critical analysis of the cultures and traditions of the peoples in Latin America. Critical in-depth study of contemporary society and political systems, inter-ethnic relations, traditional medicinal healing, religions, and sorcery. Analysis of the history and development of Latin American cultures and the impact of state forms of social organization on its traditional societies. UC/CSU

ART 105. Ancient Art and Architecture of Latin America (3)
Lec-52.5, field trips P/NP available
Advised: ENGL 86 or ENGL 91 or ESL 160 or placement in ENGL 88 or ENGL 93
A survey of the artistic heritage of Ancient Mexico, Central, and South America. Art 105 explores the stylistic traditions and themes 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. UC/CSU

ART 106. Latin American Art History (3)
Lec-52.5, field trips P/NP available
ENGL 86 or ENGL 91 or ESL 160 or placement in ENGL 88 or ENGL 93
The artistic heritage of Latin America from the sixteenth century CE to the present. 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 Latin American Art. UC/CSU Offered on occasion

HIST 18A. The Colonial History of Latin America (3)
Lec-52.5 P/NP available
A survey of the colonial history of Latin America. Students examine historical, cultural, political, socio-economic and artistic elements from the conquest to independence. UC/CSU

HIST 18B. History of Latin America (3)
Lec-52.5 P/NP available
Survey of Latin-American history from independence in the 19th century to the present. UC/CSU

HIST 20. History of Mexico (3)
Lec-52.5 P/NP available
A survey of the history of Mexico from the indigenous, colonial and modern eras. UC/CSU

HIST 21. History of the Mexican American/Chicano (3)
Lec-52.5 P/NP available
A survey of the history of Mexican Americans/Chicanos in the United States. Students examine historical, cultural, political, socio-economic and artistic elements. UC/CSU

LBCS 15. Latin American Workers in the Americas (3)
Lec-52.5
Advised: ENGL 88 or ENGL 93 or ESL 160 or placement in ENGL 96 or ENGL 88B or ESL 160
This course bridges labor studies and Latin American/ Latino/a Studies by comparing the histories of realities of Latin American workers in the US and Latin America. Traces the parallel histories of Latin American and Latino workers and the ways in which politics, economics and social movements shape their experiences. UC/CSU

LGBT 9. The Latin American and Latina/o LGBT Experience (3)
Lec-52.5 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. UC/CSU

LGBT 9 = LALS 9
Offered on occasion
MUS 25. Music of Latin America and the Caribbean (3)
Lec-52.5, 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. UC/CSU

POL 18. Government and Politics of Latin America (3)
Lec-52.5  P/NP available
The constitutional systems, political processes, and social problems of Latin-American nations. UC/CSU

Offered on occasion

Learning Language Courses: See Spanish in this section of the catalog.

Learning Assistance
Office: Rosenberg 207
Phone Number: (415) 452-5502
Web Site: www.ccsf.edu/lac

Announcement of Courses
Credit, Degree Applicable Courses:
LERN 10. Introduction to Tutoring (1)
Lec-17.5  P/NP only
Prereq.: Acceptance into a CCSF Peer Tutoring Program. Introduction to 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)
Lec-17.5  P/NP only
Prereq.: Completion of or concurrent enrollment in LERN 10. 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

Design for students who wish to tutor in the Learning Assistance Center, other tutorial programs, or classrooms. Offered on occasion

LERN 12. Tutoring/Mentoring Work Experience (1-3)
Work-60-225  P/NP only
Advise: Completion of or concurrent enrollment in: LERN 10
Repeat max. 9 units
Work experience tutoring or mentoring in a specific subject matter, course or program under the supervision of the Learning Assistance Center Coordinator or an Instructor for a specific course or program. CSU

Replaces LERN 12A, 12B, and 12C

LERN 50. College Success (3)
Lec-52.5  P/NP available
Integrates personal growth and values, study strategies, and communication and critical analysis in to 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, note taking, textbook reading, test-taking, library skills, problem-solving. UC/CSU

LERN 50 = IDST 50

LERN 51. College Success Basics (1)
Lec-17.5  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

Offered on occasion

LERN 52A. Study Strategies: Discipline Specific (.5)
Lec-9  P/NP only
This brief intensive course increases student success by introducing discipline-specific study strategies particular to a targeted academic discipline, or course or section within a discipline. CSU

52A is not a prerequisite to LERN 52B

Offered on occasion

LERN 52B. Study Strategies: Skills Based (.5)
Lec-9  P/NP only
This brief intensive course increases student success by introducing study strategies particular to targeted study skills. CSU

52A is not a prerequisite to 52B

Offered on occasion

LERN 53A. Test Prep for CBEST Basic Skills Test-English (.5)
Lec-9  P/NP only
Advise: ENGL 88 or ENGL 88B or placement in ENGL 1A
This brief review course is designed to prepare students for the CBEST - California Basic Education Skills Test: English. This is the standardized exam that future K-12 teachers must pass prior to being hired as a teacher for particular subjects. CSU

LERN 53B. Test Prep: Standardized Exams-CBEST (.5)
Lec-9  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. CSU

LERN 53C. Test Prep: Standardized Exams-CSET English (.5)
Lec-9  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. CSU

LERN 53D. Test Prep for CSET Multiple Subjects Exam: Math (.5)
Lec-9  P/NP only
Advise: MATH 40
This short-term course is designed to prepare students for the mathematics section of the CSET Multiple Subjects standardized test. This course covers formatting, scoring standards, test-taking and study strategies, and specific content related to each subset of the particular test. CSU

LERN 55. Successful Online Learning (1)
Lec-17.5
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

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, study
strategies and computer skills. Students work with tutors who are recommended, trained and supervised by faculty. Students must have a referral by faculty to receive tutoring.

LERN 1010. Introduction to Tutoring (18 hrs)
Introduction to 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.

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 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 program, students will be able to:

- Research, analyze, and critically address key issues in understanding Lesbian, Gay, Bisexual, Transgender, Queer and Intersex histories and the intersectionality of LGBTQI identity formations with race, ethnicity, socio-economic status, religion, age, and ability within the context of systems of power and privilege.
- 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 form cultural identity are informed by issues of politics, religion and colonial histories throughout different historical, political, and social contexts.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

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, Bisexual, Gay, and Transgender Studies ................................. 3.0
LGBT 15 From Greece to Stonewall: Global LGBT Literature, Art and Culture ......................... 3.0
Choose 6 units from these Arts and Humanities courses (at least one course must be from the Arts):
ARTS
LGBT 20 LGBT U.S. Art and Culture......................... 3.0
LGBT 55 Contemporary Global LGBT Art and Culture 3.0
HUMANITIES
LGBT 11 Film Expression: History of Queer Film ...... 3.0
LGBT 18 Transgender Lives, Culture and Art ........... 3.0
LGBT 75 Queer Cinema in the 1970s .......................... 3.0
Choose 6 units from these Social and Behavioral Sciences courses:
LGBT 9/LALS 9 The Latin American and Latina/o LGBT Experience ......................................... 3.0
LGBT 10 LGBT Culture & Society ............................ 3.0
LGBT 50 Lesbian/Gay/Bisexual/Transgender/Communities of Color in the U.S. ....................... 3.0
ANTH 20 Lesbian Gay Bisexual Transgender Anthropology .................................................. 3.0
HIST 45 LGBT American History ............................ 3.0
Choose 3 units from the following course electives:
LGBT 21 Issues in Lesbian Relationships .................. 3.0
LGBT 24 Intimacy and Relationships between Men .... 3.0
BCST 103 Mass Media and Society ......................... 3.0
CDEV 76 Supporting LGBT Families in Educational Settings ..................................................... 3.0
HLTH 25 Women's Health ........................................ 3.0
HLTH 27 Men's Health ............................................ 3.0
HLTH 67 HIV and Hepatitis Navigation Skills .......... 3.0
IDST 17 Human Sexuality ........................................ 3.0
IDST 36 Poetry for the People ................................. 3.0
IDST 80A Diversity and Social Justice: Racism ....... 0.5
IDST 80C Diversity and Social Justice: Sexism ....... 0.5
IDST 80D Diversity and Social Justice: Heterosexism .... 0.5
IDST 80E Diversity and Social Justice: Ableism ...... 0.5
IDST 80F Diversity and Social Justice: Class and Classism .................................................... 0.5
IDST 80G Diversity and Social Justice: Transphobia ... 0.5
PSYC 14 Psychology of Shyness and Self-esteem .... 1.0
PSYC 15 Assertive Behavior .................................... 1.0
WOMN 10 Women and Film .................................... 3.0
WOMN 54 The Politics of Sexual Violence ............... 3.0
WOMN 55 Ending Sexual Violence: Peer Education .... 3.0
Any Arts and Humanities or Social and Behavioral course listed above, if not already taken 3.0

Total: ................................................................. 21.0
Announcement of Courses

Credit, Degree Applicable Courses:

LGBT 5. Introduction to Lesbian, Bisexual, Gay and Transgender Studies (3)
Lec-52.5, field trips
P/ NP available
This introductory course examines a broad range of contemporary LGBT issues in various domestic and global contexts including bio-medical, sociological and political. Additionally, students have the opportunity to explore intersecting identities while developing research and critical thinking skills vital for further progress in the program. UC/CSU Offered on occasion

LGBT 9. The Latin American and Latina/o LGBT Experience (3)
Lec-52.5
P/NP available
A survey of LGBT culture in Latin America and in Latina/o communities in the US. An examination of indigenous, cultural, sexual, psychological, socio-economic, immigration, literary and artistic elements. UC/CSU
LGBT 9=LALS 9
Offered on occasion

LGBT 10. LGBT Culture & Society (3)
Lec-52.5, field trips
P/NP available
This course examines the development of LGBT Communities and the cultural and ideological forces that have shaped them. Included are the ways queer groups have presented themselves and their communities through art, cultural organizations, media, and political activism both for our own uses within these communities and for those outside the queer world. Contemporary struggles for equal justice, political activism, and resistance to homophobia and other oppression will be highlighted. UC/CSU
Offered on occasion

LGBT 11. Film Expression: History of Queer Film (3)
Lec-52.5, field trips
P/NP available
Advise: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL IA
Surveys significant trends in the representation of queer sexualities in mainstream commercial cinema, as well as underground and independent films from the silent era through the twentieth century. Identifies theoretical approaches to the study of queer cinema for interpreting homophobic subtexts and alternative representations. Emphasizes the way social attitudes shape cultural representation, and interrogates the relationship between audience interpretation and filmmakers intentions. UC/CSU
Offered on occasion

LGBT 12. Contemporary LGBTQ Film (3)
Lec-52.5
P/NP available
Advise: ESL 160 or ENGL 88A or ENGL 88 or ENGL 93 or ENGL 95 or placement in ENGL 96 or ENGL 88B
Examines significant issues in the contemporary cinematic representation of LGBTQ people with a focus on the ways LGBTQ representation is expressed. Films screened cover mainstream Hollywood to small independent productions. LGBTQ film theory aids in developing a language for discussing the way cinema both challenges and reinforces societal values. The course looks at films from around the world and focuses on intersecting identities. UC/CSU
Offered on occasion

LGBT 15. From Greece to Stonewall: Global LGBT Literature, Art and Culture (3)
Lec-52.5
P/NP available
This global humanities course examines LGBT culture, artists, and writers from ancient Greece, Rome, Egypt, China, Africa and the Americas to Medieval and Renaissance Europe and Mexico through pre-World War II Europe and 1950's Japan and America. Students assess changing cultural attitudes about gender identity and sexual orientation. UC/CSU

LGBT 18. Transgender Lives, Culture and Art (3)
Lec-52.5
P/NP available
Advise: ESL 160 or ENGL 88A or ENGL 88 or ENGL 93 or ENGL 95 or placement in ENGL 96 or ENGL 88B
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. UC/CSU
Offered on occasion

LGBT 20. LGBT U.S. Art and Culture (3)
Lec-52.5
P/NP available
Lesbian, Gay, Bisexual, Transgender, and Queer U.S. artists, including expatriates, of the late 19th and 20th centuries and their influence on modern art. Analyzes the contribution of LGBTQ+ artists, poets, dancers, musicians, writers, and their associates and communities. Focuses on Indigenous Two Spirit writers and artists, Harlem Renaissance art and culture, and contemporary political art that considers social justice issues such as AIDS, immigration, and transgender life. UC/CSU
Offered on occasion

LGBT 21. Issues in Lesbian Relationships (3)
Lec-52.5
P/NP available
This class addresses intimate partner personal relationship issues (money, power, sex) about lesbian, bisexual and queer-identified women new to relationships or who have difficulties sustaining successful ones. Topics are applicable to persons of all genders and sexualities. Learning modality is critical analysis through self-exploration and sharing personal experiences via online class forum postings and confidential reports, student meetings and papers submitted to the instructor. CSU

LGBT 24. Intimacy and Relationships between Men (3)
Lec-52.5
P/NP available
Advise: ESL 160 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
This course studies male to male intimate relationships from a variety of perspectives. Integrating the personal experiences of class members, the course also examines biological, psychological, social, cultural, and legal influences upon men's ability to develop and sustain intimate relationships. Students will gain a better understanding of how to seek and participate in more satisfying relationships as well as how understand and cope with the many forces that impact male same-sex relationships. CSU

LGBT 50. Lesbian/Gay/Bisexual/Transgender/Communities of Color in the U.S. (3)
Lec-52.5
P/NP available
Advise: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
This course examines the histories, cultures, identities, communities and unique contributions of lesbian/gay/bisexual and transgender people of color in the U.S. (Asian, Black, Latino, Middle Eastern and Native/Indigenous). UC/CSU

Offered on occasion

LGBT 55. Contemporary Global LGBT Art and Culture (3)
Lec-52.5 P/NP available
This course focuses on the differences and commonalities of LGBT people from different global regions as reflected through art and culture. Through considerations of imperialism and colonization as well as religion and other intersecting identities, this course examines contemporary LGBT writers, artists, filmmakers, and musicians within a global context. UC/CSU

Offered on occasion

LGBT 75. Queer Cinema in the 1970s (3)
Lec-52.5, field trips P/NP available
ADVICE: ENGL 96 or placement in ENGL IA
The course explores film representation in the critical decade following the Stonewall Uprising, when modern Gay Liberation was born and a new LGBT visibility took hold in America. LGBT content in film will be explored from historic, artistic, critical, and consumerist perspectives. The course will examine important mainstream films, horror, documentaries, cult favorites, international hits, and experimental films, as well as the work of key queer filmmakers. UC/CSU

Offered on occasion

ANTH 20. LGBT Anthropology (3)
Lec-52.5 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. UC/CSU

BCST 103. Mass Media and Society (3)
Lec-52.5
ADVICE: ENGL 93 or ENGL 95 or ENGL 88A or ENGL 88 or placement in ENGL 96 or ENGL 88B
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, 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. UC/CSU

BIO 15. The Biology of HIV (3)
Lec-52.5, field trips P/NP available
This course presents the biological basis for HIV/AIDS origins and emergence; epidemiology; virus structure and replication; interaction of HIV with the immune system and disease; HIV testing; current prevention, treatment, and cure strategies. UC/CSU

Offered on occasion

CDEV 76. Supporting LGBT Families in Educational Settings (3)
Lec-52.5
ADVICE: 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

Offered on occasion

HIST 45. LGBT American History (3)
Lec-52.5, field trips P/NP available
Survey of the origins, development, and current status of the Lesbian, Gay, Bisexual, and Transgender reform and liberation movements in the United States, with particular emphasis since WWII. Includes the lives the lives, communities, organizations, and resistance movements created by LGBT peoples form diverse racial, ethnic, and class background. UC/CSU

HLTH 25. Women's Health (3)
Lec-52.5, field trips P/NP available
ADVICE: ENGL 91 or ENGL 86 or ESL 150 or placement in ENGL 88 or ENGL 95 or ESL 160
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. UC/CSU

HLTH 27. Men's Health (3)
Lec-52.5 P/NP available
ADVICE: ENGL 91 or ENGL 86 or ESL 150 or placement in ENGL 88 or ENGL 95 or ESL 160
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. UC/CSU

HLTH 67. HIV and Hepatitis Navigation Skills (3)
Lec-52.5 P/NP available
Prepares frontline workers to provide navigation services to those at risk for and living with HIV and hepatitis diseases and common co-occurring conditions informed by a public health and social justice framework. CSU

Offered Fall semesters

HLTH 95. Transgender Health: Working with Clients and Communities (1)
Lec-17.5 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

Offered Spring semesters

IDST 17. Human Sexuality (3)
Lec-52.5 P/NP available
ADVICE: ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A human sexuality course that integrates content and methodology from the disciplines of anthropology, biology, ethics, health education, history, jurisprudence, and psychology. UC/CSU

C-ID PSY 130

IDST 36. Poetry for the People (3)
Lec-52.5 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. UC/CSU
Offered Fall semesters

IDST 80A. Diversity and Social Justice: Racism (.5)
Lec-9  P/NP available
ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of race-based oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about racism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

IDST 80C. Diversity and Social Justice: Sexism (.5)
Lec-9  P/NP available
A consciousness raising analysis and evaluation of sexism on individual, institutional, and cultural levels in the United States. Expanding one's knowledge about sexism, increasing personal awareness of one's own sexism and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

IDST 80D. Diversity and Social Justice: Heterosexism (.5)
Lec-9  P/NP available
ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of homophobia and heterosexism (discrimination based on perceived or real sexual orientation and identity) oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about heterosexism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

IDST 80E. Diversity and Social Justice: Ableism (.5)
Lec-9  P/NP available
A consciousness raising analysis and evaluation of ableism (disability-based oppression) on individual, institutional, and cultural levels in the US. Expanding knowledge about ableism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

IDST 80F. Diversity and Social Justice: Class and Classism (.5)
Lec-9  P/NP available
ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of class oppression and classism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about class, class oppression and classism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

IDST 80G. Diversity and Social Justice: Transphobia (.5)
Lec-9  P/NP available
ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A consciousness-raising analysis and evaluation of transphobia and gender oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about transphobia and gender diversity, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

Offered Spring semesters

IDST 81B. Diversity and Social Justice: Anti-Semitism/Anti-Arabism (1)
Lec-18  P/NP available
ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of anti-Semitism and anti-Arabism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about anti-Semitism and anti-Arabism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

PSYC 14. Psychology of Shyness and Self-esteem (1)
Lec-17.5  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-18  P/NP available
Examination of the development of communication patterns in a psychological and sociological context. Psychological and emotional barriers to effective communication will be explored. Application of assertiveness techniques to effect behavior change based on cognitive / behavioral theories in psychology are a major focus. Assessment and implementation of appropriate techniques in a variety of situations, including communication with family, friends, and at the workplace are also discussed. CSU

SOC 25. Sex and Gender in American Society (3)
Lec-52.5  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. UC/CSU

WOMN 10. Women and Film (3)
Lec-52.5  P/NP available
Feminist film studies. Applying introductory level feminist film studies to classic and current films. UC/CSU

WOMN 54. Politics of Sexual Violence (3)
Lec-52.5, 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
WOMN 55. Ending Sexual Violence: Peer Education (3)
Lec.-52.5, 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

Liberal Arts and Sciences

Announcement of Curricula
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 a university as it provides the flexi-

dibility 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 one of these degrees, a student must:

- Complete the CCSF General Education requirement (18-24
  units).
- Complete 18 units in one "Area of Emphasis" from those out-
  lined 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 empha-
  sis" may also be counted for a General Education area.
- Complete all other CCSF graduation requirements (i.e., math,
  GPA, residency, and unit requirements).

Assuming students start one of these degrees with transfer-level math and
English eligibility, the minimum time for completion is 4 semes-
ters. Completion time will vary based on student preparation and
number of units completed per semester.

AREAS OF EMPHASIS

Arts and Humanities Emphasis (AA)
Associate in Arts in Arts and Humanities
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 a university as it provides the flexi-

bility 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.

The courses in the Arts and Humanities emphasis cover the study of
cultural, literary, humanistic activities and artistic expression of human
beings.

Learning Outcomes
Upon completion of this program, students will be able to:

- Exhibit an understanding of the ways in which people in diverse
cultures and eras have produced culturally significant works.
- Communicate effectively the meanings and intentions of cre-
  ative expression.
- Use analytical techniques to assess the value of human creations
  in meaningful ways.
- Demonstrate an understanding of the human condition through
  language, reasoning, or artistic creation.

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.

Assuming students start this AA with transfer-level math and
English eligibility, the minimum time for completion is 4 semesters.
Completion time will vary based on student preparation and number
of units completed per semester.

Courses Required for the Major in Liberal Arts and Sciences Emphasis
in Arts and Humanities

Course ..................................................... Units
Complete 18 units from the following courses (at least one course
from Arts, and one from Humanities):

ARTS: CHOOSE AT LEAST ONE OF THE FOLLOWING COURSES:

AFAM 55 From Funk to Hip Hop ..................................... 3.0
ARCH 31A History of Architecture .................................. 3.0
ARCH 31B History of Architecture .................................. 3.0
ARCH 32 Bay Region Architectural History ......................... 3.0
ARCH 102 Architecture Design Studio II ........................... 3.0
ARCH 134 History and Theory of Modern Architecture ........... 3.0
ART 101 Western Art History ....................................... 3.0
ART 102 Western Art History ....................................... 3.0
ART 103 History of Modern Art ...................................... 3.0
ART 104 Asian Art History .......................................... 3.0
ART 105 Ancient Art and Architecture of Latin America ......... 3.0
ART 106 Latin American Art History ................................ 3.0
ART 107 African-American Art History .............................. 3.0
ART 108 Women Through Art History .............................. 3.0
ART 109 History of Contemporary Art ............................. 3.0
ART 118 American Art ............................................... 3.0
ART 122A Russian Art at the Legion ................................. 3.0
ART 123Q Baroque Masters of Light ................................ 3.0
ART 123U 18th c. French Art at the Legion ......................... 3.0
ART 123V Renaissance Art at the Legion .......................... 3.0
ART 123W 19th -c. Painting at the Legion .......................... 3.0
ART 125A Basic Design ............................................. 3.0
ART 126 Color .................................................... 3.0
ART 130A Basic Drawing ............................................ 3.0
ART 140A Beginning Painting ....................................... 3.0
ART 146A Beginning Chinese Brush Painting ...................... 3.0
ART 146B Intermediate Chinese Brush Painting ................... 3.0
ART 160A Beginning Ceramics ...................................... 3.0
ART 170A Beginning Sculpture ..................................... 3.0
ART 180A Beginning Jewelry/Metal Arts ............................ 3.0
ASIA II East Asian Calligraphy: An Introduction .................. 3.0
CINE 18 American Cinema .......................................... 3.0
CINE 21 Introduction to Film Studies ................................ 3.0
CINE 23A Films of Alfred Hitchcock ................................ 3.0
CINE 23B Focus on Film Noir ........................................ 3.0
CMST 38 Forensics Competition .................................... 3.0
DANC 30 Dance History Dance in Cultural Context ............... 3.0
DANC 32 Black Tradition in American Dance ........................ 3.0
DANC 100A Beginning Dance Composition .......................... 3.0
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DSGN 101/PHOT 100/VMD 101</td>
<td>Design Fundamentals</td>
<td>3.0</td>
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<tr>
<td>DSGN 105</td>
<td>Survey of Collaborative Design</td>
<td>3.0</td>
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<td>DSGN 110/VMD 112</td>
<td>Design Drawing Techniques</td>
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<td>FASH 23</td>
<td>Fashion History</td>
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<td>FASH 55</td>
<td>Icons of Contemporary Fashion</td>
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<td>INTD 138</td>
<td>Global History of Interior Design</td>
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<td>LALS 14</td>
<td>Diego Rivera; Art and Social Change in Latin America</td>
<td>3.0</td>
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<td>LBCS 104A</td>
<td>Work Tales- Beginning Performance</td>
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<td>LGBT 20</td>
<td>LGBT U.S. Art and Culture</td>
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<td>LGBT 55</td>
<td>Contemporary Global LGBT Art and Culture</td>
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<td>MUS 3A</td>
<td>Diatonic Harmony</td>
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<td>MUS 3B</td>
<td>Chromatic Harmony</td>
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<td>Music Fundamentals</td>
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<td>MUS 5A</td>
<td>Introduction to Composition</td>
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<td>MUS 5B</td>
<td>Music Composition</td>
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<td>MUS 9A</td>
<td>Beginning Piano</td>
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<td>MUS 21</td>
<td>Traditional African Music</td>
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<td>History of Music in Western Culture: Medieval and Renaissance Music</td>
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<td>MUS 22B</td>
<td>History of Music in Western Culture: Baroque and Classical Music</td>
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<td>MUS 22C</td>
<td>History of Music in Western Culture: Romanticism</td>
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<tr>
<td>MUS 23</td>
<td>History of Jazz: Musical Traditions of the African-American</td>
<td>3.0</td>
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<td>MUS 24</td>
<td>Music of East Asia</td>
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<td>MUS 25</td>
<td>Music of Latin America and the Caribbean</td>
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<td>MUS 26</td>
<td>Music in American Culture</td>
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**HUMANITIES:** **CHOOSE AT LEAST ONE OF THE FOLLOWING COURSES:**

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ENGL 46C Survey of Literature in English, Part 3: Mid-Nineteenth through the Twentieth Century .... 3.0
ENGL 48C Science Fiction and Fantasy .................................................. 3.0
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ENGL 51 The Graphic Novel as Literature ........................................... 3.0
ENGL 52 Shakespeare ................................................................. 3.0
ENGL 57 Survey of Women's Literature ................................................ 3.0
ENGL 58 Contemporary Women's Writing ........................................... 3.0
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HIST 15B History of the American Indian: Western Tribes ....................... 3.0
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HIST 41B The African American in the United States From the Reconstruction to the Present ............. 3.0
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IDST 27B Asian Humanities: Contemporary ........................................ 3.0
IDST 29 Islam: Identity & Culture ................................................... 3.0
IDST 30 Demystifying the Middle East .............................................. 3.0
IDST 31 Women in the Middle East .................................................. 3.0
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IDST 45 Pacific Islanders in the U.S. ................................................. 3.0
IDST 46 Fa'a Pasefika: Interdisciplinary Cultural Expressions of Oceania ............... 3.0
IDST 47 Trauma and the Arts: An Interdisciplinary Approach ...................... 3.0
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RUSS 16A Advanced Conversation through Russian Cinema ........................................ 3.0
RUSS 16B Advanced Conversation through Contemporary Russian Cinema ..................... 3.0
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RUSS 21A Elementary Russian for Bilingual Students ................................................ 3.0
RUSS 21B Elementary Russian for Bilingual Students ................................................ 3.0
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SPAN 10B Continuation of Beginning Conversational Spanish ....................................... 3.0
SPAN 10C Intermediate Conversational Spanish ........................................................... 3.0
SPAN 10D Continuation of Intermediate Conversational Spanish ................................... 3.0
SPAN 31A Intermediate Spanish for Bilingual Students ................................................. 3.0
SPAN 31B Intermediate Spanish for Bilinguals ............................................................. 3.0
SPAN 32A Intermediate Spanish for Bilingual Students ................................................. 3.0
SPAN 32B Intermediate Spanish for Bilingual Students ................................................. 3.0
SPAN 4I Culture and Civilization of Spain ...................................................................... 3.0
WOMN 10 Women and Film ......................................................................................... 3.0
WORL 100 Introduction to Intercultural Communication and Language Learning .............................. 3.0
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**Communication Emphasis (AA) Associate in Arts in Communication**

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 a 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.
The courses in the Communication emphasis cover 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 program, students will be able to:

- Use the principles and application of language toward logical thought.
- Demonstrate clear and precise expression.
- Critically evaluate communications in whatever symbol system the student uses.

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.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Liberal Arts and Sciences Emphasis in Communication

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Science and Mathematics Emphasis (AS)

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 a 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.

The courses in the Science and Mathematics emphasis cover 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 program, students will be able to:

- Apply scientific inquiry and investigation of evidence to critically evaluate scientific arguments.
- Communicate scientific ideas and theories effectively.
- Apply scientific principles, theories, or models to explain the behavior of natural phenomena.
- Apply scientific knowledge and reasoning to human interaction with the natural world and issues impacting society.
- Apply mathematical concepts through numerical, symbolic, graphical, and verbal methods to interpret quantitative information, solve problems, and communicate results.

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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Liberal Arts and Sciences Emphasis in Science and Mathematics

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**Total:** 18.0

### Social and Behavioral Sciences Emphasis (AS)

**Associate in Science in Social and Behavioral 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 a 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.

The courses in the Social and Behavioral Sciences emphasis cover 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.

### Learning Outcomes

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

- Exhibit an understanding of the methods of inquiry used by the social and behavioral sciences.
- Critically evaluate the ways people act, think, and feel in response to their societies or cultures.
• Analyze how societies and/or social subgroups operate.

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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the Major in Liberal Arts and Sciences Emphasis in Social and Behavioral Sciences**

Course .................................................. Units
Complete 18 units from the following courses (at least one course from Behavioral Sciences and one from Social Sciences):

**BEHAVIORAL SCIENCES: CHOOSE AT LEAST ONE OF THE FOLLOWING COURSES:**

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<tr>
<td>PSYC 10 Abnormal Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 11 Theories of Personality</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 14 Psychology of Shyness and Self-esteeem</td>
<td>1.0</td>
</tr>
<tr>
<td>PSYC 15 Assertive Behavior</td>
<td>1.0</td>
</tr>
<tr>
<td>PSYC 17 Psychology of Eating, Food, and Weight</td>
<td>1.0</td>
</tr>
<tr>
<td>PSYC 21 Lifespan Development</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 23 Psychology of Race and Ethnic Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 25 Psychology of Gender</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 26 Applied Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 32 Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 40 Child and Adolescent Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 1 Introduction to Sociology</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 2 Social Deviance</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 3 Social Problems</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 21 Introduction to Research Methods</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 25 Sex and Gender in American Society</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 35 Sex, Marriage and Family Relationships</td>
<td>3.0</td>
</tr>
<tr>
<td>WOMN 25 Introduction to Women's Studies: Feminism Demystified</td>
<td>3.0</td>
</tr>
<tr>
<td>WOMN 54 The Politics of Sexual Violence</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**SOCIAL SCIENCES: CHOOSE AT LEAST ONE OF THE FOLLOWING COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMJ 57 Introduction to Administration of Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 67 Terrorism and Counterterrorism</td>
<td>3.0</td>
</tr>
<tr>
<td>AFAM 40 The Black Experience in California</td>
<td>3.0</td>
</tr>
<tr>
<td>AFAM 42 The Origins and History of Race Theory and Modern Racism</td>
<td>3.0</td>
</tr>
<tr>
<td>AFAM 55 From Funk to Hip Hop</td>
<td>3.0</td>
</tr>
<tr>
<td>AFAM 60 African American Women in the US</td>
<td>3.0</td>
</tr>
<tr>
<td>AMS 5 Comics, Power and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 20 Asian American Experience Since 1820</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 22 Community Issues &amp; Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 27 Asian American Race Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 30 Asian American Issues Through Film</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 35 Asian American Women</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 104 Race and Media</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 1 Principles of Macroeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 3 Principles of Microeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 6 International Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 15 Political Economy</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Library Information Technology

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.

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 program, 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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Library Information Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>LIBR 51 Introduction to Libraries and Library Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>LIBR 53 Library Public Services</td>
<td>2.0</td>
</tr>
<tr>
<td>LIBR 55A Cataloging and Classification</td>
<td>3.0</td>
</tr>
<tr>
<td>LIBR 55B Library Technical Services</td>
<td>3.0</td>
</tr>
<tr>
<td>LIBR 56 Computers in Libraries</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose 4 units from the following course electives:</td>
<td></td>
</tr>
<tr>
<td>LIBR 57 Internet Research Strategies</td>
<td>2.0</td>
</tr>
<tr>
<td>LIBR 58A Legal Resources and Libraries</td>
<td>1.0</td>
</tr>
<tr>
<td>LIBR 58B Medical Resources and Libraries</td>
<td>2.0</td>
</tr>
<tr>
<td>LIBR 58C Business Resources and Libraries</td>
<td>2.0</td>
</tr>
<tr>
<td>LIBR 59 Library Work Experience</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended additional coursework may be taken for skills development in WDPR, MAIS, CNET, GRPH, and CSCI; or for sophistication in the arts, social and humanities.</td>
<td></td>
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<tr>
<td>Total:</td>
<td>18.0</td>
</tr>
</tbody>
</table>

Certificate Curriculum
The certificate program is designed for students transferring to a senior college, or for those who already hold academic degrees.

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" in each course taken towards the certificate; 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 of this program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Library Information Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>LIBR 51 Introduction to Libraries and Library Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>LIBR 53 Library Public Services</td>
<td>2.0</td>
</tr>
<tr>
<td>LIBR 55A Cataloging and Classification</td>
<td>3.0</td>
</tr>
<tr>
<td>LIBR 55B Library Technical Services</td>
<td>3.0</td>
</tr>
<tr>
<td>LIBR 56 Computers in Libraries</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Choose 3 units from the following course electives:
LIBR 57 Internet Research Strategies ......................... 2.0
LIBR 58A Legal Resources and Libraries .................... 1.0
LIBR 58B Medical Resources and Libraries .................. 2.0
LIBR 58C Business Resources and Libraries ................. 2.0
LIBR 59 Library Work Experience ........................... 3.0

Recommended additional coursework may be taken for skills development in WDPR, MABS, CNET, GRPH, and CSCI; or for sophistication in the arts, social sciences and humanities.

Total: ....................................................... 17.0

Announcement of Courses
Credit, Degree Applicable Courses:
LIBR 51. Introduction to Libraries and Library Resources (3)
Lec-52.5, field trips P/NP available
Advise: MABS 60
Addresses major foundations, access, 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-35, field trips P/NP available
Advise: LIBR 51 or 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-52.5, field trips P/NP available
Prereq.: LIBR 51
Advise: MABS 60
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-52.5, field trips P/NP available
Advise: LIBR 51 or 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-52.5, field trips P/NP available
Advise: LIBR 51; 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-35, field trips P/NP available
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-17.5
Prereq.: ENGL 96 or ENGL 88 or ENGL 88B or placement in ENGL 1A
Advise: MABS 60
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 & Libraries (2)
Lec-35, field trips P/NP available
Advise: LIBR 51 and MABS 60
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-35, field trips P/NP available
Advise: LIBR 51 and MABS 60
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 resources. CSU

LIBR 59. Library Work Experience (3)
Work-180-225, field trips P/NP available
Prereq.: approved of LIBR Work Experience Coordinator based on short interview with student.
Advise: LIBR 53; LIBR 51; LIBR 55A or LIBR 55B; LIBR 56; MABS 60
Repeat: Students can repeat once (total 2 enrollments)
Supports competencies for library support staff though work experience under supervision for students wishing to clarify career development, pursue further education, or seek employment in library services or related industries. Workplaces include all types of libraries and in both public or technical service areas. CSU

Library Information Skills
Office: Rosenberg 413
Phone Number: (415) 452-5571

Credit, Degree Applicable Course:
LI S 10. Use of Information Resources (1)
Lec-18 P/NP available
Advise: ESL 150 or placement in ESL 160
Students develop skills using a range of information tools and sources, and explore concepts related to information production and sharing. Research topic development, search strategies, content evaluation and citation are covered. UC/CSU

Life Science
See Biological Sciences.
Maker Studies
Office: Science 220
Phone Number: (415) 239-3396
Website: www.ccsf.edu/makersphere

Announcement of Curricula

Collaborative Design Certificate
The certificate program in Collaborative Design provides students with a strong foundation in multidisciplinary approaches to design and collaboration. This approach offers students the collaborative skills and experiences needed for success in today's workplace. The program enhances a focused study in any design discipline and also provides an introduction to design thinking and making for all students.

Learning Outcomes
Upon completion of this program, students will be able to:

- Discuss historical and contemporary collaborative processes across a range of disciplines.
- Manage a design process with a collaborative creative team.
- Apply design vocabulary in developing concepts and approaches to various design solutions.
- Employ a structured iterative process to solve a variety of design problems.
- Apply various ideation techniques as tools for visual problem solving.
- Integrate color theory/harmonies in assembling creative works.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Collaborative Design

Course .......................................................... Units
Core courses:
DSGN 105 Survey of Collaborative Design ........... 3.0
DSGN 101/PHOT 100/VMD 101 Design Fundamentals . 3.0
DSGN 110/VMD 112 Design Drawing Techniques ...... 1.5
DSGN 150/VMD 118 Color in Design .................... 3.0
CMST 4 Group Communication .......................... 3.0

Choose 2 units from the following elective courses:
ART 125A Basic Design .................................. 3.0
ART 126 Color .............................................. 3.0
ART 130A Basic Drawing ................................ 3.0
ART 132A Beginning Figure Drawing ................ 3.0
FASH 36A Fashion Design I ............................. 3.0
FASH 42 Introduction to the Fashion Industry .......... 3.0
FASH 46 Fashion Merchandising ........................ 3.0
IDST 3 Introduction to Museum Studies ................ 3.0
PHOT 50B History & Aesthetics Since 1945 .......... 4.0
PHOT 50A History & Aesthetics Pre-1945 .......... 4.0
PHOT 51 Beginning Photography ..................... 3.0
PHOT 57 Photography for the Web ..................... 3.0
PHOT 60A Beginning Photoshop ...................... 2.0
PHOT 60B Intermediate Photoshop .................... 3.0
PHOT 101C Self Portraiture ................................ 1.0
PHOT 101D Landscape Photography .................. 1.0
PHOT 101G Pinhole Photography ...................... 1.0
VMD 105 Visual Media Digital Skills .................. 3.0
VMD 120 Graphic Design I ............................... 3.0
VMD 130 Typography I .................................. 3.0
VMD 140 Web Production I .............................. 3.0
VMD 150 Illustrator I .................................... 3.0
VMD 152 InDesign I ..................................... 3.0
VMD 154 Photoshop I .................................. 3.0

Total: ................................................................ 15.5

Announcement of Courses

Credit, Degree Applicable Courses:
MAKR 100. Introduction to History, Culture and Practices of Making (3)
Lec-52.5, field trips
ADVISE: ESL 140 or ESL 184 or ENGL 86 or ENGL 91 or placement in ESL 150 or ESL 186 or ENGL 88 or ENGL 93
Introduction to the Maker Movement, a survey of cultures, disciplines, materials, and technologies related to the traditions of making through time and around the world. Students will recognize key materials and techniques of disciplines including the arts, construction, engineering, and computer science to critically analyze and apply ways of creating that support an understanding of culturally significant work of diverse peoples and eras. CSU

MAKR 400. Maker Capstone (3)
Lec-35, Lab-52.5, field trips
PREREQ.: MAKR 100
Students will complete cross-discipline projects of their own design. Each student will conceptualize, prototype, test, and develop a working model to prove their design using materials and techniques of traditionally disparate disciplines. CSU

Mathematics
Office: Batmale 756
Phone Number: (415) 239-3478
Web Site: www.ccsf.edu/math

Announcement of Curricula

Mathematics Major (AS-T)
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 this program, 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.

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 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.

Assuming students start this AS-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AS-T in Mathematics

Course .................................. Units

Required courses:
MATH 110A Calculus I .......................... 5.0
MATH 110B Calculus II ......................... 5.0
MATH 110C Calculus III .......................... 5.0

Choose one of the following options:
OPTION 1:
MATH 120 Linear Algebra .......................... 3.0
MATH 125 Differential Equations .......................... 3.0

OPTION 2:
Choose one of the following advanced math courses:
MATH 120 Linear Algebra .......................... 3.0
MATH 125 Differential Equations .......................... 3.0
MATH 130 Linear Algebra and Differential Equations .......................... 5.0

Choose one course or course combination from the following:
MATH 80 Probability and Statistics .......................... 4.0
MATH 115 Discrete Mathematics .......................... 3.0
CS 110A Intro to Programming .......................... 4.0
CS 111A Classical Mechanics for Scientists and Engineers .......................... 4.0

and PHYC 4AL Mechanics Laboratory for Scientists and Engineers .......................... 1.0

Total: .................................. 21.0 – 24.0

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 30. Prealgebra with Basic Mathematics (5)
Lec-87.5
Prereq: MATH E1 or MATH E3 or MATH 30 or placement in MATH 40
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.

MATH 35. Prealgebra (5)
Lec-87.5
Prereq: MATH E1 or MATH E3 or MATH 30 or placement in MATH 40
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.

MATH 40. Elementary Algebra (5)
Lec-87.5
Prereq: MATH E1 or MATH E3 or MATH 35 or MATH 30 or placement in MATH 40
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 43. Preparation for Liberal Arts Mathematics (5)
Lec-87.5
Prereq: MATH E1 or MATH E3 or MATH 30 or placement into MATH 40

MATH 45. Preparation for Statistics (6)
Lec-105
Prereq: MATH E1 or MATH E3 or MATH 35 or MATH 835 or MATH 30 or placement in MATH 40
Accelerated preparation for transfer-level statistics. Algebra necessary for college-level statistics, including variables, formulas, and linear equations. Rationals, ratio, and proportional reasoning; fractions, decimals and percents; evaluating expressions; analyzing algebraic forms of statistical measures; modeling bivariate data with trend lines; graphical and numerical descriptive techniques for quantitative and categorical data.

MATH 46. Elementary and Intermediate Algebra (7.5)
Lec-131.25
Prereq: MATH E1 or MATH E3 or MATH 30 or MATH 835 or MATH 30 or placement in MATH 40 or MATH 46
Accelerated treatment of both elementary and intermediate algebra topics. Polynomials and rational expressions; solving linear, quadratic, and rational equations; linear inequalities; systems of linear equations; graphing lines, parabolas, and circles; radicals and rational exponents; complex numbers; introduction to functions; introduction to exponential functions and logarithms; applications; problem solving skills.
MATH 55. Geometry (5)
Lec-87.5
Prereq.: MATH 40 or placement in MATH 60 or 55 or 50
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 (5)
Lec-87.5
Prereq.: MATH 40 or placement in MATH 60
Advise: MATH 50 or MATH 55
Polynomial 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. Liberal Arts Math (3)
Lec-52.5
Prereq.: MATH 60 or placement into MATH 70
Survey 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 in modern society. This course is designed to enhance student appreciation of both the beauty and utility of mathematics. UC/CSU

MATH 75. Mathematical Analysis for Business (3)
Lec-52.5
Prereq.: MATH 60 or MATH 92
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. UC/CSU

MATH 80. Probability and Statistics (4)
Lec-70
Prereq.: MATH 92 or MATH 60 or 860
Descriptive statistics: organization of data, sample surveys, experiments and observational studies; measures of central tendency and dispersion; 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. UC/CSU

MATH 90. Precalculus Algebra (5)
Lec-87.5
Prereq.: MATH 60 or placement in MATH 90
Advise: MATH 50 or MATH 50
Real functions and their graphs; one-to-one and inverse functions; polynomial, rational, exponential and logarithmic functions; complex numbers and zeros of polynomials; linear systems and matrices; geometric transformations and conic sections; topics in discrete mathematics. UC/CSU

MATH 92. College Algebra (5)
Lec-87.5
Prereq.: MATH 40 or placement in MATH 92
Advise: MATH 50 or MATH 55
Polynomial 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-52.5
Prereq.: MATH 60 or MATH 92
Advise: MATH 90 and (MATH 55 or MATH 50)
Trigonometric functions and their graphs; trigonometric identities and equations; inverse trigonometric functions; solving triangles; complex numbers. CSU

MATH 97. Precalculus Review (5)
Lec-87.5
Prereq.: MATH 95 and (MATH 90 or MATH 92)
Prereq: MATH 95 and (MATH 90 or MATH 92)
Real functions and their graphs; polynomial, rational, and radical functions; one-to-one and inverse functions; exponential and logarithmic functions with applications; trigonometric functions and their graphs, trigonometric identities and equations, inverse trigonometric functions; conic sections; matrices and linear systems; topics in discrete mathematics. UC/CSU

MATH 100A. Short Calculus I (3)
Lec-52.5
Prereq.: MATH 97 or MATH 90 or MATH 92 or placement in MATH 100A or 110A
Lines, algebraic functions, exponential functions, logarithmic functions, limits, derivatives, and integrals, with applications. UC/CSU

MATH 100B. Short Calculus II (3)
Lec-52.5
Prereq.: MATH 100A
The second course in a two-semester sequence in applied calculus. Techniques of integration, periodic functions, Taylor polynomials, multi-variable calculus, and differential equations, with applications to business, economics, and science. UC/CSU

MATH 110A. Calculus I (5)
Lec-87.5
Prereq.: MATH 100A
The first course in a two-semester sequence in applied calculus. Techniques of integration, periodic functions, Taylor polynomials, multi-variable calculus, and differential equations, with applications to business, economics, and science. UC/CSU

MATH 110B. Calculus II (3)
Lec-87.5
Prereq.: MATH 97 or (MATH 90 and MATH 95) or (MATH 92 and MATH 95) or placement in MATH 110A
A first course in single-variable calculus. Limits, continuity, differentiation, applications of differentiation, and an introduction to integration. UC/CSU

C-ID MATH 210; C-ID MATH 900S (MATH 110A + MATH 110B)
MATH 110B. Calculus II (5)
Lec-87.5
Prereq.: MATH 10A or placement in MATH 110B
A second course in single-variable calculus. Applications of integration, techniques of integration, numerical integration, indeterminate forms, improper integrals, parametrized curves, polar coordinates, infinite sequences and series, and power series. UC/CSU
C-ID MATH 220; C-ID MATH 900S (MATH 110A + MATH 110B)

MATH 110C. Calculus III (5)
Lec-87.5
Prereq.: MATH 110B
Vectors, curves and surfaces in 3-dimensional space, differentiation and integration of multivariate functions, line and surface integrals, and, in particular, the theorems of Green, Stokes, and Gauss. UC/CSU
C-ID MATH 230

MATH 115. Discrete Mathematics (3)
Lec-52.5
Prereq.: MATH 100A or 110A; and CS 110B or 111B
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. UC/CSU
C-ID COMP 152

MATH 120. Linear Algebra (3)
Lec-52.5
Prereq.: Completion of or concurrent enrollment in: 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. UC/CSU
C-ID MATH 250

MATH 125. Differential Equations (3)
Lec-52.5
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. UC/CSU
C-ID MATH 240

MATH 130. Linear Algebra and Differential Equations (5)
Lec-87.5
Prereq.: MATH 110C

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

Announcement of Curricula

Computers and Music Certificate
The Computers and Music certificate provides students with the foundation for developing standalone music software as well as composing and performing music using computer-coding languages. Students learn how to analyze and meet the needs of users of creative and musical software. Students who complete this certificate are prepared for entry-level work in software development for creative users.

Students will have four semesters to complete coursework.

Learning Outcomes
Upon completion of this program, students will be able to:

- Describe and analyze the processes involved in creating a piece of music using a computer
- Discuss, evaluate, and analyze the needs of musical software users
- Collaborate, plan and produce effective electronic music software for performance or recording, that meets the needs of users, including their own
- Apply the technical and fundamental skills necessary for effective use of contemporary computer music tools
- Implement software in a team environment
- Display professionalism and effective application of music technology workforce expectations in communication and behavior

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Certificate of Accomplishment in Computers and Music
Course .......................................................... Units
Required Courses
MUS 4 Music Fundamentals .................................. 3.0
MUS 29 Electronic Music .................................. 3.0  
MUS 30 Electronic Music Laboratory ......................... 3.0  
CS 177 Software Engineering ................................. 3.0  

Choose one of the following:  
CNIT 133 JavaScript, jQuery, AJAX .......................... 3.0  
CS 131A Python Programming ............................... 4.0  
CS 110A Intro to Programming .............................. 4.0  
CS 111A Introduction to Programming: Java ............... 4.0  

Total: .................................................. 15.0 – 16.0

**Music Technology Certificate**

The Music Technology certificate provides students with the foundation for composing and performing music using a range of technology such as music software, computer coding, analog synthesizers, as well as a variety of creative approaches. Students learn how to incorporate traditional and contemporary electronic music techniques into their own work as well as analyze the way that other artists utilize these techniques for concert performances and other mediums. Students who complete this certificate are prepared for entry-level work in electronic music facilities, musical performance spaces, and other music technician-related fields.

**Learning Outcomes**

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

- Describe and analyze the processes involved in composing, producing and engineering a piece of electronic music
- Discuss, evaluate, and analyze their own work as electronic musicians and the work of others on a creative, technical level
- Create, plan, and produce effective, playable electronic music projects for performance or recording
- Apply the technical and fundamental skills necessary for effective use of contemporary electronic music tools
- Display professionalism and effective application of workforce protocol, communication skills, and behavior in the music technology environment.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Music Technology**

Course .................................................. Units  
Required Courses  
MUS 4 Music Fundamentals ................................. 3.0  
MUS 29 Electronic Music .................................. 3.0  
MUS 30 Electronic Music Laboratory ....................... 3.0  
BCST 119 Digital Media Skills ............................. 3.0  
BCST 120 Audio Production ................................ 4.0  
Total: .................................................. 16.0

**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 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 (3)**  
Lec.-52.5, field trips  
P/NP available  
Advise: 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. UC/CSU

**MUS 1B. Intermediate Musicianship (3)**  
Lec.-52.5, 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. UC/CSU

**MUS 3A. Diatonic Harmony (3)**  
Lec.-52.5, field trips  
P/NP available  
Advise: 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. UC/CSU

**MUS 3B. Chromatic Harmony (3)**  
Lec.-52.5, field trips  
P/NP available  
Prereq.: MUS 3A, 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 chromaticism. UC/CSU

**MUS 4. Music Fundamentals (3)**  
Lec.-52.5, 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. UC/CSU

**MUS 5A. Introduction to Composition (3)**  
Lec.-52.5, field trips  
P/NP available  
Advise: MUS 3A, 4 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. UC/CSU  
Offered Spring semesters

**MUS 5B. Music Composition (3)**  
Lec.-52.5, field trips  
P/NP available  
Prereq.: MUS 5A, or demonstration of exit skills  
Advise: 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. UC/CSU

**Offered Spring semesters**

**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.

Music courses that are related in content are grouped together in “families” of courses below. The families are indicated by their headings, e.g., Applied Training: Guitar, Ensemble: Chorale, etc. For the most up-to-date listing of courses and families, refer to the online catalog, www.ccsf.edu/catalog.

### Instrumental and Vocal Training

**Applied Training: Guitar**

**MUS 6A. Beginning Classical Guitar (3)**

Lec-52.5, field trips  P/NP available

Advise: MUS 4 or demonstration of exit skills

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. UC/CSU

No prior experience with the guitar necessary. The student must provide a guitar.

**MUS 6B. Advanced Beginning Classical Guitar (3)**

Lec-52.5, field trips  P/NP available

Prerequisite: MUS 6A or demonstration of exit skills

Individualized study of classical guitar theory, technique, and repertoire at the advanced beginning level. The emphasis is on the advanced beginning skills needed for solo performance. UC/CSU

**MUS 6C. Intermediate Classical Guitar (3)**

Lec-52.5, field trips  P/NP available

Prerequisite: 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. UC/CSU

**MUS 6D. Advanced Intermediate Classical Guitar (3)**

Lec-52.5, field trips  P/NP available

Prerequisite: MUS 6C or demonstration of exit skills

Individualized study of classical guitar theory, technique, and repertoire at the advanced intermediate level. The emphasis is on the development of skills needed for solo performance. UC/CSU

**Music 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: Cello**

**MUS 7C1. Beginning Cello (3)**

Lec-52.5, field trips  P/NP available

This course is the first in a series, addressing the advanced beginning level aspects of cello technique and repertoire. Emphasis is on the development of advanced beginning skills needed for solo performance. UC/CSU

Prerequisite: MUS 6A or demonstration of exit skills

**MUS 7C2. Advanced Beginning Cello (3)**

Lec-52.5, field trips  P/NP available

Prerequisite: MUS 7C1 or demonstration of MUS 7C1 exit skills

This course is the second in a series, addressing the advanced beginning level aspects of cello technique and repertoire. Emphasis is on the advanced beginning skill needed for solo performance. UC/CSU

**MUS 7C3. Intermediate Cello (3)**

Lec-52.5, field trips  P/NP available

Prerequisite: MUS 7C2 or demonstration of MUS 7C2 exit skills

This course is the third in a series, addressing the intermediate level aspects of cello technique and repertoire. Emphasis is on the intermediate skill needed for solo performance. UC/CSU

**MUS 7C4. Advanced Intermediate Cello (3)**

Lec-52.5, field trips  P/NP available

Prerequisite: MUS 7C3 or demonstration of MUS 7C3 exit skills

This course is the fourth in a series, addressing the advanced intermediate level aspects of cello technique and repertoire. Emphasis is on the advanced intermediate skill needed for solo performance. UC/CSU

**Applied Training: Percussion**

**MUS 7P1. Beginning Percussion (3)**

Lec-52.5, field trips  P/NP available

A practical introduction to percussion performance, students learn to play the instruments in the four families of percussion: Orchestral, Band, Jazz Band, and Show. UC/CSU

Formerly MUS 7P

**MUS 7P2. Advanced Beginning Percussion (3)**

Lec-52.5, field trips  P/NP available

This course is a continuation of the study of percussion, and individualized study of the appropriate techniques and repertoire to master an advanced beginning level of music on selected percussion instruments. The emphasis is on the development of advanced beginning skills needed for solo percussion performance. UC/CSU

**MUS 7P3. Intermediate Percussion (3)**

Lec-52.5, field trips  P/NP available

This course is a continuation of the study of percussion, and individualized study of the appropriate techniques and repertoire to master an intermediate level of music on selected percussion instruments. The emphasis is on the development of intermediate skills needed for solo percussion performance. UC/CSU

**MUS 7P4. Advanced Intermediate Percussion (3)**

Lec-52.5, field trips  P/NP available

This course is a continuation of the study of percussion, and individualized study of the appropriate techniques and repertoire to master an intermediate level of music on selected percussion instruments. The emphasis is on the development of intermediate skills needed for solo percussion performance. UC/CSU
advanced intermediate level of music on selected percussion instruments. The emphasis is on the development of advanced intermediate skills needed for solo percussion performance. UC/CSU

**Applied Training: Brass**

MUS 7T1. Beginning Brass (3)
Lec-52.5, field trips P/NP available
This course is an introduction to the study of brass instruments, and individualized study of the appropriate techniques and repertoire to master a beginning level of music on the trumpet, trombone or tuba. The emphasis is on the development of beginning skills needed for solo trumpet, trombone or tuba performance. UC/CSU

Offered on occasion

MUS 7T2. Advanced Beginning Brass (3)
Lec-52.5, field trips P/NP available
This course is a continuation of the study of brass instruments, and individualized study of the appropriate techniques and repertoire to master an advanced beginning level of music on the trumpet, trombone or tuba. The emphasis is on the development of advanced beginning skills needed for solo trumpet, trombone or tuba performance. UC/CSU

Offered on occasion

MUS 7T3. Intermediate Brass (3)
Lec-52.5, field trips P/NP available
This course is a continuation of the study of brass instruments, and individualized study of the appropriate techniques and repertoire to master an intermediate level of music on the trumpet, trombone or tuba. The emphasis is on the development of intermediate skills needed for solo trumpet, trombone or tuba performance. UC/CSU

Offered on occasion

MUS 7T4. Advanced Intermediate Brass (3)
Lec-52.5, field trips P/NP available
This course is a continuation of the study of brass instruments, and individualized study of the appropriate techniques and repertoire to master an advanced intermediate level of music on the trumpet, trombone or tuba. The emphasis is on the development of advanced intermediate skills needed for solo trumpet, trombone or tuba performance. UC/CSU

Offered on occasion

**Applied Training: Violin/Viola**

MUS 7V1. Beginning Violin (3)
Lec-52.5, 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 beginning skills needed for solo performance. Audition for placement within the class. UC/CSU

MUS 7V2. Advanced Beginning Violin (3)
Lec-52.5, 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. UC/CSU

MUS 7V3. Intermediate Violin (3)
Lec-52.5, 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. UC/CSU

MUS 7V4. Advanced Intermediate Violin (3)
Lec-52.5, 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. UC/CSU

**Applied Training: Woodwinds**

MUS 7W1. Beginning Woodwind (3)
Lec-52.5, field trips P/NP available
This course is an introduction 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. UC/CSU

MUS 7W2. Advanced Beginning Woodwind (3)
Lec-52.5, field trips P/NP available
Prereq.: MUS 7W1 or demonstration of MUS 7W1 exit skills
Individualized study of woodwind 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. UC/CSU

MUS 7W3. Intermediate Woodwind (3)
Lec-52.5, 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. UC/CSU

MUS 7W4. Advanced Intermediate Woodwind (3)
Lec-52.5, 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. UC/CSU

**Applied Training: Jazz Piano**

MUS 8A. Beginning Jazz & Other Popular Piano (3)
Lec-52.5, field trips P/NP available
Advise: 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. UC/CSU

MUS 8B. Intermediate Jazz & Other Popular Piano (3)
Lec-52.5, field trips P/NP available
Prereq.: MUS 8A or demonstration of exit skills
Advise: MUS 9A or demonstration of exit skills
An intermediate study of basic jazz, blues, Afro-Cuban, Brazilian and other popular piano techniques. UC/CSU
Applied Training: Piano
MUS 9A. Beginning Piano (3)
Lec-52.5, 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. UC/CSU

MUS 9B. Intermediate Piano (3)
Lec-52.5, field trips  P/NP available
Advise: 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. UC/CSU

MUS 9C. Keyboard Harmony (3)
Lec-52.5, field trips  P/NP available
Advise: 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. UC/CSU

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).

MUS 10A. Beginning Voice (3)
Lec-52.5, 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. UC/CSU

MUS 10B. Advanced Beginning Voice (3)
Lec-52.5, 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. UC/CSU

MUS 10C. Intermediate Voice (3)
Lec-52.5, 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. UC/CSU

MUS 10D. Advanced Intermediate Voice (3)
Lec-52.5, 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. UC/CSU

Performance Courses
Ensemble: Guitar
MUS 11. Guitar Workshop (3)
Lec-52.5, field trips  P/NP available
Advise: MUS 6A or demonstration of exit skills
Students can repeat three times (total 4 enrollments)
Develop the technique, musicality, note reading ability and theoretical knowledge to perform ensemble music for guitar. Ensembles include duos, trios, quartets, or larger ensembles. UC/CSU

Ensemble: Large Traditional Choirs
MUS 12. Choir (3)
Lec-52.5, field trips  P/NP available
Students can repeat three times (total 4 enrollments)
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. UC/CSU

MUS 48A. Beginning Labor Heritage Chorus (3)
Lec-52.5, field trips  P/NP available
Prereq.: LBCS 98A/MUS 48A
Intermediate Labor Chorus is designed to further develop choral music and knowledge of labor songs from various periods in American history, as presented in MUS 48A. Students will develop more complex choral techniques and repertoire. There is an increased focus on individual achievement within the chorus. UC/CSU
MUS 48A = LBCS 98A

MUS 48B. Intermediate Labor Heritage Chorus (3)
Lec-52.5, field trips  P/NP available
Prereq.: LBCS 98B/MUS 48A
Intermediate Labor Chorus is designed to further develop choral music and knowledge of labor songs from various periods in American history. Students will develop more complex choral techniques and repertoire with an increased focus on the development of a self-directed creative process within the labor song tradition. UC/CSU
MUS 48B = LBCS 98B

MUS 48C. Advanced Labor Heritage Chorus (3)
Lec-52.5, field trips  P/NP available
Prereq.: LBCS 98B/MUS 48B
Advanced Labor Chorus is designed to further develop choral music and knowledge of labor songs from various periods in American history. Students will develop advanced choral techniques and repertoire with an increased focus on the development of a self-directed creative process within the labor song tradition. UC/CSU
MUS 48C = LBCS 98C

Ensemble: Jazz/Rock
MUS 13A. Jazz/Rock Improvisation Workshop (3)
Lec-52.5, field trips  P/NP available
Students can repeat three times (total 4 enrollments)
Study of a variety of jazz, rock, and blues genres for all instruments. Emphasis on application of basic techniques of improvisation. Students learn to play lead (melodic improvisation) in an ensemble. Culmination is a concert demonstrating repertoire and techniques learned. UC/CSU
Music Surveys

MUS 21. Traditional African Music (3)
Lec.-52.5, 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. UC/CSU

MUS 22A. History of Music in Western Culture: Medieval and Renaissance Music (3)
Lec.-52.5, field trips  
P/NP available
Advise: ENGL 91 or ENGL 86 or ESL 130 or ESL 182 or placement in ENGL 95 or ENGL 88 or ESL 140 or ESL 184
A survey of musical styles from the 10th century to the early 16th century. The course focuses on evolution of musical styles and the changing social, cultural, economic, and political conditions that gave rise to those styles. UC/CSU
Offered on occasion

MUS 22B. History of Music in Western Culture: Baroque and Classical Music (3)
Lec.-52.5, field trips  
P/NP available
Advise: ENGL 91 or ENGL 86 or ESL 130 or ESL 182 or placement in ENGL 95 or ENGL 88 or ESL 140 or ESL 184
A survey of musical styles and their social contexts in the 17th and 18th centuries. Topics include the decline of church music, the rise of public concerts and opera, the evolution of the orchestra, symphonies, concertos, suites, and the development of musical instruments. UC/CSU
Offered on occasion

MUS 22C. History of Music in Western Culture: Romanticism (3)
Lec.-52.5, field trips  
P/NP available
This course examines the music literature of the Romantic era (1800 to 1900) and the composers and the cultural and political forces that played a role in the creation of the musical works of that era. Topics include sonatas, chamber music, opera, tone poems, and symphonies. UC/CSU
Offered on occasion

MUS 23. Jazz History: Musical Traditions of the African American (3)
Lec.-52.5, 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. UC/CSU

MUS 24. Music of East Asia (3)
Lec.-52.5, 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. UC/CSU

MUS 25. Music of Latin America and the Caribbean (3)
Lec.-52.5, 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. UC/CSU
MUS 26. Music in American Culture (3)
Lec-52.5, field trips P/NP available
A survey of music generated by America's diverse populations including Latino, African American, Hawaiian, Asians, Europeans, Native American, Cajun and Puerto Rican. UC/CSU

MUS 27A. Music Appreciation (3)
Lec-52.5, 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. UC/CSU

MUS 27B. Musical Awareness (3)
Lec-52.5, field trips P/NP available
Detailed study of opera, and musical theatre. UC/CSU
MUS 27A is not prerequisite for MUS 27B
Offered Fall semesters

MUS 27Q. Music and Queer Identity (3)
Lec-52.5, field trips P/NP available
Advise: Completion of or concurrent enrollment in: ENGL 91 or ENGL 86 or ESL 140 or ESL 184
An examination of how music encodes “queerness” by focusing on significant musical styles and performers in the LGBT community. UC/CSU
Formerly MUS 27C

MUS 27R. The History of Rock and Popular Music (3)
Lec-52.5, field trips P/NP available
Advise: ESL 150 or ENGL 91 or ENGL 86 or Placement in ESL 160 or ENGL 93 or ENGL 95 or ENGL 88
A survey of the origin, trends, styles and genres of rock and popular music from the early 20th century to the present day, focusing on historical and cultural influences and the effects of technology on popular music. UC/CSU
Offered on occasion

MUS 28. 20th Century Music (3)
Lec-52.5, field trips P/NP available
Advise: ENGL 91 or ENGL 86 or ESL 130 or ESL 182 or Placement in ENGL 95 or ENGL 88 or ESL 140 or ESL 184
The study of the music of the twentieth century through analysis of its composers and styles as well as graphic scores, electronic music recordings and development of new technologies. UC/CSU
Offered on occasion

MUS 29. Electronic Music (3)
Lec-52.5, 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. UC/CSU

MUS 30. Electronic Music Laboratory (3)
Lec-52.5, 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. UC/CSU
Offered Spring semesters

Other Music Performance Courses

Ensemble: African Drumming
MUS 41. African Drumming Ensemble (3)
Lec-52.5, field trips P/NP available
Students can repeat three times (total 4 enrollments)
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 UC/CSU
The content of this course varies. Students may re-enroll without repeating subject matter.

MUS 42. Gospel Choir (3)
Lec-52.5, field trips P/NP available
Students can repeat three times (total 4 enrollments)
The study of the theory, techniques and performance practices of popular, Gospel and other African American choir arrangements with piano accompaniment. UC/CSU
Offered on occasion

MUS 46. Stage Band (3)
Lec-52.5, field trips P/NP available
Students can repeat three times (total 4 enrollments)
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. UC/CSU

MUS 47. Pep Band (3)
Lec-52.5, field trips P/NP available
Students can repeat three times (total 4 enrollments)
Rehearsal band for music of historical 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. UC/CSU

Ensemble: Musical Theatre
MUS 200A. Ensemble - Musical Theatre Rehearsal and Presentation (1)
Lab-52.5 P/NP available
Ensemble training and role preparation at a basic level as an introduction to musical theatre works 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. UC/CSU

MUS 200B. Supporting Role - Musical Theatre Rehearsal & Presentation (2)
Lab-105 P/NP available
Supporting role training and preparation at an intermediate level as continuing study of musical theatre works 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. UC/CSU

MUS 200C. Leading Role - Musical Theatre Rehearsal & Presentation (3)
Lab-157.5 P/NP available
Principal (leading) role training and preparation at an advanced level as continuing study of musical theatre works 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. UC/CSU
Announcement of Curricula

Registered Nursing Major (AS)

General Information

1. Individual Nursing Courses are not open for individual enrollment.
2. Prerequisites must be completed prior to filing of enrollment application.
3. At present, qualified applicants are admitted per lottery.
4. Students will be conditionally admitted to the R.N. Nursing program. These students will be required to submit to a background screening check, health and immunization report, and current CPR for healthcare providers.
5. Students will be required to take ATI TEAS or submit previous ATI TEAS scores (or equivalent).

Degree Curriculum

The Associate in Science curriculum in Nursing is accredited by the California Board of Registered Nursing (BRN). Students who complete the course of study in accordance with City College requirements are eligible to take the National Council Licensure Examination of Registered Nurses (NCLEX-RN). Those who pass the NCLEX-RN are qualified for entry-level positions of R.N. in health facilities and agencies.

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 Mathematics.

Learning Outcomes

Upon completion of this program, students will be able to:
- 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;
- 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.

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 of students who are eligible to enroll is made twice 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 Filing 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. Prerequisite courses:
   a. Complete the following prerequisite courses: No in progress courses will be considered
      Anatomy 25
      Physiology 1 or 12

Nursing, Registered

Office: Cloud 340
Phone Number: (415) 239-3218
Web Site: www.ccsf.edu/rn
Nursing, Registered

Courses Required for the Major in Registered Nursing

<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>NURS 50 Fundamentals of Nursing</td>
<td>6.0</td>
</tr>
<tr>
<td>NURS 50A Pharmacology in Nursing Part I</td>
<td>2.0</td>
</tr>
<tr>
<td>NURS 50L Nursing Skills Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>Second Semester:</td>
<td></td>
</tr>
<tr>
<td>NURS 50B Pharmacology in Nursing Part II</td>
<td>2.0</td>
</tr>
<tr>
<td>NURS 31 Basic Medical-Surgical Nursing</td>
<td>6.0</td>
</tr>
<tr>
<td>NURS 31L Intermediate Nursing Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>Third Semester:</td>
<td></td>
</tr>
<tr>
<td>NURS 53 Maternal Newborn Nursing</td>
<td>6.0</td>
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<tr>
<td>NURS 55 Psychosocial Nursing</td>
<td>6.0</td>
</tr>
<tr>
<td>Fourth Semester:</td>
<td></td>
</tr>
<tr>
<td>NURS 54 Nursing of Children</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Credit by Examination. All nursing courses are challengeable. 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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.
Course required by the Board Of Registered Nursing:
PSYC 1 General Psychology 3.0
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).

Choose one of the following additional courses required by the Board Of Registered Nursing:
SOC 1 Introduction to Sociology 3.0
ANTH 3 Introduction to Social and Cultural Anthropology 3.0
ANTH 3C Introduction to Cultural Anthropology: Focus on American Cultures 3.0
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).

Nursing, Registered

Credit, Degree Applicable Courses:
NURS 50. Fundamentals of Nursing (6)
Lec-52.5, Lab-157.5
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, basic medical-surgical concepts and principles of care common to adults/older adults. This course includes application of theory and practice of skills in the clinical area and will lay 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-35
Coreq.: NURS 50 and 50L
This course provides an introduction to pharmacology with emphasis placed on nursing implications of drugs: including administration, adverse effects, clinical indications, dosages and frequencies, drug interactions, pharmacologic effects, and precautions and contraindications to use. CSU

NURS 50B. Pharmacology in Nursing Part II (2)
Lec-35
Coreq.: NURS 51 and 51L
This course provides a continuation of the study of pharmacology with emphasis placed on nursing implications of drugs: including administration, adverse effects, clinical indications, dosages and frequencies, drug interactions, pharmacologic effects, and precautions and contraindications to use. CSU

NURS 50L. Nursing Skills Laboratory (1)
Lab-52.5
Coreq.: NURS 50 and 50A
This nursing skills lab is designed to orient, assist, and enhance the development of psycho motor and cognitive skills that are critical in the performance of selected fundamental nursing procedures. CSU

NURS 51. Basic Medical-Surgical Nursing (6)
Lec-52.5, Lab-157.5
Prereq.: (NURS 50 AND NURS 50L AND NURS 50A) or current LVN license
Coreq.: NURS 50B and 50L
Acquaints the student with adults/geriatric adults experiencing dysfunction of the cardiovascular, respiratory, gastrointestinal, urinary, and male reproductive systems. Emphasis is placed on nursing process and integrating principles of nutrition, pharmacology, pathophysiology, psychosocial and biological sciences. Students are assigned to care for patients in acute or postacute care settings. CSU

NURS 51L. Intermediate Nursing Skills (1)
Lab-52.5
Prereq.: NURS 50, 50L, 50A; or current LVN license and NURS 50T
Coreq.: NURS 51, 51B
Intermediate/Advanced nursing skills for the adult medical-surgical patient. Laboratory instruction consisting of assigned reading, class discussion, and demonstration of skill by instructor. Student practice and return demonstration. Clinical simulation and case studies incorporating recently acquired skills for enhancement of critical thinking skills and application of concurrent theory to practice. CSU

NURS 53. Maternal and Newborn Care (6)
Lec-52.5, Lab-157.5
Prereq.: NURS 51 and 55 if taken first in sequence of 3rd semester nursing courses
This course covers the principles and practices of maternal newborn health and nursing care. The maternity cycle, women’s health and the development of the newborn from the embryonic stage to neonatal life will be covered. Clinical nursing experience will be in the acute care inpatient settings and in outpatient settings. CSU

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.

NURS 54. Nursing of Children (6)
Lec-52.5, Lab-157.5
Prereq.: NURS 53, 55 (and 56 if taken first in the sequence of fourth semester nursing courses)
Growth and development of children from birth through adolescence. Nursing education for health maintenance, prevention, medical treatment, and nursing interventions for common disease condition or injuries that affect children. The nursing clinical experience will be at multicultural inpatient hospital units, outpatient areas, and schools in San Francisco. CSU

NURS 55. Psychosocial Nursing (6)
Lec-52.5, Lab-157.5
Prereq.: NURS 50B and 51 and 51L
This course covers the principles and practices of psychosocial health and nursing care. Emphasis is placed on the development of therapeutic communication skills, fundamental to all nursing care. Prevention and treatment of psychopathology is explored. Clinical nursing
Upon completion of this program, students will be able to:

Learning Outcomes

- 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.

Admission Requirements:

1. Completion of ENGL L or ESL 140 or placement in ENGL 91, ENGL 86, or ESL 150.
2. A physical examination
3. Immunizations: Hepatitis B, Rubella, Varicella, Mumps, and T.B.
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 (2.0 grade point average) to qualify for a Certificate of Accomplishment.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Home Health Aide/Nurse Assistant

Course.................................................Units
Required courses:
VOCN 23 Nurse Assistant/Convalescent Care ......... 7.0
VOCN 24 Home Health Aide .......................... 2.5
VOCN 25 Nurse Assistant/Acute Care ............. 3.5
Total: .................................................... 13.0

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.

Learning Outcomes

Upon completion of this program, 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.

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 95 or ENGL 88 or ENGL 88A 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 BIO 106 or ANAT 25 or BIO 108, and PHYS 1 or BIO 111 or PHYS 12 or BIO 112)

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 assistant 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.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Achievement in Vocational Nursing

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester:</td>
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</tr>
<tr>
<td>VOCN 41A Fundamentals of Vocational Nursing</td>
<td>4.0</td>
</tr>
<tr>
<td>VOCN 41B Basic Medical/Surgical Nursing</td>
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</tr>
<tr>
<td>VOCN 41C Basic Medical/Surgical Skills Lab</td>
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</tr>
<tr>
<td>VOCN 41D Pharmacology</td>
<td>3.0</td>
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</tbody>
</table>

Second Semester:
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOCN 42A Adult Medical Surgical Nursing I</td>
<td>5.5</td>
</tr>
<tr>
<td>VOCN 42B Adult Medical Surgical Nursing II</td>
<td>5.5</td>
</tr>
<tr>
<td>VOCN 42C Adult Medical/Surgical Skills Lab</td>
<td>0.5</td>
</tr>
<tr>
<td>VOCN 42D Mental Health Nursing</td>
<td>2.0</td>
</tr>
<tr>
<td>VOCN 42E Nutrition</td>
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Third Semester:
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<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOCN 43A Concepts in Community Health Nursing</td>
<td>2.5</td>
</tr>
<tr>
<td>VOCN 43B Maternity Nursing</td>
<td>4.5</td>
</tr>
<tr>
<td>VOCN 43C Pediatric Nursing</td>
<td>3.5</td>
</tr>
<tr>
<td>VOCN 43D Advanced Medical Surgical Nursing</td>
<td>3.5</td>
</tr>
<tr>
<td>VOCN 43E Advanced Medical/Surgical Skills Lab</td>
<td>0.5</td>
</tr>
<tr>
<td>VOCN 43F Child Growth and Development</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Total: 47.5

Announcement of Courses

Credit, Degree Applicable Courses:

VOCN 23. Nurse Assistant/Convalescent Care (7)
Lec-84, Lab-126
Prereq.: Certification of Cardio Pulmonary Resuscitation (CPR); Approved by American Heart Association or American Red Cross for Health Care Provider

Theory content 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 (2.5)
Lec-40, Lab-24
Prereq.: A valid Certified Nursing Assistant License; Completion of or concurrent enrollment in: VOCN 23
A short term course that provides an introduction to basic client 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 (HHA). CSU

VOCN 25. Nurse Assistant/Acute Care (3.5)
Lec-30, Lab-96
Prereq.: Completion of or concurrent enrollment in: VOCN 23 or Valid CNA License

Announcement of Courses

This 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 41A. Fundamentals of Vocational Nursing (4)
Lec-72, Lab-16
Coreq.: VOCN 41B and VOCN 41C and VOCN 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

VOCN 41B. Basic Medical/Surgical Nursing (8)
Lec-56, Lab-252
Prereq: Completion of or concurrent enrollment in: 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

VOCN 41C. Basic Medical/Surgical Skills Lab (.5)
Lab-35
Coreq: VOCN 41A; VOCN 41B
Introduction to basic medical-surgical assessment skills as well as the nursing skills commonly practiced for clients with integumentary, musculoskeletal and gastrointestinal disorders. CSU

VOCN 41D. Pharmacology (3)
Lec-52.5
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

VOCN 42A. Adult Medical Surgical Nursing I (5.5)
Lec-45, Lab-162
Prereq: VOCN 41A; VOCN 41B; VOCN 41C; VOCN 41D; completion of or concurrent enrollment in: VOCN 42C and VOCN 42D
This course presents theory with concurrent clinical practice. System focus includes hematologic, cardiovascular, respiratory, and immunological. Core concepts include care of the surgical patient, pain management, and fluid and electrolyte balance. CSU

VOCN 42B. Adult Medical Surgical Nursing II (5.5)
Lec-45, Lab-162
Prereq: Completion of or concurrent enrollment in: VOCN 42A
Coreq: VOCN 42C
This course presents theory content with concurrent clinical practice. System focus includes neurological, endocrine, genitourinary and reproductive systems. CSU

VOCN 42C. Adult Medical/Surgical Skills Lab (.5)
Lab-35
Prereq: VOCN 41B and VOCN 41C and VOCN 41D
Coreq: VOCN 42A and VOCN 42B
Presents the nursing skills commonly practiced for clients with hematologic, lymphatic, cardiovascular, respiratory, neurological, endocrine, genitourinary, and reproductive disorders. CSU

VOCN 42D. Mental Health Nursing (2)
Lec-35
Prereq: VOCN 41A; VOCN 41B; VOCN 41C; VOCN 41D; VOCN 41E
Coreq: VOCN 42A; VOCN 42B; VOCN 42C
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

VOCN 42E. Nutrition (3)
Lec-52.5
Prereq: VOCN 41A; VOCN 41B; VOCN 41C; VOCN 41D
Coreq: VOCN 42A; VOCN 42B; VOCN 42C
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

Offered Spring semesters

VOCN 43A. Concepts in Community Health Nursing (2.5)
Lec-30, Lab-60
Prereq: VOCN 42A-42E PREREQ.: VOCN 42A; VOCN 42B; VOCN 42C; VOCN 42D
Coreq: VOCN 43E; VOCN 43B; VOCN 43C; VOCN 43D
Introduction to community health nursing: home health care, long-term care, rehabilitative and hospice care, as well as disaster nursing. CSU

VOCN 43B. Maternity Nursing (4.5)
Lec-50, Lab-90
Prereq: VOCN 42D; VOCN 42B; VOCN 42C; completion of or concurrent enrollment in: VOCN 43B and VOCN 43C and VOCN 43D and VOCN 43E
Coreq: VOCN 43E; VOCN 43B; VOCN 43C; VOCN 43D
Introduction to community health nursing: home health care, long-term care, rehabilitative and hospice care, as well as disaster nursing. CSU

VOCN 43C. Pediatric Nursing (3.5)
Lec-40, Lab-72
Prereq: VOCN 43F and VOCN 43B
Coreq: VOCN 43E
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

VOCN 43D. Advanced Medical Surgical Nursing (3.5)
Lec-40, Lab-72
Prereq: VOCN 42A and VOCN 42B and VOCN 42C; completion of or concurrent enrollment in: VOCN 43B and VOCN 43C and VOCN 43D and VOCN 43E
Coreq: VOCN 43E
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

VOCN 43E. Advanced Medical Surgical Nursing (3.5)
Lec-40, Lab-72
Prereq: VOCN 42A and VOCN 42B and VOCN 42C; completion of or concurrent enrollment in: VOCN 43B and VOCN 43C and VOCN 43D and VOCN 43E
Coreq: VOCN 43E
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

VOCN 43F. Advanced Medical/Surgical Skills Lab (.5)
Lab-35
Prereq: VOCN 41A; VOCN 41B; VOCN 41C; VOCN 41D; VOCN 41E
Coreq: VOCN 42A; VOCN 42B; VOCN 42C
Presents the nursing skills commonly practiced in maternity and pediatric nursing as well as the client with advanced medical-surgical disorders. CSU
VOCN 43E. Child Growth and Development (1)
Lec-14, Lab-14
Prereq.: Completion of or concurrent enrollment in: VOCN 43B
Coreq.: VOCN 43E
Presents basic concepts of normal growth and development from birth through adolescence. The growth and developmental theories proffered by Abraham Maslow, Eric Erickson, and Jean Piaget will be examined. The impact of age-appropriate nursing interventions will be discussed. CSU

Noncredit Courses:
VOCN 9194. Home Health Aide--Theory/Special (120 hrs)
Adviser: ESLN 3800
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 Health Aide.

Offered on occasion
VOCN 9195. Home Health Aide--Clinical/Special (45 hrs)
Adviser: 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.

Offered on occasion
VOCN 9200. Nursing Refresher (455 hrs)
Adviser: A valid or expired LVN or RN license from the United States or abroad is required for enrollment; ENGL 91 or ENGL 86 or ESL 150 or Placement in ENGL 88 or ESL 160
A one-semester course designed for international and U.S. trained re-entry LVN’s and RN’s. The course provides review of the knowledge and skills needed for employment in nursing through didactic, skills lab, and clinical experience.

Enrollment in this course requires current or past licensure as an RN or LVN in the United States or foreign country. If licensed in the U.S. the student is expected to have been out of the field of nursing for at least two years. If unlicensed in the U.S. the student should obtain permission from the Board of Vocational Nursing or the Board of Registered Nursing to take the licensing examination.

Oceanography
See Earth Sciences.

Older Adults
Office: Mission Center 265
Phone Number: (415) 452-7403
Web Site: www.ccsf.edu/olad

Announcement of Courses

Noncredit Courses:

Health
OLAD 7005. Body Dynamics and the Aging Process I (18 hrs)
Through lecture, demonstration and practice students learn strategies for implementing a physical activity program, techniques for stress reduction, and key healthy aging concepts such as nutrition and disease. Formerly OLAD 7205

OLAD 7007. Body Dynamics and the Aging Process II (36 hrs)
Through lecture, demonstration and practice, students learn strategies for implementing a physical activity program, techniques for stress reduction, and key healthy aging concepts such as nutrition and disease prevention to maintain and improve overall health and well-being while aging. Formerly OLAD 7200

OLAD 7201. Body Dynamics and the Aging Process II (12 hrs)
Through instruction, demonstration and practice learn techniques that improve overall health with emphasis on strength and flexibility. Offered only in Summer semesters

OLAD 7206. Body Dynamics and the Aging Process I (6 hrs)
Through instruction, demonstration and practice learn techniques that improve strength and flexibility. Offered on occasion

OLAD 7202. Principles of Balance (12 hrs)
The risk of injury and death due to falls increases as one ages. In this multilevel class, students will learn ways to improve balance and reduce the risk of falling through lecture, discussion, demonstration, and practice based on Tai Chi Chuan. Offered only in Summer semesters

OLAD 7203. Principles of Balance-Beginning (18 hrs)
The risk of injury and death due to falls increases as one ages. In this beginning class, students will learn ways to improve balance and reduce the risk of falling through lecture, discussion, demonstration, and practice based on Tai Chi Chuan.

OLAD 7204. Principles of Balance-Intermediate/Advanced (18 hrs)
The risk of injury and death due to falls increases as one ages. In this intermediate/advanced class, students will continue instruction of balanced movement techniques to reduce the risk of falling through lecture, discussion, demonstration, and practice based on Tai Chi Chuan.

OLAD 7208. Mind Body Health (12 hrs)
Through lecture, discussion and practice learn about the mind body connection using such techniques as meditation, chair yoga and T’ai chi chih. Offered on occasion

OLAD 7209. Mind-Body Health (36 hrs)
Through lecture, discussion and practice learn about the mind body connection.

OLAD 7003. Brain Fitness (12 hrs)
Discover and practice memory and mental fitness techniques, learn how memory works and what factors affect how well our brain functions. Students will devise their own strategies to maintain or improve their brain health and their ability to retain and retrieve information. Offered only in Summer semesters

OLAD 7004. Brain Fitness (18 hrs)
Discover and practice memory and mental fitness techniques, learn how memory works and what factors affect how well our brain...
functions. Students will devise their own strategies to maintain or improve their brain health and their ability to retain and retrieve information.

**Offered Fall semesters**

OLAD 7211. Brain Fitness (36 hrs)
Discover and practice memory and mental fairness techniques, learn how memory works and what factors affect how well our brain functions. Students will devise their own strategies to maintain or improve their brain health and their ability to retain and retrieve information.

**Offered on occasion**

OLAD 7002. Staying Engaged for a Lifetime (18 hrs)
Through lecture, discussion and subject matter experts students learn about different aspects of social and community engagement that are key to healthy aging. The class also introduces students to the free and low-cost social, intellectual and physical activities in and around San Francisco.

**Offered on occasion**

OLAD 7212. Staying Engaged for a Lifetime (36 hrs)
Through lecture, discussion and subject matter experts students learn about different aspects of social and community engagement that are key to healthy aging. The class also introduces students to the free and low-cost social, intellectual and physical activities in and around San Francisco.

**Offered on occasion**

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.

**Offered on occasion**

**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 7305. Arts and Crafts (15 hrs)
This course develops formal artistic skills such as color, composition, form, texture and contrast through tactile skills such as painting, weaving and sculpture. Completed projects are two or three-dimensional using a variety of materials and mediums.

**Offered only in Summer semesters**

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 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.

OLAD 7317. Life Sculpture (30 hrs)
In a supportive studio atmosphere, students will learn and gain basic proficiency in constructing a clay sculpture working primarily from a live model.

**Offered only in Summer semesters**

**Music and Theater**

OLAD 7302. Music Appreciation for Older Adults (12 hrs)
Students are introduced to many genres of Western classical music, including larger genres such as symphonies, concertos, operas, oratorios and ballets, as well as chamber music, piano music, song and choral music.

**Offered only in Summer semesters**

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 7308. The Theatre-Elements and Interpretation (18 hrs)
Students attend and read plays and develop critical skills in review discussions concerning the elements of dramatic literature and production techniques.

**Offered on occasion**

OLAD 7309. Theater-Elements and Interpretation (54 hrs)
Students read plays, attend performances, and develop critical skills in review discussions concerning the history of theatre, elements of dramatic literature, and production techniques.
**Writing and Literature**

**OLAD 7401. Writers’ Workshop for Older Adults (45 hrs)**
In a supportive atmosphere, older students will learn and gain proficiency in writing fiction and non-fiction, assess work by masters of the craft, share their work and critique that of their peers.

**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 7410. Telling Your Life Story (45 hrs)**
This course uses non-traditional and creative approaches to life review. It gives participants the opportunity to reflect on their life, consider how past occurrences have influenced their present life and how the past and present will impact their future. (Writing skills not required.) **Offered on occasion**

**OLAD 7411. Creative Ways of Telling Your Life Story (18 hrs)**
This course uses non-traditional and creative approaches to telling your life story. It includes the opportunity to reflect on life, consider how past occurrences have influenced present life and how the past and present will impact the future. (Writing skills not required.) **Offered only in Summer semesters**

**OLAD 7412. Creative Ways of Telling Your Life Story (27 hrs)**
This course uses non-traditional and creative approaches to telling your life story. It includes the opportunity to reflect on life, consider how past occurrences have influenced present life and how the past and present will impact the future.

**Computers**

**OLAD 7501. Introduction to Computers I (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 or possess equivalent basic computer skills. A survey of the concepts and techniques of the Internet presented in an unhurried, non-competitive environment. Students learn how to access the web, use e-mail, surf the web using browsers, participate in 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 or possess equivalent basic computer skills. 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.

**OLAD 7505. Introduction to Computers I (18 hrs)**
An introduction 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 the concepts of basic software and hardware, operating systems, word processing, email and the Internet. **Offered only in Summer semesters**

**OLAD 7506. Introduction to the Internet (18 hrs)**
This course is a survey of the concepts and techniques of the Internet. Students learn how to acquire access to and safely navigate the web, use e-mail and other communication tools, manage browser software and use search engines effectively to find information and evaluate web site content. **Offered only in Summer semesters**

**OLAD 7507. Art and Photography Using Digital Media (18 hrs)**
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. **Offered on occasion**

**OLAD 7508. PowerPoint (18 hrs)**
This course will teach students how to work, in detail, with Microsoft PowerPoint. **Offered on occasion**

**OLAD 7509. Encore Career Strategies (27 hrs)**
Develop skills necessary to pursue a second or “encore” career. Topics include goal setting, how the definition of career has changed over the years, effective search strategies for today’s world, resume writing, preparing for an interview and addressing issues of aging in today’s workplace.

**Philippine Studies**

Office: Batmale 360
Phone Number: (415) 239-3740
Web Site: www.ccsf.edu/philstd

**Announcement of Courses**

**Credit, Degree Applicable Courses:**

**PHST 10. Independent Study (3)**
Lab-157.5 P/NP available
Independent reading and research in Philippine 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 Philippine Studies and meets the student's own educational resources and needs. CSU

**PHST 20. The Filipino Family (3)**
Lec-52.5 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. UC/CSU
PHST 30. Philippine Society and Culture Through Film (3)
Lec-52.5  P/NP available
An examination of Philippine films for expressions of various cultural themes and socio-political influences on the Filipino experience; includes: images of Filipinos, language, interpersonal relations, sex roles, the "Filipino Dream", immigration, and bicultural alienation. UC/CSU

ANTH 15. Philippine Culture and Society (3)
Lec-52.5  P/NP available
The course introduces students to the development of Philippine culture and the impact of Eastern and Western civilizations on the people; emphasis on the ways of life in Philippine rural and urban areas and also the cultures of the various ethnic groups. UC/CSU

ASAM 8. Filipino American Community (3)
Lec-52.5  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. UC/CSU

HIST 37. History of the Philippines (3)
Lec-52.5  P/NP available
This course covers the historical development of the Philippines from the pre-colonial period to present day. The evolution of national culture, political and social institutions, and foreign relations will also be examined. UC/CSU

IDST 14. American Cultures in Literature and Film (3)
Lec-52.5, field trips  P/NP available
ADVISE: ENGL 96 or placement in ENGL 1A
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. UC/CSU

IDST 29. Islam: Identity & Culture (3)
Lec-52.5, field trips  P/NP available
ADVISE: ESL 150 or ENGL 86 or ENGL 91 or placement in ESL 160 or ENGL 88
An interdisciplinary survey of Muslim identity and 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. UC/CSU

IDST 37. Introduction to Ethnic Studies (3)
Lec-52.5  P/NP available
An introduction to concepts, theories, and social policy related to the history, culture, concerns, and conditions of American ethnic and racial groups. Examines cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, and patterns of interaction between various racial and ethnic groups. UC/CSU

IDST 40. Contemporary Issues in the Filipino Community (3)
Lec-52.5, 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. UC/CSU

IDST 42. Introduction to Philippine Arts (3)
Lec-52.5, field trips  P/NP available
Critical understanding of the aesthetics and development of Philippine visual, performing, literary, and media arts in the context of the country's history. UC/CSU

IDST 45. Pacific Islanders in the United States (3)
Lec-52.5, field trips  P/NP available
This course examines Pacific Islander migrations to the United States mainland including the history, culture, and development of Hawai'i and U.S. Pacific territories. It explores indigenous cultures and immigration experiences of Pacific Islanders from Guam, Palau, Marshall Islands, Fiji, Vanuatu, Tuvalu, Samoa, Tonga, Tahiti, New Zealand, Australia, and the Philippines. UC/CSU

IDST 46. Fa'a Pasefika: Interdisciplinary Cultural Expressions of Oceania (3)
Lec-52.5, field trips  P/NP available
ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A survey of traditional and contemporary art across Oceania (Pacific Islands). Emphasis on literature, dance, music, visual arts, film, and museums. Using an interdisciplinary and cross-cultural approach, the course explores the underlying unity of Pacific cultures, including their engagement with both western and non-western societies, colonization, and diasporic communities. UC/CSU

IDST 80A. Diversity and Social Justice: Racism (.5)
Lec-9  P/NP available
ADVISE: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of race-based oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about racism, increasing awareness of one’s own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

IDST 80C. Diversity and Social Justice: Sexism (.5)
Lec-9  P/NP available
A consciousness raising analysis and evaluation of sexism on individual, institutional, and cultural levels in the United States. Expanding one's knowledge about sexism, increasing personal awareness of one's own sexism and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU
IDST 80D. Diversity and Social Justice: Heterosexism (.5)
Lec-9 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of homophobia and heterosexism (discrimination based on perceived or real sexual orientation and identity) oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about heterosexism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU
Offered Fall semesters

IDST 80E. Diversity and Social Justice: Ableism (.5)
Lec-9 P/NP available
A consciousness-raising analysis and evaluation of ableism (disability-based oppression) on individual, institutional, and cultural levels in the U.S. Expanding knowledge about ableism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU
Offered Spring semesters

IDST 80F. Diversity and Social Justice: Class and Classism (.5)
Lec-9 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A consciousness-raising analysis and evaluation of class oppression and classism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about class, class oppression and classism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU
Offered Spring semesters

IDST 80G. Diversity and Social Justice: Transphobia (.5)
Lec-9 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A consciousness-raising analysis and evaluation of transphobia and gender oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about transphobia and gender diversity, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU
Offered Fall semesters

IDST 81B. Diversity and Social Justice: Anti-Semitism/Anti-Semitism (.5)
Lec-18 P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of anti-Semitism and anti-Arabism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about anti-Semitism and anti-Arabism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU
Offered Spring semesters

LGBT 50. Lesbian/Gay/Bisexual/Transgender/Communities of Color in the U.S. (3)
Lec-52.5 P/NP available
Advise: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
This course examines the histories, cultures, identities, communities and unique contributions of lesbian/gay/bisexual and transgender people of color in the U.S. (Asian, Black, Latino, Middle Eastern and Native/Indigenous). UC/CSU
Offered Fall semesters

Announcement of Courses
Credit, Degree Applicable Courses:
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-52.5
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? UC/CSU

PHIL 4. Introduction to Philosophy: Knowledge and Its Limits (3)
Lec-52.5
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 other 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. UC/CSU
C-ID PHIL 100

PHIL 12A. Symbolic Logic (5)
Lec-87.5
Prereq.: MATH 60 or MATH 92 or placement in MATH 90
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. UC/CSU
PHIL 25A. Ancient Philosophy (3)
Lec-52.5
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. UC/CSU C-ID PHIL 130
Offered Fall semesters

PHIL 25C. Modern Philosophy through Kant (3)
Lec-52.5
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?” UC/CSU C-ID PHIL 140
Offered Spring semesters

PHIL 40. Logic: An Introduction to Critical Thinking (3)
Lec-52.5
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. UC/CSU

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.

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.

Learning Outcomes
Upon completion of this program, 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.
- 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 design concepts, such as but not limited to: aesthetic elements and principles, create and evaluate photographic images, use iterative processes.
- 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.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Photography

Course ................................................. Units
Core courses:
PHOT 51 Beginning Photography .................................. 3.0
PHOT 100/DSGN 101/VMD 101 Design Fundamentals ...... 3.0
PHOT 83 View Camera Techniques ............................. 2.0
PHOT 85A Beginning Lighting Techniques .................... 4.0
PHOT 80 Outdoor & Ambient Lighting .......................... 3.0
PHOT 85B Advanced Studio Lighting Tech .................... 4.0
PHOT 90 Portrait............................................. 4.0
PHOT 99 Business Practices of Photography ................. 3.0
PHOT 130 Portfolio Production .................................. 3.0

Choose one of the following intermediate photography courses:
PHOT 81A Intermediate Photo: B&W Film/Darkroom .... 4.0
PHOT 81D Intermediate Photo: Digital ........................ 4.0

Choose one of the following history and aesthetics courses:
PHOT 50A History & Aesthetics Pre-1945 ...................... 4.0
PHOT 50B History & Aesthetics Since 1945 .................. 4.0

Choose one of the following editorial/news photography courses:
PHOT 93 Editorial Photography ................................ 2.0
PHOT 102B Documentary/News Photography ............... 2.0

Choose one of the following intermediate/advanced photography courses:
PHOT 81B Advanced Black & White Darkroom ............. 4.0
PHOT 60B Intermediate Photoshop .......................... 3.0

Choose 2 units from the following elective courses:
PHOT 52 Photographers and Their Images .................... 1.0
PHOT 57 Photography for the Web ........................... 3.0
PHOT 67 Digital Negatives for Darkroom Printing ........ 3.0
PHOT 86 Mixed Media & the Photo Image 3.0
PHOT 101C Self Portraiture 1.0
PHOT 101D Landscape Photography 1.0
PHOT 101G Pinhole Photography 1.0
PHOT 102A Architectural Photography 2.0
DSGN 105 Survey of Collaborative Design 3.0
DSGN 110/VMD 112 Design Drawing Techniques 1.5
DSGN 150/VMD 118 Color in Design 3.0
Total: 44.0 – 46.0

**Alternative Photography Processes Certificate**

This certificate program combines traditional, alternative and experimental photographic techniques with emerging digital technologies. Built on the basics of photography and design, it includes hands-on instruction in the black and white darkroom for processing negatives and prints, as well as hands-on instruction for producing and printing negatives with computers. Students are able to take their work back and forth between the two arenas utilizing the unique advantages that each has to offer. Students completing this certificate program will be qualified to work in custom photography labs and for professional fine-artists, in entry-level positions in museums, and the growing industry of image conservation and restoration. Additionally, this certificate prepares students for transfer to 4-year programs of study.

**Learning Outcomes**

Upon completion of this program, 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.
- Create digital negatives, for use with traditional darkroom printing techniques, through various means such as but not limited to: film recorders, image-setters, and inkjet printers
- Examine the characteristics of various films, papers and chemicals and how they may react to different light and development techniques
- Apply the ideas and practical uses of mixed media, alternative, experimental, and computer-assisted processes as they apply in contemporary photography
- 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Alternative Photography Processes**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 100/DSGN 101/VMD 101 Design Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 67 Digital Negatives for Darkroom Printing</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 81A Intermediate Photo: B&amp;W Film/Darkroom</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 86 Mixed Media &amp; the Photo Image</td>
<td>3.0</td>
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</tbody>
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**Recommended additional coursework**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHOT 58 History &amp; Aesthetics Since 1945</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 52 Photographers and Their Images</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 83 View Camera Techniques</td>
<td>2.0</td>
</tr>
<tr>
<td>PHOT 130 Portfolio Production</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 16.0

**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 program, 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 corrective camera movements to achieve control over perspective, plane of sharpness, point of view and framing.
- Demonstrate the techniques and concepts of architectural photography, such as but not limited to: photographing interior and exterior architectural environments, and explain elementary visual history and aesthetics of architecture.

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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Architectural Photography**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 100/DSGN 101/VMD 101 Design Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 80 Outdoor &amp; Ambient Lighting</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 83 View Camera Techniques</td>
<td>2.0</td>
</tr>
<tr>
<td>PHOT 85A Beginning Lighting Techniques</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 102A Architectural Photography</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total: 17.0

**Recommended additional coursework**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 52 Photographers and Their Images</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 99 Business Practices of Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 130 Portfolio Production</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 17.0
B&W Photography: The Print Certificate

This certificate program, built on the basics of photography and design, includes hands-on instruction in traditional darkroom techniques with an emphasis on high-end black and white printing. Students will build a personal portfolio of work and achieve proficiency in what has now become an artisanal skill. Students completing this certificate program will be qualified to work in custom photography labs, to operate a darkroom facility, and to work for professional fine-artists. Additionally, this certificate prepares students for transfer to 4-year programs of study.

Learning Outcomes

Upon completion of this program, 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.
- Analyze the characteristics of various films, papers and chemicals and how they may react to different light and development techniques.
- Process prints and negatives according to existing archival standards, such as but not limited to: exposure and contrast control, specific film and paper developer selection, standardized chemical testing.
- Produce a portfolio of high quality Black and White prints.

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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in B&W Photography: The Print

Course ..................................................... Units
Required courses:
PHOT 51 Beginning Photography .................. 3.0
PHOT 100/DSGN 101/VMD 101 Design Fundamentals . 3.0
PHOT 81A Intermediate Photo: B&W Film/Darkroom . 4.0
PHOT 81B Advanced Black & White Darkroom ...... 4.0
PHOT 130 Portfolio Production ..................... 3.0
Recommended additional coursework:
PHOT 67 Digital Negatives for Darkroom Printing .... 3.0
PHOT 82 Zone System Techniques .................. 4.0
PHOT 86 Mixed Media & the Photo Image ........... 3.0
Total: ..................................................... 17.0

B&W Photography: The Zone System Certificate

This certificate program, built on the basics of photography and design, includes in-depth and hands-on instruction in traditional black and white darkroom techniques with an emphasis on the proper exposure and development of negative films. Specifically, the “Zone System,” created by Ansel Adams, is explored. Students completing this certificate program will be qualified to work in custom photography labs, to operate a darkroom facility, and to work for professional fine-artists. Additionally, this certificate prepares students for transfer to 4-year programs of study.

Learning Outcomes

Upon completion of this program, 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
- Analyze the characteristics of various films, papers and chemicals and how they may react to different light and development techniques.
- Produce precise, predictable results under the guidelines of the Photographic Zone System, such as but not limited to: calibrate photographic equipment and materials, place photographic values through precise light metering, development and the use of camera filters.
- 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in B&W Photography: The Zone System

Course ..................................................... Units
Required courses:
PHOT 51 Beginning Photography .................. 3.0
PHOT 100/DSGN 101/VMD 101 Design Fundamentals . 3.0
PHOT 81A Intermediate Photo: B&W Film/Darkroom . 4.0
PHOT 82 Zone System Techniques .................. 4.0
PHOT 99 Business Practices of Photography ........ 3.0
Recommended additional coursework:
PHOT 67 Digital Negatives for Darkroom Printing .... 3.0
PHOT 81B Advanced Black & White Darkroom ...... 4.0
PHOT 86 Mixed Media & the Photo Image ........... 3.0
Total: ..................................................... 17.0

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 rely on post-production and retouching such as wedding photography, product photography, fashion photography, real-estate photography, event photography, and portrait photography. This certificate is also recommended for students seeking to upgrade skills for career advancement or transition.
Learning Outcomes

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

- Use the traditional tools and techniques of photography
- Apply design concepts in an artistic iterative process.
- Demonstrate the use of digital hardware and software technologies used in the photography career field.

Students must complete 4 of 6 courses at City College of San Francisco. All courses must be taken within a 4-year period.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

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>3.0</td>
</tr>
<tr>
<td>PHOT 100/DSGN 101/VMD 101 Design Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 81D Intermediate Photo: Digital</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 60A Beginning Photoshop</td>
<td>2.0</td>
</tr>
<tr>
<td>PHOT 60B Intermediate Photoshop</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Recommended additional coursework:

- PHOT 52 Photographers and Their Images
- PHOT 57 Photography for the Web
- PHOT 67 Digital Negatives for Darkroom Printing
- PHOT 80 Outdoor & Ambient Lighting
- PHOT 85A Beginning Lighting Techniques
- PHOT 99 Business Practices of Photography
- PHOT 130 Portfolio Production

Total: 15.0

Motion Photography - Field Certificate

This certificate provides hands-on instruction in motion and still photography using cameras with video capability in the field, emphasizing mixed lighting on location. Students will gain the aesthetic and technical skills necessary to professionally plan, capture, produce and deliver photographic stills and videos to clients or for electronic delivery. Certificate completion prepares students for employment in the following fields of photography: wedding and events, real-estate, advertising, public relations, corporate presentations, documentary and photojournalism, athletics, travel, and to work as a photography assistant.

Learning Outcomes

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

- Use the techniques of location-based photography to create stills and videos for electronic delivery.
- Edit and analyze still and video packages and presentations.
- Apply the proper use of lighting, sound and aesthetic techniques to field photography and video.
- Evaluate the effectiveness of presentations for motion photography.
- Apply the standard workforce protocols and communication skills used in the video and photographic industry.

ADVISE: ESL 160 or ENGL 93 or 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B

Photography Studio Practice Certificate

This certificate provides hands-on instruction in large format cameras, electronic strobe equipment and lighting techniques as applied to professional studio and/or portrait photography. Includes a foundation in design. Students completing this certificate program are prepared for an entry-level position as a photographer’s assistant in the fields of commercial photography, product photography, portrait photography, fashion photography, food photography, graduation photography and public relations.

Learning Outcomes

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

- Use the traditional tools and techniques of photography.
- Apply design concepts to the requirements of photography.
- Apply the proper use of the techniques and aesthetics of light to the requirements of photography.
- Apply the techniques of portraiture photography.
- Apply corrective camera movements to achieve control over the photographic process.

Students must complete each course with a grade of “C” or higher. Students must complete at least four courses at City College of San Francisco. All courses must be completed within four years. The minimum time for completion of this certificate is two semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Motion Photography - Field

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 135 Audio for the Web</td>
<td>1.0</td>
</tr>
<tr>
<td>BCST 136 Video for the Web</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 99 Business Practices of Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 57 Photography for the Web</td>
<td>3.0</td>
</tr>
<tr>
<td>or BCST 159 Digital Media Portfolio</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 93 Editorial Photography</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total: 17.0
PHOT 100/DSGN 101/VMD 101 Design Fundamentals . 3.0
PHOT 83 View Camera Techniques . 2.0
PHOT 85A Beginning Lighting Techniques . 4.0

Choose one of these electives:
PHOT 85B Advanced Studio Lighting Tech . 4.0
PHOT 90 Portraiture . 4.0

Recommended additional coursework:
PHOT 52 Photographers and Their Images . 1.0
PHOT 99 Business Practices of Photography . 3.0
PHOT 130 Portfolio Production . 3.0

Total: 16.0

**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 program, 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 or 5 courses at City College of San Francisco. All courses must be taken within a 4-year period.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Portrait Lighting**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 100/DSGN 101/VMD 101 Design Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 80 Outdoor &amp; Ambient Lighting</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 85A Beginning Lighting Techniques</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 90 Portraiture</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Reportage Photography Certificate**

This certificate provides a foundation in reportage photography and includes instruction in ambient and electronic strobe equipment, and lighting techniques. Students completing this certificate program will be qualified for employment in the fields of editorial photography, photojournalism, documentary and social documentary photography, combat photography, public relations, and travel photography.

**Learning Outcomes**

Upon completion of this program, 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.
- Demonstrate the ability to create successful illustrative images and solve problems in visual story telling, from research and directing subjects to presentation, sequencing and captioning.
- 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Accomplishment in Reportage Photography**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 100/DSGN 101/VMD 101 Design Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 80 Outdoor &amp; Ambient Lighting</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 85A Beginning Lighting Techniques</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 93 Editorial Photography</td>
<td>2.0</td>
</tr>
<tr>
<td>PHOT 102B Documentary/News Photography</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**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 program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

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>3.0</td>
</tr>
<tr>
<td>PHOT 100/DSGN 101/VMD 101 Design Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 85A Beginning Lighting Techniques</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 85B Advanced Studio Lighting Tech.</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 99 Business Practices of Photography</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Recommended additional coursework:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 52 Photographers and Their Images</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 80 Outdoor &amp; Ambient Lighting</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 90 Portraiture</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total: 17.0

Collaborative Design Certificate*

The certificate program in Collaborative Design provides students with a strong foundation in multidisciplinary approaches to design and collaboration.

*See Maker Studies section of the catalog.

Announcement of Courses

Photography

Credit, Degree Applicable Courses:

PHOT 50A. History and Aesthetics of Photography (4)
Lec-70, field trips. P/NP available
ADVICE: ESL 160 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B

This course will address the history of photography from its invention until 1945. Included are discussions and illustrated lectures of the lives and achievements of important photographers and processes of that time. Students visit museums to view photographs and participate in class discussions. UC/CSU

Offered Fall semesters

PHOT 50B. History and Aesthetics of Photography Since 1945 (4)
Lec-70, field trips. P/NP available
ADVICE: ESL 160 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B

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. UC/CSU

PHOT 51. Beginning Photography (3)
Lec-35, Lab-70, field trips. P/NP available
ADVICE: ESL 160 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B

A basic course introducing photographic capture, processing and output practices. Introduction to small format cameras and use; exposure calculations, film and digital capture, scanning, digital printing, and presentation techniques. This course explores both the technical and aesthetic aspects of photography. UC/CSU

STUDENTS SHOULD OWN A CAMERA WITH MANUAL OPERATIONS SUCH AS ISO, SHUTTER AND ApERTURE.

PHOT 52. Photographers and Their Images (1)
Lec-17.5, 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 57. Photography for the Web (3)
Lec-52.5, Lab-17.5. P/NP available
PREREQ.: PHOT 51 or demo of exit skills
ADVICE.: VMD 105 and 140; AND PHOT100/VMD 101/DSGN 101

An exploration of techniques used to acquire, prepare, and process photographs for online use. Emphasis on image sizing, optimization and compression, and basic webpage construction leading to the production of an online portfolio from a simple gallery to a customized website. CSU

PHOT 60A. Beginning Photoshop (2)
Lec-35, Lab-17.5. P/NP available
ADVICE: CNIT 100M or PHOT 51

An introductory Photoshop course that emphasizes the technical aspects of digital post production workflow in photography. UC/CSU

Offered Spring semesters

PHOT 60B. Intermediate Photoshop (3)
Lec-35, Lab-52.5, field trips. P/NP available
PREREQ.: PHOT 60A or PHOT 81D or VMD 154
ADVICE: PHOT 51 and PHOT 100/VMD 101/DSGN 101

An in-depth exploration of digital tools that will provide students skills to create expressive images and explore various electronic methods of output. Students will integrate available technical resources in preparation for a rapidly changing field. The course includes lectures,
demonstrations, creative assignments, lab exercises and class critiques.

UC/CSU

Offered Fall semesters

PHOT 67. Digital Negatives for Darkroom Printing (3)
Lec-52.5, Lab-17.5 P/NP available
Prereq.: PHOT 51; and PHOT 60A or PHOT 81D or demo of exit skills
Advise: PHOT 81A and PHOT 60B
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

Offered Fall semesters

PHOT 80. Outdoor & Ambient Lighting (3)
Lec-52.5, Lab-17.5, field trips P/NP available
Prereq.: PHOT 51
Advise: PHOT 100/VMD 101/DSGN 101
A hands-on, how-to course in managing natural light. Emphasis is on outdoor and ambient light; designed to relate lighting to photo-aesthetics and visual communication. CSU

PHOT 81A. Intermediate Photo: B & W Film/Darkroom (4)
Lec-52.5, Lab-52.5 P/NP available
Prereq.: PHOT 51
Advise: PHOT 100 or VMD 101 or DSGN 101
An intermediate black and white film photography course with emphasis on film processing and darkroom printing. Topics include camera exposure, black and white films and enlarging papers, contrast control, camera filters, elementary lighting, manipulation of film characteristics, finishing techniques, visual communication and the aesthetics of photography. UC/CSU

PHOT 81B. Advanced Black and White Darkroom Techniques (4)
Lec-52.5, Lab-52.5, field trips P/NP available
Prereq.: PHOT 81A and PHOT 100/VMD 101/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

Offered Spring semesters

PHOT 81D. Intermediate Photo: Digital (4)
Lec-52.5, Lab-52.5, field trips P/NP available
Prereq.: PHOT 51
Advise: DSGN 101; ENGL 93 or ENGL 160 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
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, 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 (4)
Lec-52.5, Lab-52.5 P/NP available
Prereq.: PHOT 81A and (PHOT 100 or VMD 101 or DSGN 101)
Using advanced metering, film processing and darkroom printing techniques, students will produce black & white photographs with meticulous control of exposure and contrast. Students will be required to produce a portfolio of fine prints resulting from Zone System techniques. CSU

Offered Spring semesters

PHOT 83. View Camera Techniques (2)
Lec-35, Lab-17.5, field trips P/NP available
Prereq.: PHOT 51 or demonstration of exit skills.
Advise: completion/concurrent enrollment in 85A
An exploration of the 4 x 5 view camera through hands-on experience. Investigation of exposure, perspective control, and camera movements, as applied to studio, architectural and fine art photography. Cameras and accessories are available to students. CSU

Offered Fall semesters

PHOT 85A. Beginning Lighting Techniques (4)
Lec-52.5, Lab-52.5, field trips P/NP available
Prereq.: PHOT 51 or demonstration of exit skills.
Advise: completion/concurrent enrollment in PHOT 83 and DSGN 101 or VMD 101 or PHOT 100
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-52.5, Lab-52.5
Prereq.: PHOT 85A and PHOT 100 or VMD 101 or DSGN 101 or demonstration of exit skills
Advise: 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

Offered Fall semesters

PHOT 86. Mixed Media and the Photographic Image (3)
Lec-35, Lab-52.5, field trips P/NP available
Prereq.: PHOT 81A and PHOT 100/VMD 101/DSGN 101
Advise: PHOT 67
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

Offered Spring semesters

PHOT 90. Portraiture (4)
Lec-52.5, Lab-52.5, field trips P/NP available
Prereq.: PHOT 85A; completion of or concurrent enrollment in PHOT 100 or VMD 101 or DSGN 101
An advanced studio lighting course introducing students to the technical, aesthetic and historical aspects of photographic portraiture. Students have hands-on experience with classic and contemporary lighting techniques using constant studio light sources and strobes. Students work individually and in teams. CSU

Offered Spring semesters
PHOT 93. Editorial Photography (2)
Lec-35, Lab-17.5  P/NP available
Prereq.: PHOT 85A and (PHOT 100 or VMD 101 or DSGN 101 or demonstration of exit skills)
This course includes camera handling, operation of speed lights and studio strobes as well as indoor and outdoor lighting. Editorial photography is a branch of commercial photography that produces electronic images for print and online trade and consumer publications. In this course, students will practice making these types of photographs "for hire." CSU
Offered Fall semesters

PHOT 99. Business Practices of Photography (3)
Lec-52.5  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
Offered Fall semesters

PHOT 100. Design Fundamentals (3)
Lec-35, Lab-70, field trips  P/NP available
Advise: ENGL 93 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
Foundational 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. UC/CSU
PHOT 100 = VMD 101 = DSGN 101

PHOT 101C. Self Portraiture (1)
Lec-17.5, field trips  P/NP available
Prereq.: PHOT 51
This course explores the challenges and benefits associated with photographing oneself. Public versus private portraiture is thoroughly examined. Emphasis is placed on the study and application of North Light specifically as it applies to dimensional devices. CSU
Offered on occasion

PHOT 101D. Landscape Photography (1)
Lec-17.5, field trips  P/NP available
Prereq.: PHOT 51
Techniques leading to a creative treatment of landscape photography using film or digital media. Illustrated lectures of important historical and contemporary image-makers. Emphasis on photographic fieldwork, interpretive lighting, design, camera technique, post production processing and filtration to support personal vision and conceptual ideas. CSU
Offered on occasion

PHOT 101E. Environmental Portraiture (1)
Lec-17.5, field trips  P/NP available
Prereq.: PHOT 51
Advise: PHOT 80 or PHOT 85A or PHOT 100
An introduction to photographing people in their own environments with an emphasis on creating powerful portraits while working with and highlighting their personalities. Use of available indoor and outdoor light in multiple combinations. Working successfully with subjects. Analysis and application of lighting techniques for child, family, group and candid portraiture. CSU
Offered on occasion

PHOT 101G. Pinhole Photography (1)
Lec-17.5, field trips  P/NP available
An in depth exploration of the photographic image created through the design, construction and use of pinhole cameras. Students will experiment with paper negatives, litho film, conventional black and white film and contact printing methods. Demonstrations and hands-on experience and field work will be emphasized. CSU
Offered on occasion

PHOT 101S. Introduction to Image Scanning (.5)
Lec-9, Lab-6, field trips  P/NP available
A basic course introducing scanning hardware, software and techniques used in professional settings. Scanning transparent, reflective, and three-dimensional originals, including retouching and optimizing scanned files for various uses. CSU

PHOT 102A. Architectural Photography (2)
Lec-35, Lab-17.5  P/NP available
Prereq.: PHOT 85A or demonstration of exit skills.
Advise: PHOT 83.
Commercial and fine art applications specifically related to issues of architectural perspective control, lighting, various camera formats, and camera accessories. CSU
Offered Fall semesters

PHOT 102B. Documentary/News Photography (2)
Lec-35, Lab-17.5  P/NP available
Prereq.: PHOT 80 or PHOT 85A
Advise: PHOT 100/VMD 101/DSGN 101
This course explores photojournalism and documentary photography while addressing business and legal issues. Students will be introduced to a variety of camera and lighting equipment. CSU
Offered Spring semesters

PHOT 102C. Phase One - Capture One (2)
Lec-35, field trips  P/NP available
Prereq.: PHOT 51 and PHOT 85A
Advise: PHOT 83 and PHOT 81D; (PHOT 90 or PHOT 85B)
A digital photography course to help students prepare for the Phase One Certified Professional (POCP) Exam. Topics include Phase One medium format digital camera handling & configurations, tethered and non-tethered capture, device calibration, file processing, image manipulation and enhancement and output using Capture One software. CSU

PHOT 102D. Beginning Drone Piloting and Imaging (2)
Lec-35, field trips  P/NP available
Prereq.: PHOT 83 and PHOT 81D; (PHOT 90 or PHOT 85B)
An introduction to using unmanned aerial systems (UAS) or drones. This course is designed to give the student the ability to safely and competently fly a drone. Emphasis is placed on safety, equipment selection, and flying. Provides a starting point to drone data collection for multiple disciplines and careers. CSU
Essential equipment needed for this course will be provided by the college.

PHOT 130. Portfolio Production (3)
Lec-35, Lab-70, field trips  P/NP available
Prereq: PHOT 81B or PHOT 81D
Students will produce a portfolio that prepares them for a career in commercial photography, fine, arts or transfer to a four-year institution. The course addresses technical and aesthetic issues as well as
portfolios and marketing strategies. CSU

Offered Fall semesters

PHOT 140. Industry Internship (1-8)
Work-60,000-600,000 P/NP available
Prereq.: Approval of academic personnel
Repeat max. 16.00 units
Photography related work experience and further career development in a supervised setting. Work experience in an approved industry facility such as a photography studio, publication, design studio, art gallery or museum and/or production team. Professional presence, networking, communication and interview skills are addressed. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU

PHOT 200A. Photography Service Learning (3)
Lec-17.5, Lab-122.5, field trips P/NP available
Prereq.: PHOT 85B or PHOT 90 or PHOT 93
Photography Service Learning provides an environment for students to gain real-world skills and practice service learning. Students will work with CCSF departments and/or non-profit organizations to produce projects for actual clients. Students will gain practice with client communications, technical problem solving, and project management for individual and collaborative photography services for projects including websites, printed materials, brochures, and other communications projects. CSU

PHOT 200B. Photography Service Learning II (3)
Lec-17.5, Lab-122.5, field trips P/NP available
Prereq.: PHOT 200A
Advanced opportunities for students to gain real-world skills, learning through service work with CCSF departments and/or non-profit organizations. Students will produce complex projects for actual clients and have significant autonomy with communications and technical problem solving, as well as take on leadership and management roles in individual and collaborative projects. CSU

Noncredit Course:
PHOT 1000. Supplemental Instruction for Photography (35 hrs)
A course to assist students in achieving photography learning outcomes, reinforce classroom learning and improve practical skills in digital and analogue camera use, post-production, film processing, B&W darkroom, and studio techniques and practices. Students work on individual and team assignments with faculty instruction and consultation.

Physical Education and Dance
Office: Wellness 113
Phone Number: (415) 239-3411
Web Site: www.ccsf.edu/pe

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. 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. Faculty 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 and Nutrition are included to support the student’s development.

The program highlights dance technique (ballet, modern, African Haitian, and jazz) 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 and history 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 this program, students will be able to:

- Apply observational and evaluative skills to the creative processes required of dance production.
- Synthesize the physical skills and dance knowledge learned in the major to meet academic and industry standards.
- Exhibit professionalism during dance training and performance.

Prerequisites: DANC 119B, DANC 124B, DANC 129B, DANC 133A, DANC 138A, or demonstration of courses’ exit skills.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Dance Performance Art
Course........................................................Units
First Semester Required Courses:
DANC 34A Dance Conditioning .............................. 1.0
DANC 100A Beginning Dance Composition ................ 3.0
DANC 102A Beginning CCSF Repertory Dance Company Local Theatre: .................................. 1.0
DANC 133B Advanced Beginning African Haitian ....... 1.0
DANC 134A Beginning Tap Dance: .......................... 1.0

First Semester: Choose one of the following modern dance courses:
DANC 124C Intermediate Modern Dance .............. 1.0
DANC 126B Intensive Modern Dance ..................... 2.0

First Semester: Choose 1 unit from the following electives:
DANC 122 Beginning Pointe Technique ................... 1.0
DANC 127A Dance Improvisation: Group ............... 1.0
DANC 127B Dance Improvisation: Solo and Duet ....... 1.0
DANC 134B Advanced Beginning Tap Dance ........... 1.0
DANC 134C Intermediate Tap Dance ..................... 1.0
DANC 134D Advanced Intermediate Tap Dance ........ 1.0
DANC 138D Advanced Hip Hop Dance .................... 1.0
DANC 145A Beginning Ballroom Dance ................... 1.0
DANC 150A Beginning Swing Dance .......................... 1.0
DANC 155A Beginning Salsa and Latin Dance ................. 1.0
DANC 151A Beginning Lindy Hop ............................. 1.0
DANC 160A Beginning Argentine Tango ......................... 1.0
DANC 172A Zumba: Latin Style Dance Forms ................. 1.0
DANC 172B Zumba: Street Style Dance Forms ................. 1.0
DANC 173 Yoga Movement ..................................... .1.0
PE 223A Feldenkrais, Level I ................................... .1.0

Second Semester Required Courses:
DANC 30 Dance History Dance in Cultural Context .......... 3.0
DANC 133C Intermediate African-Haitian Dance ............ 1.0

Second Semester: Choose one of the following ballet courses:
DANC 119C Intermediate Ballet ................................. 1.0
DANC 121B Intensive Ballet ...................................... 2.0

Second Semester: Choose one of the following hip hop courses:
DANC 138B Advanced Beginning Hip Hop Dance ............ 1.0
DANC 138C Intermediate Hip Hop Dance ..................... 1.0

Second Semester: Choose one of the following nutrition courses:
BIO 132 Introduction to Nutrition .............................. 3.0
HLTH 176/PE 20 Sports Nutrition .............................. 3.0

Third Semester Required Courses:
DANC 32 Black Tradition in American Dance ............... 3.0
DANC 37 Feldenkrais for Dance and Performing Arts ....... 1.0
DANC 119D Advanced Intermediate Ballet .................... 2.0
DANC 129C Intermediate Jazz Dance .......................... 1.0
DANC 100B Intermediate Dance Composition ................ 4.0

Fourth Semester Required Courses:
BIO 106 Introduction to Human Anatomy and Physiology ........................................... 4.0
DANC 124D Advanced Modern Dance ........................ 2.0
DANC 129D Advanced Jazz Dance .............................. 1.0

Fourth Semester: Choose one of the following dance production courses:
DANC 101A Dance Performance Production ................ 1.0
DANC 101B Dance Performance Production ................ 2.0
DANC 102B CCSF Repertory Dance Company Local and Touring ........................................... 3.0

Total: ......................................................... 37.0 – 41.0

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, technique, performance, and dance fitness. To meet diverse students’ needs various options are available. For further information call 452-5697, or visit the website at www.ccsf.edu (Search: Dance Certificates).

Learning Outcomes

Upon completion of this program, students will be able to:
- Demonstrate a foundation in classical dance techniques and movement skills.
- Apply critical and creative skills to the processes and techniques required of dance performance and education.
- Compose short dance studies.
- Analyze the influence of culture on different styles of dance.

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.

The minimum time for completion is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Classical Dance Performance

Course .................................................................... Units

Required Workshop and Theory courses:
DANC 100A Beginning Dance Composition .................. 3.0
DANC 30 Dance History Dance in Cultural Context ....... 3.0
DANC 34A Dance Conditioning .................................. 1.0

Required 1 unit from the following performance courses:
DANC 101A Dance Performance Production ............... 1.0
DANC 102A Beginning CCSF Repertory Dance Company Local Theatre ........................................... 1.0

Choose 6 units from the following dance technique courses:
DANC 119C Intermediate Ballet ................................. 1.0
DANC 119D Advanced Intermediate Ballet ..................... 2.0
DANC 121B Intensive Ballet ...................................... 2.0
DANC 124C Intermediate Modern Dance .................... 1.0
DANC 124D Advanced Modern Dance ....................... 2.0
DANC 126B Intensive Modern Dance ......................... 2.0

Choose 3 units from the following elective courses:
DANC 37 Feldenkrais for Dance and Performing Arts .... 1.0
DANC 101B Dance Performance Production ............... 2.0
DANC 102B CCSF Repertory Dance Company Local and Touring ........................................... 3.0
DANC 119A Beginning Ballet ................................. 1.0
DANC 119B Advanced Beginning Ballet ....................... 1.0
DANC 122 Beginning Pointe Technique ....................... 1.0
DANC 124A Beginning Modern Dance ....................... 1.0
DANC 124B Advanced Beginning Modern Dance ........... 1.0
DANC 129A Beginning Jazz Dance ............................. 1.0
DANC 129B Advanced Beginning Jazz Dance ............... 1.0
MUS 4 Music Fundamentals ..................................... 3.0
BIO 132 Introduction to Nutrition ............................. 3.0
PE 20/HLTH 176 Sports Nutrition ............................. 3.0
TH A 150A Beginning Acting Fundamentals ............... 3.0

Total: ..................................................................... 17.0

Classical Dance Performance Certificate

The curriculum for this certificate 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, technique, performance, and dance fitness. To meet diverse students’ needs various options are available. For further information call 452-5697, or visit the website at www.ccsf.edu (Search: Dance Certificates).
African Heritage Performance Certificate

The curriculum for this certificate will allow students to develop the skills required to pursue careers in dance. The Dance Program provides comprehensive studies including history and theory, choreography, technique, performance and health maintenance. To meet diverse students' needs, various options are available. For further information call 452-5697, or visit the website at www.ccsf.edu (Search: Dance Certificates).

Learning Outcomes

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

- Demonstrate a foundation in African heritage dance techniques and movement skills.
- Apply critical and creative skills to the processes and techniques required of dance performance and education.
- Compose short dance studies.
- Analyze the influence of culture on different styles of dance.

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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in African Heritage Performance

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 100A Beginning Dance Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>DANC 32 Black Tradition in American Dance</td>
<td>3.0</td>
</tr>
<tr>
<td>DANC 34A Dance Conditioning</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Choose 1 unit from the following courses:

- DANC 101A Dance Performance Production | 1.0
- DANC 102A Beginning CCSF Repertory Dance Company Local Theatre | 1.0

Choose 6 units from the following Technique courses (6 units at Intermediate/Advanced level):

- DANC 101B Dance Performance Production | 2.0
- DANC 129C Intermediate Jazz Dance | 1.0
- DANC 129D Advanced Jazz Dance | 1.0
- DANC 133C Intermediate African-Haitian Dance | 1.0
- DANC 134C Intermediate Tap Dance | 1.0
- DANC 134D Advanced Intermediate Tap Dance | 1.0
- DANC 138C Intermediate Hip Hop Dance | 1.0
- DANC 138D Advanced Hip Hop Dance | 1.0

Choose 3 units from the following elective courses:

- DANC 37 Feldenkrais for Dance and Performing Arts | 1.0
- DANC 102B CCSF Repertory Dance Company Local and Touring | 3.0
- DANC 129A Beginning Jazz Dance | 1.0
- DANC 129B Advanced Beginning Jazz Dance | 1.0
- DANC 133A Beginning African-Haitian Dance | 1.0
- DANC 133B Advanced Beginning African Haitian | 1.0
- DANC 134A Beginning Tap Dance | 1.0
- DANC 134B Advanced Beginning Tap Dance | 1.0
- DANC 138A Beginning Hip Hop Dance | 1.0

DANC 138B Advanced Beginning Hip Hop Dance | 1.0
DANC 150A Beginning Swing Dance | 1.0
DANC 150B Intermediate Swing Dance | 1.0
DANC 151A Beginning Lindy Hop | 1.0
DANC 151B Intermediate Lindy Hop | 1.0
AFAM 55 From Funk to Hip Hop | 3.0
HUM 48 African-American Music, Art and Literature | 3.0
MUS 21 Traditional African Music | 3.0
MUS 23 History of Jazz: Musical Traditions of the African-American | 3.0
BIO 132 Introduction to Nutrition | 3.0
PE 20/HLTH 176 Sports Nutrition | 3.0

Total: 17.0

Dance Aerobics and Fitness Certificate

The curriculum for this certificate will allow students to develop the skills required to pursue careers in dance and fitness education. The Dance Program provides comprehensive studies including history and theory, choreography, technique, performance and health maintenance. To meet diverse students' needs, various options are available.

Learning Outcomes

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

- Apply technical dance and movement skills to aerobic fitness practices.
- Use critical and creative skills in the processes required of dance and physical fitness education.
- Synthesize dance movement into individualized fitness plans.

Each course needs to be completed with a C or higher grade. At least 12 units need to be completed at CCSF.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Dance Aerobics and Fitness

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 34A Dance Conditioning</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 8 Intro to Fitness and Training</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 9 Fit or Fat, Diet and Exercise</td>
<td>2.0</td>
</tr>
<tr>
<td>PE 14 Women's Fitness and Aging: A New Paradigm</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 20/HLTH 176 Sports Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose 4 units from the following dance courses:

- DANC 34A Dance Conditioning | 1.0 |
- DANC 129A Beginning Jazz Dance | 1.0 |
- DANC 129B Advanced Beginning Jazz Dance | 1.0 |
- DANC 138A Beginning Hip Hop Dance | 1.0 |
- DANC 138B Advanced Beginning Hip Hop Dance | 1.0 |
- DANC 172A Zumba: Latin Style Dance Forms | 1.0 |
- DANC 172B Zumba: Street Style Dance Forms | 1.0 |

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 138A Beginning Yoga</td>
<td>1.0</td>
</tr>
</tbody>
</table>

* DANC 34A may be used to meet the dance course requirement if not taken to meet core requirement.

Choose 2 units from the following movement/flexibility courses:

PE 217A Beginning Stretching and Flexibility Development | 1.0 |
PE 217B Intermediate Stretching and Flexibility Development | 1.0 |
PE 219A Beginning Yoga | 1.0 |
Social Dance Certificate

The curriculum for this certificate will allow students to develop the skills required to pursue careers in social dance education. The social dance program provides comprehensive studies in a variety of social dance styles and techniques that includes partnering, musicality, and performance. To meet diverse students' needs, various options are available.

Learning Outcomes

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

- Demonstrate a foundation in social dance skills and related dance techniques.
- Apply partnering skills to a variety of social dance styles.
- Select and integrate music appropriate to the style of social dance.
- Distinguish and compare various social dance styles.

Each course needs to be completed with a C or higher grade. At least 12 units need to be completed at CCSF.

The minimum time for completion is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Social Dance

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required core dance courses</td>
<td></td>
</tr>
<tr>
<td>DANC 145A Beginning Ballroom Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 145B Intermediate Ballroom Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 34A Dance Conditioning</td>
<td>1.0</td>
</tr>
<tr>
<td>Choose two courses from the following related dance techniques:</td>
<td></td>
</tr>
<tr>
<td>DANC 119A Beginning Ballet</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 119B Beginning Beginning Ballet</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 124A Beginning Modern Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 124B Advanced Beginning Modern Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 129A Beginning Jazz Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 129B Advanced Beginning Jazz Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 134A Beginning Tap Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 134B Advanced Beginning Tap Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>Choose 2 units from performance courses:</td>
<td></td>
</tr>
<tr>
<td>DANC 101A Dance Performance Production</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 101B Dance Performance Production</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Yoga Certificate

The Certificate of Accomplishment in Yoga 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 Certificate offers pathways for students to meet any and/or all of these goals. This 2-year college level program builds upon the skills needed for further certification in the private sector.

Learning Outcomes

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

- Identify and demonstrate the appropriate sequence of physical movements to perform yoga poses successfully.
- Integrate health and/or safety concepts or practices into movement activities.
- Create an individualized practice based on yoga principles.
- Apply good work habits for successful job performance.

Program Prerequisites: PE 219A Beginning Yoga or demonstration of exit skills.

All students need to meet with the designated yoga faculty member to verify program course completion totaling 17 units. Each course needs to be completed with a C or higher grade. At least 12 units must be completed at CCSF. Students may work closely with a yoga mentor of their choice and are encouraged to consult with a CCSF academic counselor to ensure they are moving toward fulfillment of their goals.

The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Yoga

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First semester:</td>
<td></td>
</tr>
<tr>
<td>PE 219B Intermediate Yoga</td>
<td>1.0</td>
</tr>
<tr>
<td>Choose one of the following anatomy or physiology courses:</td>
<td></td>
</tr>
<tr>
<td>BIO 106 Introduction to Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 108 General Human Anatomy</td>
<td>4.0</td>
</tr>
</tbody>
</table>
BIO 112 Introduction to Human Physiology ............ 4.0

Second semester:
PE 220 Intensive Yoga ................................... 2.0
PE 218 Gentle Restorative Yoga ....................... 1.0
Choose at least one unit from Elective Course List below .......................... 1.0

Third semester:
PE 219C Advanced Yoga ................................ 1.0
Choose at least 2 units from Elective Course List below .................. 2.0

Fourth Semester:
DANC 173 Yoga Movement ........................... 1.0
Choose 1 unit from the following work experience courses:
WKEX 333 General Work Experience .......... 1.0
WKEX 777 On-Campus Work Experience ........ 1.0
Choose at least 2 units from Elective Course List below ....... 2.0

Elective Course List:
DANC 34A Dance Conditioning .......................... 1.0
DANC 124A Beginning Modern Dance .............. 1.0
DANC 119A Beginning Ballet ........................... 1.0
DANC 129A Beginning Jazz Dance .................... 1.0
PE 217A Beginning Stretching and Flexibility Development ............. 1.0
PE 217B Intermediate Stretching and Flexibility Development .......... 1.0
PE 222 Introduction to Feldenkrais .................... 1.0
PE 223A Feldenkrais, Level I ........................... 1.0
PE 14 Women's Fitness and Aging: A New Paradigm ....... 3.0
PE 20/HLTH 176 On-Campus Work Experience ........ 3.0
HLTH 33 Introduction to Health and Wellness .......... 2.0
HLTH 91M Mindful Stress Reduction .................. 1.0
HUM 7 Comparative Religions ........................ 3.0
HUM 8 Philosophies of Religion ........................ 3.0
Total: ................................................. 16.0

Announcement of Courses

Dance

Credit, Degree Applicable Courses:
DANC 30. Dance History - Dance in Cultural Context (3)
Lec.-52.5, field trips ................................. P/NP available
Advise: ENGL 93 or ENGL 95 or ESL 160 or ENGL 88 or ENGL 88A or Placement in ENGL 96 or ENGL 88B
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 ballet, American-European modern dance, African-Haitian dance and the American idioms of tap and Jazz. UC/CSU
Offered Spring semesters

DANC 32. Black Tradition in American Dance (3)
Lec.-52.5 ................................. P/NP available
Advise: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or Placement in ENGL 96 or ENGL 88B
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. UC/CSU
Offered Fall semesters

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.

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.

Dance Theory
DANC 34A. Dance Conditioning (1)
Lab-35 P/NP available
A class focusing on conditioning techniques that relate to the dance idiom. Emphasis on basic Pilates and body alignment exercises, flexibility techniques, as well as the integration of floor barre and resistance band exercises. UC/CSU

Integrative Movement: Mind/Body Approach to Improving Quality of Movement and Conditioning for Dance
DANC 37. Feldenkrais for Dance and Performing Arts (1)
Lab-35 P/NP available
Advise: DANC 119A or DANC 124A or DANC 129A or DANC 133A or DANC 138A or training in theater, voice, or instrumental music or demonstration of skills; ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 95 or ENGL 88
Instruction and practice in the Feldenkrais Method to address physical habits, movement adaptability, and specific performance skills for dance and related movement-based performance styles. Processes which enhance human expression through refinement of motor learning will be explored. UC/CSU

PE 223A. Feldenkrais, Level 1 (1)
Lab-35 P/NP available
Advise: PE 222; ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95 done
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. UC/CSU

PE 223B. Feldenkrais, Level 2 (1)
Lab-35 P/NP available
Advise: PE 223A or demo of exit skills; ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95
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. UC/CSU

**PE 223C. Feldenkrais, Level 3 (1)**
Lab-35  P/NP available

*Advise: PE 223B or demo of exit skills; ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95*

Improve action, perception, and aesthetics of movement with sophisticated repertoire from the Feldenkrais Method. Emphasis is on the use of imagery, diagonals, walking, developing confidence for complex lessons, and working through physical challenges. UC/CSU

**Dance Composition: Choreographic Tools to Create Dance**

**DANC 100A. Beginning Dance Composition (3)**
Lab-105  P/NP available

*Advise: DANC 124A or DANC 119C or DANC 129A or DANC 129C or DANC 133A or DANC 134A or DANC 134C or DANC 145A or DANC 145B*

Exploration of compositional movement techniques. Improvisation and choreographic structures are presented for student study. The course culminates with a studio demonstration or theatre performance. UC/CSU

*Offered Fall semesters*

**DANC 100B. Intermediate Dance Composition (4)**
Lec-35, Lab-70, field trips

*Advise: DANC 100A or DANC 119C or DANC 126B or DANC 133A*

This is a self-directed, cumulative capstone course for the Dance Major - Performance Art. The student will choreograph and produce an original dance piece for public performance. This interdisciplinary, integrated project may enhance employability and augment artistic entrepreneurship. UC/CSU

*Offered Fall semesters*

**DANC 127A. Dance Improvisation: Group (1)**
Lab-35  P/NP available

Dance Improvisation: Group is a non-traditional approach to dance. Emphasis will be placed on improvisational movement techniques that stimulate ideas for moving spontaneously. The students will collaborate on group projects for performance at some unconventional sites on campus. UC/CSU

*Formerly DANC 127*

*Offered Fall semesters*

**DANC 127B. Dance Improvisation: Solo and Duet (1)**
Lab-35  P/NP available

Dance Improvisation: Solo and Duet course emphasis will be on improvisational movement techniques that integrate drama, comedy, music, vocal art forms and various choreographic techniques. Students will practice their performance of improvisation through individual projects and duet collaborations. UC/CSU

*Offered Fall semesters*

**DANC 128. Contact Improvisation (1)**
Lab-35  P/NP available

Contact Improvisation is a non-traditional approach to dance. Emphasis will be placed on improvisational movement techniques that integrate weight release, weight sharing, partnering and various choreographic techniques. Students will work independently, in duets, and in larger group configurations. UC/CSU

*Offered Fall semesters*

**Performance: Training and Rehearsing to Perform in Public**

**DANC 101A. Dance Performance Production (1)**
Lab-35  P/NP only

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 dance performance will also be learned. UC/CSU

**DANC 101B. Dance Performance Production (2)**
Lab-70  P/NP available

Complex dance choreography will be learned and performed in a theatrical environment. A continuation of Dance 101A’s study of lighting, costumes and makeup. UC/CSU

*Offered Fall semesters*

**DANC 102A. Beginning CCSF Repertory Dance Company - Local Theatre (1)**
Lab-35, field trips  P/NP available

*Advise: DANC 124A or DANC 119A*

Designed as an introduction to CCSF ambassadorial dance company touring. Students will learn dance works from faculty and guest choreographers. Touring venues include CCSF campuses and San Francisco Bay Area colleges. UC/CSU

**DANC 102B. CCSF Repertory Dance Company - Local and Touring (3)**
Lab-105, field trips  P/NP available

*Advise: DANC 119A or DANC 124A*

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 dance public events. This course includes workshops on performance technique and lectures on choreographic theory. UC/CSU

*Offered Spring semesters*

**Ballet: Classical Dance Form That Defies Gravity**

**DANC 119A. Beginning Ballet (1)**
Lab-35  P/NP available

Theory and practice of the principles of beginning ballet technique that include alignment, placement, turnout, positions of the feet, carriage of the arms, fundamental foot and leg movements and basic ballet vocabulary. Focus is on the application of these principles to barre exercises and center practice. UC/CSU

*Formerly DANC 120A*

**DANC 119B. Advanced Beginning Ballet (1)**
Lab-35  P/NP available

*Advise: DANC 119A or demo of exit skills*

Advanced Beginning Ballet is a continuation of beginning ballet technique with an emphasis on building vocabulary and integrating connecting and traveling steps in combinations to enable the student to develop the skill to move from one step to another. UC/CSU

**DANC 119C. Intermediate Ballet (1)**
Lab-35  P/NP available

*Advise: DANC 119B*

Intermediate ballet is a continuation of the theory and practice of classical ballet and builds upon skills learned in advanced beginning ballet. Intermediate ballet vocabulary and technique at the barre and
in center practice are introduced including positions of the body, balances, and pirouettes (turns on one leg). UC/CSU
Formerly DANC 120B

DANC 119D. Advanced Intermediate Ballet (2)
Lab-70 P/NP available
Advise: DANC 119C or demonstration of DANC 119C exit skills
Advanced Intermediate ballet is a continuation of the theory and practice of classical ballet and builds upon skills learned in intermediate ballet. Advanced intermediate ballet vocabulary and technique are introduced that include multiple turns, jumps with beats, turns in the air, and longer and more difficult combinations that emphasize style and technical accuracy. UC/CSU
Formerly DANC 120C

DANC 121B. Intensive Ballet (2)
Lab-70 P/NP available
Advise: DANC 119C or demonstration of DANC 119C exit skills
Intensive Ballet offers further practice and refinement of technique and vocabulary learned in Intermediate Ballet with an emphasis on analysis of anatomical function, movement qualities related to musicality, and longer center combinations integrating direction changes. UC/CSU
Formerly PE 604B

DANC 122. Beginning Pointe Technique (1)
Lab-35 P/NP available
Advise: DANC 119C or demonstration of DANC 119C exit skills
Theory and practice of basic pointe technique that include pre-pointe exercises, elementary pointe vocabulary, selection and fit of pointe shoes, and guidelines necessary to develop correct placement, muscular strength, and safe habits. UC/CSU
An assessment of ankle strength and alignment occurs at the start of the semester to determine whether students should use point shoes or soft shoes.

Modern: Contemporary American Dance Form Utilizing Gravity

DANC 124A. Beginning Modern Dance (1)
Lab-35 P/NP available
Beginning modern dance with emphasis on basic terminology, correct dance alignment, dance routines and basic concepts of modernism. Examples of the techniques explored: Graham, Cunningham, Limon, Horton, and Dunham. UC/CSU
Formerly DANC 125A

DANC 124B. Advanced Beginning Modern Dance (1)
Lab-35 P/NP available
Advise: DANC 124A or demonstration of DANC 124A exit skills
Advanced beginning modern dance builds upon skills learned in beginning modern dance technique with emphasis on refining technique, increasing vocabulary, movement through space, and combinations. UC/CSU

DANC 124C. Intermediate Modern Dance (1)
Lab-35 P/NP available
Advise: DANC 124B or demonstration of DANC 124B exit skills
Intermediate modern dance builds upon skills learned in advanced beginning modern dance technique with emphasis on increased technique, increased movement vocabulary appropriate to intermediate training, dynamic movement qualities related to musicality and an in-depth continuation of modern dance history. UC/CSU
Formerly DANC 125B

DANC 124D. Advanced Modern Dance (2)
Lab-70 P/NP available
Advise: DANC 124C or demonstration of DANC 124C exit skills
Advanced modern dance builds upon skills learned in intermediate modern dance technique with emphasis on increased technique, increased movement vocabulary appropriate to advanced training, and more complex compound element phrase work integrating dynamics and musicality. A continuation of modern dance history will be presented. UC/CSU
Formerly DANC 125C

DANC 126B. Intensive Modern Dance (2)
Lab-70 P/NP available
Advise: DANC 119A; DANC 124C
Intensive modern dance builds upon the modern technique and vocabulary learned in Intermediate Modern Dance with emphasis on analysis of anatomical function, dynamic movement qualities related to musicality, ensemble performance and technique, and an in-depth continuation of modern dance history. UC/CSU
Formerly PE 626B

Jazz Dance: American Dance Form Utilizing African Rhythms and Body Isolations

DANC 129A. Beginning Jazz Dance (1)
Lab-35 P/NP available
Beginning jazz dance with emphasis on basic technique, terminology, dance combinations and basic rhythms of jazz dance. UC/CSU
Formerly DANC 130A

DANC 129B. Advanced Beginning Jazz Dance (1)
Lab-35 P/NP available
Advise: DANC 129A or demonstration of DANC 129A exit skills
Advanced beginning jazz dance builds upon skills learned in beginning jazz dance technique with emphasis on refining technique, increasing vocabulary, movement through space, and combinations. UC/CSU

DANC 129C. Intermediate Jazz Dance (1)
Lab-35 P/NP available
Advise: DANC 129B
Intermediate Jazz builds upon skills learned in Advanced Beginning Jazz Dance with emphasis on refining technique, musicality, increasing vocabulary and movement through space and combinations. UC/CSU
Formerly DANC 130B

DANC 129D. Advanced Jazz Dance (1)
Lab-35 P/NP available
Advise: DANC 129C
Advanced Jazz Dance builds upon skills learned in Intermediate Jazz Dance technique with emphasis on refining technique, rhythmic structure, increasing vocabulary, movement through space, improvisation and combination. UC/CSU
Formerly DANC 130C

African-Haitian Dance: Haitian Traditional Ritual Dances

DANC 133A. Beginning African–Haitian Dance (1)
Lab-35 P/NP available
Beginning African Haitian dance will be examined through technical demonstration and practice. Emphasis will be placed on traditional movements, isolations, movement progressions, dance patterns, and
mecality. Dance pioneers and their contribution to African Haitian dance will be discussed. UC/CSU

**FORMERLY DANC 132A**

DANC 133B. Advanced Beginning African Haitian (1)
Lab-35  P/NP available
Prereq: DANC 133A or demonstration of exit skills
Advanced beginning African Haitian Dance is a continuation of beginning African Haitian with an emphasis on building vocabulary on traditional movements and integrating isolations and movement progressions in connection to dance patterns and correct musicality. UC/CSU

**FORMERLY DANC 132B**

DANC 133C. Intermediate African-Haitian Dance (1)
Lab-35  P/NP available
Advise: DANC 133B or demonstration of exit skills
Intermediate African Haitian dance builds on advanced beginning level skills. Through demonstration, practice, correction, and review emphasis is placed on expansion into more intricate traditional movements, Dunham technique, dance patterns, styles, and musicality. Historical and cultural elements will be explored through lectures, films, research, and discussions. Creative expression will be encouraged through group choreographic activities and individual projects. UC/CSU

**FORMERLY DANC 132C**

**Tap Dance: Musical Theater Dance Form Originating in Vaudeville**

DANC 134A. Beginning Tap Dance (1)
Lab-35  P/NP available
Beginning Tap Dance briefly reviews the history of tap and lays the foundation for acquisition of tap dance skills. Emphasis will be on demonstration and practice of fundamental tap technique and vocabulary in rhythmic drills and dance phrases. UC/CSU

**FORMERLY DANC 135A**

DANC 134B. Advanced Beginning Tap Dance (1)
Lab-35  P/NP available
Advise: DANC 134A or demonstration of exit skills
Advanced Beginning Tap Dance further examines the history of tap and builds upon skills learned in beginning tap with emphasis on refining technique, increasing vocabulary, precise footwork and rhythmic accuracy in more complex combinations. UC/CSU

DANC 134C. Intermediate Tap Dance (1)
Lab-35  P/NP available
Advise: DANC 134B
Intermediate Tap Dance reviews the historical relationship of tap dance to jazz music and builds upon skills learned in advanced beginning tap with emphasis on more refined musicality and acquisition of intermediate level tap vocabulary and technique. UC/CSU

**FORMERLY DANC 135B**

DANC 134D. Advanced Intermediate Tap Dance (1)
Lab-35  P/NP available
Advise: DANC 134C or demonstration of exit skills
Advanced Intermediate Tap Dance 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. UC/CSU

**FORMERLY DANC 136**

**Hip-Hop Dance: Modern Vernacular Street Dance**

DANC 138A. Beginning Hip Hop Dance (1)
Lab-35  P/NP available
Beginning Hip Hop dance with emphasis on technique, vocabulary, dance combinations and basic rhythms of hip hop dance. UC/CSU

**FORMERLY DANC 137A**

DANC 138B. Advanced Beginning Hip Hop Dance (1)
Lab-35  P/NP available
Advise: DANC 138A or demo of exit skills
Advanced Beginning Hip Hop dance builds upon skills learned in Beginning Hip Hop with emphasis on increasing vocabulary, styles, and length of dance combinations with more complex rhythms. UC/CSU

DANC 138C. Intermediate Hip Hop Dance (1)
Lab-35  P/NP available
Advise: DANC 138B or demo of exit skills
Intermediate Hip Hop dance builds upon skills learned in advance Beginning Hip Hop with emphasis on increasing vocabulary, styles, and length of dance combinations with more complex rhythms. Using hip hop dance as a vehicle, students will be able to explore their own movement expression and choreography. UC/CSU

DANC 138D. Advanced Hip Hop Dance (1)
Lab-35  P/NP available
Advise: DANC 138C or demo of exit skills
Advanced Hip Hop dance builds upon skills learned in Intermediate Hip Hop with emphasis on increasing vocabulary, styles, and length of dance combinations with more complex rhythms. Using hip hop dance as a vehicle, students will be able to explore their own movement expression and choreography in both group and solo settings. UC/CSU

**Folk Dance: Traditional Country Dances From Different Cultures**

DANC 107A. Folk Dance Production (1)
Lab-35  P/NP only
Prereq.: DANC 140A or DANC 141A or demonstration of equivalent skills
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. UC/CSU

Offered Fall semesters

DANC 140A. Beginning European Folk Dance (1)
Lab-35  P/NP available
Introduction to various European Folk dances and their cultural/historical contexts. Partner and non-partner styles and forms will be examined through demonstration and practice. Emphasis will be on
DANC 140B. Intermediate European Folk Dance (1)  
Lab-35  
P/NP available  
Advise: DANC 140A or DANC 141A  
Continued study of various European Folk dances and their cultural/historical contexts at an intermediate level. Partner and non-partner 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 and diaspora. UC/CSU  
Offered Fall semesters

DANC 141A. Beginning International Folk Dance (1)  
Lab-35  
P/NP available  
International Folk Dance provides a foundation for the study of dance. Folk dance offers experience in varied rhythms, formations, dance structures and movement vocabularies. Partner and non-partner dances from various countries and cultures are included. UC/CSU  
Formerly PE 518A  
Offered Spring semesters

DANC 141B. Intermediate International Folk Dance (1)  
Lab-35  
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. UC/CSU  
Formerly PE 518B  
Offered Spring semesters

DANC 145A. Beginning Ballroom Dance (1)  
Lab-35  
P/NP available  
Beginning and intermediate ballroom dance; emphasis on step patterns and dance positions for a complete range of dances. UC/CSU

DANC 145B. Intermediate Ballroom Dance (1)  
Lab-35  
P/NP available  
Ballroom dance with emphasis on intermediate level step patterns and dance positions for a complete range of dances such as: waltz, swing, cha-cha, salsa, rumba, foxtrot, and tango. UC/CSU

DANC 146A. Beginning Waltz Styles and Techniques (1)  
Lab-35  
P/NP available  
Introduction to beginning waltz steps. Students will learn both beginning slow waltz and Viennese Waltz. UC/CSU  
Formerly PE 538A  
Offered on occasion

DANC 146B. Intermediate Waltz Styles and Techniques (1)  
Lab-35  
P/NP available  
Advise: DANC 146A or demo of exit skills  
Develop intermediate skills in waltz and Viennese waltz. Students will build on techniques learned in beginning waltz. UC/CSU  
Offered on occasion

DANC 146C. Advanced Intermediate Waltz Styles (1)  
Lab-35  
P/NP available  
Advise: DANC 146B or demonstration of 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. UC/CSU  
Offered on occasion

DANC 147A. Beginning Swing Dance (1)  
Lab-35  
P/NP available  
Beginning swing dance with emphasis on step patterns for East Coast Swing, and/or West Coast Swing and/or Lindy Hop. UC/CSU  
Offered on occasion

DANC 147B. Intermediate Swing Dance (1)  
Lab-35  
P/NP available  
Intermediate swing 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. UC/CSU  
Offered on occasion

DANC 148A. Beginning Smooth Ballroom Dance (1)  
Lab-35  
P/NP available  
Beginning smooth 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. UC/CSU  
Offered on occasion

DANC 148B. Intermediate Smooth Ballroom Dance (1)  
Lab-35  
P/NP available  
Advise: DANC 148A or demo of exit skills  
Intermediate ballroom dance with emphasis on step patterns from the bronze and silver level American Smooth syllabus. Standard dances included are Waltz, Foxtrot, American Tango, Viennese Waltz and Quickstep. Latin dances are Samba, Cha-Cha, Paso Doble, Jive and Rumba. UC/CSU  
Offered on occasion

DANC 148C. Advanced Intermediate Smooth Ballroom Dance (1)  
Lab-35  
P/NP available  
Continuation of various smooth ballroom dance styles and forms known as Smooth. Students will build on techniques learned in Beginning Smooth Ballroom Dance and/or Intermediate Smooth Ballroom Dance. The 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. UC/CSU  
Offered on occasion

Swing: Early American Dance Form Associated with Swing Music of the 1930’s, 40’s and 50’s

DANC 150A. Beginning Swing Dance (1)  
Lab-35  
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. An introduction to West Coast Swing or Lindy Hop may also be learned. UC/CSU

DANC 150B. Intermediate Swing Dance (1)  
Lab-35  
P/NP available  
Advise: DANC 150A  
Develops intermediate skills in the popular American social dance forms known as Swing. The main emphasis will be on intermediate step patterns for East Coast Swing, and/or West Coast Swing and/or Lindy Hop. UC/CSU  
Offered Fall semesters
Offered Spring semesters

DANC 150C. Advanced Swing Dance (1)
Lab-35 P/NP available
ADVISE: DANC 150A
Develops advanced skills in the popular American social dance forms known as Swing. The main emphasis will be on advanced step patterns for East Coast Swing, West Coast Swing, and/or Lindy Hop. UC/CSU

DANC 151A. Beginning Lindy Hop (1)
Lab-35 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. UC/CSU

DANC 151B. Intermediate Lindy Hop (1)
Lab-35 P/NP available
ADVISE: DANC 151A
Develops intermediate skills in the popular American Swing Dance known as Lindy Hop. Students will build on basic skills learned in beginning Lindy Hop class. UC/CSU

DANC 152A. Beginning West Coast Swing (1)
Lab-35 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. UC/CSU

DANC 152B. Intermediate West Coast Swing (1)
Lab-35 P/NP available
ADVISE: DANC 152A
Develops intermediate skills in West Coast Swing. Students will enhance their skills in West Coast Swing and explore historically significant dance styles. UC/CSU

Latin American Dance: Survey of Informal Social Dances From the Caribbean, Central and South America

DANC 110A. Salsa Dance Production (1)
Lab-35, field trips P/NP only
ADVISE: DANC 155B or DEMONSTRATION OF EXIT SKILLS. 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. UC/CSU

DANC 110B. Intermediate Salsa and Latin Dances (1)
Lab-35 P/NP available
ADVISE: DANC 110A
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. UC/CSU

DANC 111A. Argentine Tango Productions (1)
Lab-35 P/NP available
ADVISE: DANC 160B
Collaborative creation, development and rehearsal of an Argentine Tango-based dance piece for public performance. UC/CSU

DANC 111B. Intermediate Argentine Tango (1)
Lab-35 P/NP available
ADVISE: DANC 161A
Intermediate Argentine Tango builds upon skills learned in Beginning with an emphasis on partnering in a closer embrace, incorporating rhythmic variations, and leading and following turns. The class examines the evolution of tango as a dancing image, a living art. UC/CSU

DANC 111C. Advanced Argentine Tango (1)
Lab-35 P/NP available
ADVISE: DANC 161B
Advanced Argentine Tango builds upon skills learned in Intermediate with an emphasis on developing a deeper understanding of tango concepts, movement, partnering skills, technique and musicality. The course grows students’ dance fluency in the lead-follow language of tango. UC/CSU

DANC 112. Argentine Tango: An Improvisational Social Dance Form from Argentina with a specialized vocabulary and musicality

DANC 173. Yoga Movement (1)
Lab-35 P/NP available
ADVISE: PE 219A or DEMONSTRATION OF EXIT SKILLS. Yoga movement is a dynamic form of yoga that integrates elements of dance while increasing strength and flexibility. Fundamental yoga postures will be sequenced into combinations that include music, spatial design, energy qualities, and allow for individual creativity and expression. UC/CSU

Physical Education
Credit, Degree Applicable Courses:
PE 7. Coaching and Officiating (3)
Lec-52.5
This course will develop and augment the student's knowledge of coaching and officiating skills in sports. UC/CSU
PE 8. Introduction to Fitness, Training and Human Performance (3)
Lec-52.5
Provide the student sound information for developing a systematic program of exercise and physical activity that best fits the individual's needs. Emphasis is on personal fitness assessments, physical training and preparation for personal training certification. CSU
Offered Fall Semesters

PE 9. Fit or Fat: Exercise and Diet (2)
Lec-35
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 PE 9A
Offered Fall Semesters

PE 13. Sport and Society (3)
Lec-52.5
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or Placement in ENGL 96 or ENGL 88B
An introduction to the sociology of sport. Encourages students to discuss issues and think critically to analyze sports as a part of our society. The history of sport, competition, children's programs, deviance, aggression, coaches in the sport experience, gender, the economy, the media, social mobility and drug use in sports. UC/CSU

PE 14. Women's Fitness and Aging: A New Paradigm (3)
Lec-52.5
P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or Placement in ENGL 96 or ENGL 88B
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. UC/CSU

PE 20. Sports Nutrition (3)
Lec-52.5
P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or Placement in ENGL 96 or ENGL 88B
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. UC/CSU
PE 20 = HLTH 176
Offered Spring Semesters

PE 26. Introduction to Physical Education (3)
Lec-52.5
P/NP available
Introduction to the fields of physical education, covering the professional career options, history, basic philosophy and principles of physical activity and fitness. This course is of interest to anyone exploring opportunities in the fields of health, wellness, physical activity, and sport. UC/CSU

PE 27. Designing Weight Training Programs (3)
Lec-52.5
P/NP available
Course will cover the design and implementation of a comprehensive, effective and individualized strength and conditioning program. Resistance training concepts, functional anatomy and physiology will be applied to exercise variable manipulations such as proper sets, reps and loads in various types of resistance training programs. CSU

PE 28. Women in Sports (3)
Lec-52.5
P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or Placement in ENGL 96 or ENGL 88B
The history, social movements, physiology, psychology, and sociology of women in sports. Emphasis will be placed on exploring the changing roles in sports for women. CSU

PE 41. Appreciation and Analyses of Baseball (2)
Lec-35
P/NP available
This course will build an emphasis on systems of play, strategy, rules, training programs, organizational procedures, and background for both spectators and participants. UC/CSU
Formerly PE 10B
Offered Spring Semesters

PE 42. Appreciation and Analysis of Basketball (2)
Lec-35
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. UC/CSU
Formerly PE 10C
Offered Spring Semesters

PE 43. Appreciation and Analysis of Football (3)
Lec-52.5
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or Placement in ENGL 96 or ENGL 88B
Examine current theory and concepts of intercollegiate football offense, defense and special teams, utilizing game footage, practices and computer assisted analysis. Strategies and game plan are evaluated and applied in preparation for weekly opponents. UC/CSU
Formerly PE 10D
Offered Fall Semesters

PE 45. Appreciation and Analysis of Soccer (2)
Lec-35
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. UC/CSU
Formerly PE 10F
Offered Fall Semesters

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.

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**

**PE 218. Gentle Restorative Yoga (1)**  
Lab-35  
P/NP available  
A gentle approach to Hatha Yoga that includes a representative sample 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. Appropriate for older students and students with mild to moderate musculoskeletal conditions. UC/CSU  
Formerly PE 254C

**PE 222. Introduction to Feldenkrais (1)**  
Lab-35  
P/NP available  
Advise: ESL 130 or ESL 182 or ENGL 91 or ENGL 86 or Placement in ESL 140 or ESL 184 or ENGL 88 or ENGL 95  
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. UC/CSU  
Formerly PE 582

**PE 224. Back Fitness (1)**  
Lab-35  
P/NP available  
Introduces conditioning as a non-medical alternative to diminishing and preventing back pain. Emphasis is on fitness techniques for strength, mobility, safety, and pain free movement. Includes practical knowledge for managing daily actions while minimizing pain. UC/CSU  
Offered on occasion

**Public Safety**

**PE 29A. Beginning Firefighting and Public Safety Conditioning (2)**  
Lec-17.5, Lab-35  
P/NP available  
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  
Formerly PE 29

**PE 29B. Intermediate Firefighting and Public Safety (2)**  
Lec-17.5, Lab-35  
P/NP available  
Prerequisite: PE 29 or demonstration of exit skills  
Firefighting and Public Safety personnel are faced with many physical challenges. Among them is that ability to endure long periods of time while exerting energy in sustaining operational duties. This class addresses development of strength, endurance, and biodynamic attributes required in those professions. CSU

**PE 29C. Advanced Firefighting and Public Safety Conditioning (2)**  
Lec-17.5, Lab-35  
P/NP available  
Firefighting and Public Safety personnel are faced with many physical challenges. One of the most challenging is the output of power at any time during and operational activity. This class addresses the development of biodynamic power, muscular strength/endurance, flexibility and injury prevention required in those professions. CSU  
Offered on occasion

**PE 250A. Lifeguard Training I (1)**  
Lab-35  
P/NP available  
Prerequisite: PE 255D or demonstration of American Red Cross prerequisite swimming skills  
Designed to provide students with the knowledge and skills to prevent, recognize and respond to aquatic emergencies to help sustain life, reduce pain, and minimize the consequences of injury or sudden illness until more advanced medical help arrives. This course adheres to American Red Cross standards for certification in Lifeguarding/First Aid/CPR for Professional Rescuer. UC/CSU  
Formerly PE 250  
Offered Spring semesters

**Fitness Center**

**PE 200B. Fitness Center Super Circuit (1)**  
Lab-35  
P/NP only  
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, cardiovascular equipment and individualized fitness programs to promote general strength, muscle toning and cardiac fitness. UC/CSU  
Formerly PE 50B  
Offered only in Summer semesters

**PE 200C. Fitness Center Super Circuit (2)**  
Lab-70  
P/NP only  
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, cardiovascular equipment and individualized fitness programs to promote general strength, muscle toning and cardiac fitness. UC/CSU  
Formerly PE 50C

**PE 200D. Super Cardio Circuit (2)**  
Lab-70  
P/NP only  
Prerequisite: 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 cardiovascular fitness. UC/CSU

**PE 200E. Super Strength Circuit (2)**  
Lab-70  
P/NP only  
Prerequisite: 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. UC/CSU

**PE 202. Interactive Fitness (2)**  
Lab-70  
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. UC/CSU  
Formerly PE 52

**PE 207A. Boot Camp Fitness (1)**  
Lab-35  
P/NP available  
An introductory course focusing on high-energy group fitness. It will have bursts of intense activity alternated with intervals of lighter activity. The course will be a mix of strength training and aerobic exercises. It will offer a challenging and varied workout in a group setting. UC/CSU
Physical Fitness

PE 204A. Physical Fitness (1)
Lab-35 P/NP available
Beginning Physical Fitness is an introductory course that introduces inclusive fitness techniques with an emphasis on agility, flexibility, strength, and endurance. UC/CSU
FORMERLY PE 527A

PE 204B. Physical Fitness (1)
Lab-35 P/NP available
ADVISE: PE 204A OR DEMO OF EXIT SKILLS
Intermediate Physical Fitness is a level two course that builds upon level one inclusive fitness techniques with an emphasis on agility, flexibility, strength, and endurance. UC/CSU
FORMERLY PE 527B

PE 204C. Advanced Physical Fitness (1)
Lab-35 P/NP available
ADVISE: PE 204B OR DEMO OF EXIT SKILLS
Advanced Physical Fitness is a level three course that builds upon levels one and two’s inclusive fitness techniques with an emphasis on agility, flexibility, strength, and endurance. UC/CSU
FORMERLY PE 527C
OFFERED FALL SEMESTERS

PE 205A. Beginning Running and Conditioning (1)
Lab-35 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. UC/CSU

PE 205B. Intermediate Running and Conditioning (1)
Lab-35 P/NP available
ADVISE: 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. UC/CSU

PE 205C. Advanced Running and Conditioning (1)
Lab-35 P/NP available
ADVISE: PE 205B OR DEMO OF EXIT SKILLS
Advanced endurance and speed techniques will be introduced to enable running greater distances training toward a 5K event. Additional flexibility work and core strengthening will be covered, as well as ways to avoid common distance injuries. UC/CSU

Walking for Wellness

PE 206A. Beginning Walking for Wellness (1)
Lab-35 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. UC/CSU
FORMERLY PE 206

PE 206B. Intermediate Walking for Wellness (1)
Lab-35 P/NP available
ADVISE: 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 benefits. UC/CSU

PE 206C. Advanced Walking for Wellness (1)
Lab-35 P/NP available
ADVISE: 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. UC/CSU

Aerobics

DANC 172A. Zumba: Latin Style Dance Forms (1)
Lab-35 P/NP available
A beginning dance aerobic fitness class based upon Latin American dance steps and music. UC/CSU
FORMERLY PE 527A

DANC 172B. Zumba: Street Style Dance Forms (1)
Lab-35 P/NP available
A dance aerobic fitness class using Latin American and Hip Hop dance steps and music. UC/CSU

DANC 172C. Zumba: Latin Style Dance Forms (1)
Lab-35 P/NP available
A guided instruction into aerobic activity through high and low-impact routines with music accompaniment. UC/CSU
FORMERLY PE 527A
OFFERED ON OCCASION

PE 208A. Beginning Aerobic Fitness (1)
Lab-35 P/NP available
A guided instruction into aerobic activity through high and low-impact routines with music accompaniment. UC/CSU
FORMERLY PE 527A
OFFERED ON OCCASION

PE 208B. Intermediate Aerobic Fitness (1)
Lab-35 P/NP available
ADVISE: PE 208A OR DEMO OF EXIT SKILLS
A guided instruction into aerobic activity through high and low-impact increased intensity routines with music accompaniment. UC/CSU
FORMERLY PE 527B
OFFERED ON OCCASION

PE 208C. Advanced Aerobic Fitness (1)
Lab-35 P/NP available
ADVISE: PE 208B OR DEMO OF EXIT SKILLS
A guided instruction into aerobic activity through high and low-impact...
vigorous routines with music accompaniment and advanced movements. UC/CSU  
Formerly PE 558C  
Offered on occasion

PE 209A. Beginning Step Aerobics (1)  
Lab-35  P/NP available  
An introduction to aerobic 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. UC/CSU  
Formerly PE 209  
Offered on occasion

PE 209B. Intermediate Step Aerobics (1)  
Lab-35  P/NP available  
Advise: PE 209A or demo of exit skills  
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. UC/CSU  
Offered on occasion

PE 210A. Beginning Boxercise (1)  
Lab-35  P/NP available  
Introduction to Boxercise as a conditioning fitness class utilizing aerobic/boxing techniques with an emphasis on cardiovascular and muscular endurance. UC/CSU  
Formerly PE 210

PE 210B. Intermediate Boxercise (1)  
Lab-35  P/NP available  
Advise: PE 210A or demo of exit skills  
Intermediate boxercise builds upon the skills and technique learned in beginning level boxercise class with emphasis on intermediate level terminology and combinations that includes partner and group work and increased aerobic fitness intensity. UC/CSU

Competitive Lifting

PE 212B. Beginning - Intermediate Olympic Weightlifting (1)  
Lab-35  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. UC/CSU  
Offered fall semesters

PE 212C. Advanced Olympic Weightlifting (1)  
Lab-35  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. UC/CSU

PE 212D. Competitive Olympic Weightlifting (1)  
Lab-35  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. UC/CSU  
Offered on occasion

Strength Training

PE 214A. Beginning Weight Training (1)  
Lab-35  P/NP available  
Beginning Weight Training emphasizes instruction and implementation of machine weight and free weight training programs. UC/CSU  
Formerly PE 214

PE 214B. Intermediate Weight Training (1)  
Lab-35  P/NP available  
Advise: PE 214A or demo of exit skills  
Intermediate Weight Training emphasizes instruction and implementation of intermediate level machine weight and free weight training programs. UC/CSU  
Formerly PE 215A

PE 215A. Beginning Strength and Interval Training (1)  
Lab-35  P/NP available  
Beginning Strength and Circuit Training emphasizes free weight and machine weight training via a set number of exercises completed within a timed circuit. UC/CSU  
Formerly PE 555A

PE 215B. Intermediate Strength and Interval Training (1)  
Lab-35  P/NP available  
Advise: PE 215A or demonstration of exit skills  
Intermediate Strength and Circuit Training emphasizes free weight and machine weight training via an intermediate set number of exercises completed within a timed circuit. UC/CSU  
Formerly PE 555B

PE 216A. Beginning Body Sculpting (1)  
Lab-35  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. UC/CSU

PE 216B. Intermediate Body Sculpting (1)  
Lab-35  P/NP available  
Advise: 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. UC/CSU

Stretching and Flexibility

PE 217A. Beginning Stretching and Flexibility Development (1)  
Lab-35  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. UC/CSU  
Formerly PE 217

PE 217B. Intermediate Stretching & Flexibility Development (1)  
Lab-35  P/NP available  
Advise: 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. UC/CSU
**Yoga**

**PE 219A. Beginning Yoga (1)**
Lab-35  
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 the basic philosophy of the physical practice of yoga will be presented. UC/CSU  
**FORMERLY PE 554A**

**PE 219B. Intermediate Yoga (1)**
Lab-35  
P/NP available
**ADVISE: PE 219A OR DEMONSTRATION OF 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 Hatha Yoga philosophy will be presented as well as current trends. UC/CSU  
**FORMERLY PE 554B**

**PE 219C. Advanced Yoga (1)**
Lab-35  
P/NP available
**ADVISE: PE 219B OR DEMONSTRATION OF EXIT SKILLS**
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. UC/CSU  
**FORMERLY PE 654B**

**Archery**

**PE 230A. Beginning Archery (1)**
Lab-35  
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. UC/CSU  
**FORMERLY PE 501A**

**PE 230B. Intermediate Archery (1)**
Lab-35  
P/NP available
**ADVISE: PE 230A OR DEMO OF EXIT SKILLS**
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. UC/CSU  
**FORMERLY PE 501B**

**PE 230C. Advanced Archery (1)**
Lab-35  
P/NP available
**ADVISE: PE 230B OR DEMO OF EXIT SKILLS**
Advanced archery skills to develop improved accuracy and an understanding of archery training for competition. UC/CSU  
**OFFERED FALL SEMESTERS**

**Badminton**

**PE 231A. Beginning Badminton (1)**
Lab-35  
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 serve, and forehand and backhand drive. Basic rules and strategy for doubles game play will also be covered. UC/CSU  
**FORMERLY PE 503A**

**PE 231B. Intermediate Badminton (1)**
Lab-35  
P/NP available
**ADVISE: PE 231A OR DEMONSTRATION OF 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. UC/CSU  
**FORMERLY PE 503B**

**PE 231C. Advanced Badminton (1)**
Lab-35  
P/NP available
**ADVISE: 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. UC/CSU

**Baseball/Softball**

**PE 232A. Beginning Baseball (1)**
Lab-35, 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. UC/CSU  
**FORMERLY PE 505A**  
**OFFERED ON OCCASION**

**PE 232B. Intermediate Baseball (1)**
Lab-35, field trips  
P/NP available
**ADVISE: PE 232A OR DEMO OF EXIT SKILLS**
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. UC/CSU  
**FORMERLY PE 505B**  
**OFFERED ON OCCASION**

**PE 232C. Advanced Baseball (1)**
Lab-35, field trips  
P/NP available
**ADVISE: PE 232B OR DEMO OF EXIT SKILLS**
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. UC/CSU
**Formerly PE 505C**
**Offered Fall semesters**

**PE 239A. Beginning Softball (1)**
Lab-35, field trips  P/NP available
Analysis and practice of the basic skills, techniques, and theories of softball through active participation. Students will participate in basic lessons and fundamental drills designed to improve and increase their awareness of the skills involved in beginning level softball. UC/CSU
**Formerly PE 239**
**Offered on occasion**

**PE 239B. Intermediate Softball (1)**
Lab-35, field trips  P/NP available
**Advise: 239A**
Analysis and practice of the intermediate skills, techniques, and theories of softball through active participation. Students will participate in intermediate lessons and drills designed to improve and increase their awareness of the skills involved in intermediate level softball. UC/CSU
**Formerly PE 239**
**Offered on occasion**

**Basketball**

**PE 233A. Beginning Basketball (1)**
Lab-35  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. UC/CSU
**Formerly PE 506A**

**PE 233B. Intermediate Basketball (1)**
Lab-35  P/NP available
**Advise: PE 233A or demo of exit skills**
This course will emphasize intermediate levels of skill, agility, body conditioning and endurance as required playing basketball at an intermediate level. UC/CSU
**Formerly PE 506B**

**PE 233C. Advanced Basketball (1)**
Lab-35  P/NP available
**Advise: PE 233B or demo of exit skills**
This course will emphasize skill, agility, body conditioning and endurance. It will also assess and evaluate advanced theories and systems of play. UC/CSU
**Formerly PE 506C**

**Football**

**PE 235A. Beginning Football (1)**
Lab-35  P/NP available
Introduction to the basic fundamentals of touch football that includes basic skills, schematics, rules and play. UC/CSU
**Formerly PE 519A**
**Offered on occasion**

**PE 235B. Intermediate Football (1)**
Lab-35  P/NP available
**Advise: PE 235A or demo of exit skills**
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. UC/CSU
**Formerly PE 519B**
**Offered on occasion**

**PE 235C. Advanced Football (1)**
Lab-35  P/NP available
**Advise: PE 235B or demo of exit skills**
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. UC/CSU
**Formerly PE 519C**
**Offered only in Summer semesters**

**Golf**

**PE 236A. Beginning Golf (1)**
Lab-35  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. UC/CSU
**Formerly PE 520A**

**PE 236B. Intermediate Golf (1)**
Lab-35  P/NP available
**Advise: PE 236A or demo of exit skills**
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. UC/CSU
**Formerly PE 520B**

**Soccer**

**PE 238A. Beginning Soccer (1)**
Lab-35  P/NP available
Emphasis on rules and laws of the game, systems of play, technical skills, and soccer specific conditioning. UC/CSU
**Formerly PE 534A**

**PE 238B. Intermediate Soccer (1)**
Lab-35  P/NP available
**Advise: PE 238A or demo of exit skills**
Emphasis on intermediate systems of play, strategy, rules and training program. UC/CSU
**Formerly PE 534B**

**PE 238C. Advanced Soccer (1)**
Lab-35  P/NP available
**Advise: PE 238B or demo of exit skills**
Emphasis on advanced systems of play, strategy, rules and training programs. UC/CSU
**Formerly PE 534C**
**Offered on occasion**

**Tennis**

**PE 240A. Beginning Tennis (1)**
Lab-35  P/NP available
The course will cover beginning fundamental skills of tennis. Emphasis will be on rules, terminology, court etiquette and basic strokes: forehand, backhand, volley, overhead, and serve. UC/CSU
**Formerly PE 542A**
Volleyball

PE 242A. Beginning Volleyball (1)
Lab-35  
P/NP available

This is an introduction to the sport of volleyball with an emphasis on performing and examining the skills needed to interpret individual skills needed for game play. Analysis and correction of basic team strategies and application of volleyball rules are also covered. Volleyball falls within the volleyball family. UC/CSU

Formerly PE 545A

PE 242B. Intermediate Volleyball (1)
Lab-35  
P/NP available

Advise: PE 242A or demo of exit skills

The purpose of this course is to learn the intermediate skills and techniques of the sport of volleyball. The student will review basic volleyball skills such as pass, set, serve and spike. In addition, the student will be introduced to additional intermediate skills such as 2-person block, jump serve, multiple offenses and center back defense. Volleyball falls within the Volleyball family. UC/CSU

Formerly PE 545B

PE 242C. Advanced Volleyball (1)
Lab-35  
P/NP available

Advise: PE 242B or demo of exit skills

Advanced volleyball skills, strategies, officiating and coaching information. UC/CSU

Formerly PE 545C

Aquatics Exercise

PE 173A. Aqua Zumba (1)
Lab-35  
P/NP available

A low-impact water exercise course designed to improve muscular strength, flexibility, balance, and cardiovascular fitness. Non-swimming exercises will involve Latin-based dance steps and variations using Aqua Zumba dance vocabulary and music. UC/CSU

PE 252A. Beginning Water Aerobics (1)
Lab-35  
P/NP available

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. UC/CSU

PE 252B. Intermediate Water Aerobics (1)
Lab-35  
P/NP available

Advise: PE 252A or demo of exit skills

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 cardiovascular fitness will be emphasized, while reducing stress on the body. UC/CSU

PE 252C. Advanced Water Aerobics (1)
Lab-35  
P/NP available

Advise: PE 252B or demonstration of exit skills

Advanced Water Aerobics build upon skills learned in intermediate water aerobics with emphasis on increasing vocabulary, skills with higher intensity water exercises. Students will improve range of motion, muscular strength, flexibility, agility, balance, core strength and cardiovascular fitness, while reducing stress on the body. UC/CSU

PE 252D. Intensive Water Aerobics (1)
Lab-35  
P/NP available

Advise: 252C

Intensive Water Aerobics build upon skills learned in advanced water aerobics with emphasis on increasing vocabulary, skills with high intensity interval training (HIIT) water exercises. Students will improve range of motion, muscular strength, flexibility, agility, balance, core strength and cardiovascular fitness, while reducing stress on the body. UC/CSU

Aquatics Swim Development

PE 254. Novice Swimming (1)
Lab-35  
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. UC/CSU

PE 255A. Beginning Swimming (1)
Lab-35  
P/NP available

Advise: PE 254 or demo of exit skills

A course designed for non-swimmers, providing instruction in aquatic skill, fundamental swimming skills and personal water safety skills. UC/CSU

PE 255B. Advanced Beginning Swimming (1)
Lab-35  
P/NP available

Advise: PE 255A or demonstration of exit skills

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. UC/CSU

PE 255C. Intermediate Swimming (1)
Lab-35 P/NP available
Advise: PE 255B or demo of exit skills
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. UC/CSU

PE 255D. Advanced Swimming (1)
Lab-35 P/NP available
Advise: PE 255C or demo of exit skills
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. UC/CSU

PE 255E. Masters Swimming (1)
Lab-35 P/NP available
Advise: PE 255D or demonstration of exit skills
Instruction, analysis and practice in mastery level of competitive swimming skills and techniques, leading to high level of stroke proficiency in four competitive swimming strokes. Competitive swimming events and racing strategies will be emphasized. UC/CSU

Aquatics Fitness
PE 256A. Beginning Fitness Swimming (1)
Lab-35 P/NP only
Advise: PE 254C or demo of exit skills
An introduction to fitness swimming and cardiovascular conditioning basics. Emphasis is placed on techniques to improve physical endurance, body alignment, flexibility, and overall wellness. UC/CSU

PE 256B. Advanced Beginning Fitness Swimming (1)
Lab-35 P/NP only
Advise: PE 256A or demo of exit skills
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. UC/CSU

PE 256C. Intermediate Fitness Swimming (1)
Lab-35 P/NP only
Advise: PE 256B or demo of exit skills
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. UC/CSU

PE 256D. Advanced Fitness Swimming (1)
Lab-35 P/NP only
Advise: PE 256C or demo of exit skills
Advanced fitness swimming builds upon skills and training learned previously, with emphasis on continued improvement of fitness swimmer's cardiovascular endurance. Students will learn how to administer swimming fitness assessments and build skills to train and participate in distance swimming events. UC/CSU

Aquatics Water Polo
PE 258A. Beginning Water Polo (1)
Lab-35 P/NP available
Advise: PE 255C or demonstration of exit skills
An introduction to water polo basic skills and game play. Emphasis is placed on learning the head-up freestyle, eggbeater, passing, receiving and shooting. Basic rules and strategy for team play will also be covered. UC/CSU

PE 258B. Advanced Beginning Water Polo (1)
Lab-35 P/NP available
Advise: PE 285A
Advanced Beginning Water Polo is continuation of beginning water polo with an emphasis on building vocabulary, conditioning drills, passing, shooting, and development of individual offensive and defensive skills to better prepare the student for the intermediate level. UC/CSU

PE 258C. Intermediate Water Polo (1)
Lab-35 P/NP available
Prereq: PE 258B or demonstration of exit skills
Intermediate drills and scrimmage designed to further develop skills and knowledge of techniques, rules and strategies for water polo. Class will emphasize team offense and defense, developing players at specific positions and introduction to specific team plays and strategies. UC/CSU

PE 258D. Advanced Water Polo (1)
Lab-35 P/NP available
Prereq: PE 258C or demonstration of exit skills
This course covers the many facets of the sport of Water Polo at the advanced level. Individual skills such as passing, shooting, dribbling, and picking up the ball in water are reviewed. Advanced offensive and defensive water polo strategies are emphasized. Advanced levels of conditioning supplement team play and scrimmages. UC/CSU

Judo
PE 271A. Beginning Judo (1)
Lab-35 P/NP available
Advise: ESL 140 or ESL 184 or ENGL L or placement in ESL 150 or ESL 186 or ENGL 86
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. UC/CSU
Formerly PE 524A

PE 271B. Intermediate Judo (1)
Lab-35 P/NP available
Advise: PE 271A or demo of exit skills; ESL 140 or ESL 184 or ENGL L or placement in ESL 150 or ESL 186 or ENGL 86
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. UC/CSU
Formerly PE 524B

PE 271C. Advanced Judo (1)
Lab-35 P/NP available
Advise: PE 271B or demo of exit skills; ESL 140 or ESL 184 or ENGL L or placement in ESL 150 or ESL 186 or ENGL 86
Intermediate to advanced skill instruction and application of Nage-waza
(throwing), Osae-waza (grappling/submission), with Randori (free exercise). Principles of Sei-ryo-ku Zen you 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. UC/CSU
Formerly PE 524C
Offered Fall semesters

PE 271D. Competition Judo (1)
Lab-35 P/NP available
Advise: PE 271C or demo of exit skills; ESL 140 or ESL 184 or ENGL 150 or ESL 186 or ENGL 86
Instruction and participation in judo competition. Student will develop basic, intermediate and advanced 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. UC/CSU
Offered Spring semesters

Jujitsu
PE 274A. Beginning Jiu-jitsu (1)
Lab-35 P/NP available
Instruction in submission techniques of Brazilian Jiu-jitsu. Students will learn specific offensive/defensive techniques to be used against an attacker along with escapes and submissions from a variety of different attacks. Participation in beginning level sparring will be learned with particular attention to safety. UC/CSU
Formerly PE 274

PE 274B. Intermediate Jiu-jitsu (1)
Lab-35 P/NP available
Advise: PE 274A or demonstration of exit skills
Intermediate jiu-jitsu provides the student the opportunity to continue their study of Brazilian jiu-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. UC/CSU
Offered Spring semesters

PE 274D. Competition Jiu-jitsu (1)
Lab-35 P/NP available
Advise: PE 274C or demonstration of exit skills
Competition jiu-jitsu will familiarize the student with the different combinations and transitions along with the review of basic, intermediate and advance skill sets. The student will be encouraged to develop their own competitive style. Teaching as a means to consolidate the knowledge one has acquired will be established. UC/CSU
Offered on occasion

Taekwondo
PE 276A. Beginning Taekwondo (1)
Lab-35 P/NP available
Instruction and practice in the beginning skill of Taekwondo, the competitive sport skills and rules. Course will include basic kicks, blocks, and punches with an emphasis on self-defense, as well as a presentation in the history, philosophy, vocabulary, and etiquette. UC/CSU
Formerly PE 580A

PE 276B. Intermediate Taekwondo (1)
Lab-35 P/NP available
Advise: PE 276A or demonstration or exit skills
Instruction and practice in the rules and intermediate competitive sport skills of Taekwondo. Course will include intermediate level kicks, blocks, and punches with an emphasis on self-defense, as well as coverage in the history, philosophy, vocabulary, and etiquette. UC/CSU
Formerly PE 580B

Self Defense
PE 277. Self Defense for Women (1)
Lab-35 P/NP available
Students will be instructed in the physical and psychological aspects of self-defense, while learning how to reduce their risk to their personal safety, at home or on the streets. Emphasis is on avoidance of physical confrontation and discouragement of an attack. UC/CSU
Formerly PE 550
Offered on occasion

Physical Education Athletics
Credit, Degree Applicable Courses:
PE A 50. Intercollegiate Athletics Orientation (2)
Lec-35 P/NP available
Prereq: Athletic and medical clearance per CCCAA eligibility rules
An introduction to CCSF intercollegiate athletics. Topics discussed will be eligibility, team, college, CCCAA and NCAA rules and regulations, medical information, insurance, sports health and wellness, teamwork, leadership, time management, organization and study skills. Academic and athletic success will be emphasized. CSU
Offered on occasion

PE A 60. Women’s Intercollegiate Soccer (3)
Lab-175, field trips
Prereq: Athletic clearance (eligible by rules of the CCCAA and medical clearance verified by a physician)
Repeat: max. 12 units
Instruction for competition and participation in Women’s Intercollegiate Soccer in the Coast Conference of the California Association of Community Colleges. UC/CSU
Formerly PE 450
Offered Fall semesters

PE A 61. Intercollegiate Badminton (Women) (3)
Lab-105, field trips
Prereq: Athletic clearance (eligible by rules governed by the CCCAA and medical clearance verified by a physician)
Students can repeat three times (total 4 enrollments)
Advanced instruction, practice and competition in Women’s Intercollegiate Badminton representing City College of San Francisco. Student-athletes must meet eligibility requirements as designated by the California Community Colleges Athletic Association (CCCAA). UC/CSU
Formerly PE 451
Offered Spring semesters

PE A 62. Women’s Intercollegiate Swim (3)
Lab-175, field trips P/NP available
Prereq: Athletic clearance (eligible by rules of the CCCAA and medical clearance verified by a physician)
Repeat: max. 12 units
Instruction for competition and participation in Women’s Intercollegiate Swimming representing City College of San Francisco. Student-athletes must meet eligibility requirements as designated by
the California Community College Athletic Association (CCCAA).

Formerly PE 461
Offered Spring semesters

PE A 63. Intercollegiate Tennis for Women (3)
Lab-175 P/NP available
Prereq.: Athletic clearance (eligible by rules of the CCCAA and medical clearance verified by a physician)
Repeat: max. 12 units
Advanced instruction, practice and team preparation for the women's intercollegiate tennis team in order to compete and participate in the Coast Athletic Conference. UC/CSU
Formerly PE 453
Offered Spring semesters

PE A 65. Intercollegiate Women's Basketball (3)
Lab-175, field trips P/NP available
Prereq.: Athletic clearance and medical clearance verified by a physician
Repeat: max. 12 units
Instruction for competition and participation in Women's Intercollegiate Basketball in the Coast Conference-North Division of the California Association of Community Colleges. UC/CSU
Formerly PE 455
Offered Fall semesters

PE A 66. Intercollegiate Track & Field for Women (3)
Lab-175
Prereq.: Athletic clearance (eligible by rules governed by the CCCAA and medical clearance verified by a physician)
Repeat: max. 12 units
Instruction for competition and participation in track and field in the Coast Conference and the California Community Colleges Athletic Association (CCCAA). UC/CSU
Formerly PE 456
Offered Spring semesters

PE A 67. Intercollegiate Softball for Women (3)
Lab-175 P/NP available
Prereq.: Athletic clearance (eligible by rules governed by the CCCAA and medical clearance verified by a physician)
Repeat: max. 12 units
Instruction for competition and participation in Intercollegiate Softball in the Coast Conference of the California Association of Community Colleges. UC/CSU
Formerly PE 457
Offered Fall semesters

PE A 69. Intercollegiate Cross-country for Women (3)
Lab-175
Prereq.: Athletic clearance and medical clearance verified by a physician
Repeat: max. 12 units
Instruction for intercollegiate Cross Country competition and participation in the Coast Conference of the California Community Colleges Athletic Association (CCCAA). UC/CSU
Formerly PE 459
Offered Fall semesters

PE A 80. Intercollegiate Baseball for Men (3)
Lab-175 P/NP available
Prereq.: Athletic clearance (eligible by rules of CCCAA and medical clearance verified by a physician)
Repeat: max. 12 units
Instruction for competition and participation in Intercollegiate Baseball in the Coast Conference of the California Association of Community Colleges. UC/CSU
Formerly PE 400
Offered Spring semesters

PE A 81. Intercollegiate Men's Basketball (3)
Lab-175, field trips P/NP available
Prereq.: Athletic clearance (eligible by rules of CCCAC and medical clearance verified by a physician)
Repeat: max. 12 units
Instruction for competition and participation in Men's Intercollegiate Basketball in the Coast Conference of the California Association of Community Colleges. UC/CSU
Formerly PE 401
Offered Fall semesters

PE A 82. Intercollegiate Men's Cross-Country (3)
Lab-175, field trips P/NP available
Prereq.: Athletic clearance and medical clearance verified by a physician
Repeat: max. 12 units
Instruction for Intercollegiate Men's Cross-Country competition and participation in the Coast Conference- of the California Community Colleges Athletic Association (CCCAA). UC/CSU
Formerly PE 402
Offered Fall semesters

PE A 83. Intercollegiate Football for Men (3)
Lab-175 P/NP available
Prereq.: Athletic clearance and medical clearance verified by a physician
Repeat: max. 12 units
Instruction in intercollegiate football for the participation and competition in the Northern California Conference of the California Association of Community Colleges. UC/CSU
Formerly PE 403
Offered Fall semesters

PE A 85. Intercollegiate Soccer for Men (3)
Lab-175 P/NP available
Prereq.: Athletic clearance and medical clearance verified by a physician
Repeat: max. 12 units
Instruction in intercollegiate soccer for the participation and competition in the Northern California Conference of the California Association of Community Colleges. UC/CSU
Formerly PE 405
Offered Fall semesters
Instruction for competition and participation in Men's Intercollegiate Soccer in the Coast Conference of the California Association of Community Colleges. UC/CSU
Formerly PE 405
Offered Fall semesters

PE A 88. Intercollegiate Track and Field for Men (3)
Lab-175
Prereq: Athletic clearance (eligible by rules of CCCAC and medical clearance verified by a physician).
Repeat: max. 12 units
Instruction for competition and participation in track and field in the Coast Conference and the California Community Colleges Athletic Association (CCCAA). UC/CSU
Formerly PE 408
Offered Spring semesters

PE A 90. Intensive Intercollegiate Physical Preparation (1.5)
Lab-35
Prereq: Athletic clearance (eligible by rules of CCCAA and medical clearance verified by a physician).
Advise: PE A 97
Repeat: Students can repeat twice (total 3 enrollments)
Intensive Intercollegiate Physical Preparation utilizing high intensity interval training methodology to accelerate sport specific metabolic demands for successful individual athletic performance. UC/CSU
Offered only in Summer semesters

PE A 98. General Physical Preparation for Intercollegiate Sport (2)
Lab-105
Prereq: Athletic clearance (eligible by rules of CCCAA and medical clearance verified by a physician).
Repeat: Students can repeat twice (total 3 enrollments)
This course establishes foundation for later sport specific physical preparation and intense training. Its primary emphasis is general preparation and some specialized conditioning exercises to work all the major muscles and joints. This course will also introduce methodology related to injury prevention and rehabilitation of injured muscles and joints. UC/CSU
Offered Spring semesters

PE A 99. Intercollegiate Sport Development (3)
Lab-175
Repeat: max. 9 units
Students will be instructed in sport specific strength and conditioning protocols related to improving muscular strength, power, agility, and speed. Principles of sport specific technical and tactical methodology will be presented. Injury prevention, restoration and recovery will also be addressed. UC/CSU
Formerly PE 584
Offered Fall semesters

Physics
Office: Science 185
Phone Number: (415) 239-3467
Web Site: www.ccsf.edu/physics

Announcement of Curricula

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 research, engineering, and education. A physics degree is also a respected preparation for postgraduate studies in medical, business, and law school due to the prevalence of technology in our society. 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 physics to theoretical problems and experimental applications.
- Obtain, analyze, and report on physics laboratory data.
- Solve physics problems using mathematics through multivariable calculus, differential equations, and linear algebra.

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Physics

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYC 4A Classical Mechanics for Scientists and Engineers</td>
<td>3.0</td>
</tr>
<tr>
<td>PHYC 4AL Mechanics Laboratory for Scientists and Engineers</td>
<td>1.0</td>
</tr>
<tr>
<td>PHYC 4B Electromagnetism for Scientists and Engineers</td>
<td>3.0</td>
</tr>
</tbody>
</table>
PHYC 4BL Electromagnetism Laboratory for Scientists and Engineers 1.0
PHYC 4C Waves and Thermodynamics for Scientists and Engineers 3.0
PHYC 4CL Waves and Thermodynamics Laboratory for Scientists and Engineers 1.0
PHYC 4D Modern Physics for Scientists and Engineers 3.0
PHYC 4DL Modern Physics Laboratory for Scientists and Engineers 3.0

PHYC 2A. Introductory Physics (3)
Lec-52.5, Lab-17.5
Prereq.: MATH 95
Advise: PHYC 40 and completion of or concurrent enrollment in: PHYC 2AL
This course is a two-semester sequence required of premedical, biology, veterinary, physical therapy, and architecture degrees. Core topics include experiments in kinematics, dynamics, energy, momentum, rotation, simple harmonic motion, fluids, heat, and thermodynamics. UC/CSU
C-ID PHYS 100S (PHYC 2A + PHYC 2AL + PHYC 2B + PHYC 2BL);
C-ID PHYS 100 (PHYC 2B + PHYC 2BL)
Required of premedical, biology, and some architecture students.

PHYC 2AC. Introductory Physics-Calculus Supplement (.5)
Lec-14
Prereq.: MATH 100A or MATH 110A or placement in MATH 100B or 110B
This course is a two-semester sequence required of premedical, biology, veterinary, physical therapy, and architecture degrees. Core topics include experiments in kinematics, dynamics, energy, momentum, rotation, oscillations, fluids, heat, and thermodynamics. UC/CSU
C-ID PHYS 100S (PHYC 2A + PHYC 2AL + PHYC 2B + PHYC 2BL);
C-ID PHYS 100 (PHYC 2B + PHYC 2BL)
Required of premedical, biology, and architecture students.

PHYC 2B. Introductory Physics (3)
Lec-52.5, Lab-17.5
Prereq.: PHYC 2A.
Advise: Completion of or concurrent enrollment in: PHYC 2BL
Second course in an algebra/trigonometry-based two semester sequence. Core topics include electricity & magnetism, light, and selected topics in modern physics. UC/CSU
C-ID PHYS 100S (PHYC 2A + PHYC 2AL + PHYC 2B + PHYC 2BL);
C-ID PHYS 100 (PHYC 2B + PHYC 2BL)
Required of premedical, biology, and some architecture students.

PHYC 2BC. Introductory Physics--Calculus Supplement (.5)
Lec-14
Prereq.: PHYC 2AC and PHYC 2A and MATH 110A or MATH 100A and completion of or concurrent enrollment in: PHYC 2B
This course is a two-semester sequence required of premedical, biology, veterinary, physical therapy, and architecture degrees. Core topics include experiments in electricity & magnetism, light, and radioactivity. UC/CSU
C-ID PHYS 100S (PHYC 2A + PHYC 2AL + PHYC 2B + PHYC 2BL)
C-ID PHYS 100 (PHYC 2B + PHYC 2BL)
Required of premedical, biology, and architecture students.

PHYC 2A. Classical Mechanics for Scientists and Engineers (3)
Lec-52.5, Lab-17.5
Prereq.: MATH 100A and PHYC 41 or high school physics
Coreq.: MATH 110B
Advise: Completion of or concurrent enrollment in: PHYC 4AL
This course is a two-semester sequence required of premedical, biology, veterinary, physical therapy, and architecture degrees. Core topics include experiments in electricity & magnetism, light, and radioactivity. UC/CSU
C-ID PHYS 200S (PHYC 4A + PHYC 4AL + PHYC 4B + PHYC 4BL
+ PHYC 4C + PHYC 4CL + PHYC 4D + PHYC 4DL); C-ID PHYS 205
Required of physics, chemistry, and engineering majors planning to transfer to University of California, Berkeley or into other engineering or physical science transfer programs.

PHYC 2B. Mechanics Laboratory for Scientists and Engineers (1)
Lec-52.5
Prereq.: MATH 110A
Coreq.: PHYC 4A
Advise: MATH 110B
First laboratory course in a calculus-based four semester sequence. Core topics include experiments in kinematics, dynamics, energy, momentum, rotation, and oscillations. UC/CSU
C-ID PHYS 200S (PHYC 4A + PHYC 4AL + PHYC 4B + PHYC 4BL
+ PHYC 4C + PHYC 4CL + PHYC 4D + PHYC 4DL); C-ID PHYS 205
(PHYC 4A + PHYC 4AL)
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.

PHYC 4B. Electromagnetism for Scientists and Engineers (3)
Lec-52.5, Lab-17.5
Prereq.: PHYC 4A and MATH 110B ADVISE: Completion of or concurrent enrollment in: PHYC 4BL
Coreq.: MATH 110C
Advise: Completion of or concurrent enrollment in: PHYC 4BL
This is the 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. UC/CSU
C-ID PHYS 200S (PHYC 4A + PHYC 4AL + PHYC 4B + PHYC 4BL + PHYC 4C + PHYC 4CL + PHYC 4D + PHYC 4DL); C-ID PHYS 210 (PHYC 4B + PHYC 4BL)
Required of physics, chemistry, and engineering majors planning to transfer to University of California, Berkeley, or into other engineering or physical science transfer programs.

PHYC 4BL. Electromagnetism Laboratory for Scientists and Engineers (1)
Lab-52.5
Prereq.: PHYC 4A; PHYC 4AL; MATH 110B
Coreq.: PHYC 4B
Advise: MATH 110C
Second laboratory course in a calculus-based four semester sequence covering the topics of electricity and magnetism. UC/CSU
C-ID PHYS 200S (PHYC 4A + PHYC 4AL + PHYC 4B + PHYC 4BL + PHYC 4C + PHYC 4CL + PHYC 4D + PHYC 4DL); C-ID PHYS 210 (PHYC 4B + PHYC 4BL)
Required of physics, chemistry, and engineering majors planning to transfer to University of California, Berkeley, or into other engineering or physical science transfer programs.

PHYC 4C. Waves and Thermodynamics for Scientists and Engineers (3)
Lec-52.5, Lab-17.5
Prereq.: PHYC 4B and MATH 110C
Advise: Completion of or concurrent enrollment in: PHYC 4CL
This is the third course in a calculus-based four semester sequence. Core topics include mechanical, sound and light waves; geometrical and physical optics; and thermodynamics. UC/CSU
C-ID PHYS 200S (PHYC 4A + PHYC 4AL + PHYC 4B + PHYC 4BL + PHYC 4C + PHYC 4CL + PHYC 4D + PHYC 4DL); C-ID PHYS 210 (PHYC 4B + PHYC 4CL + PHYC 4D + PHYC 4DL)
Required of physics, chemistry, and engineering majors planning to transfer to University of California, Berkeley, or into other engineering or physical science transfer programs.

PHYC 4CL. Waves and Thermodynamics Laboratory for Scientists and Engineers (1)
Lab-52.5
Prereq.: PHYC 4B; PHYC 4BL
Coreq.: PHYC 4C
Advise: MATH 110C
Third laboratory course in a calculus-based four semester sequence. Core topics include experiments in sound, waves, electrical oscillations, thermodynamics, geometrical optics, and physical optics. UC/CSU
C-ID PHYS 200S (PHYC 4A + PHYC 4AL + PHYC 4B + PHYC 4BL + PHYC 4C + PHYC 4CL + PHYC 4D + PHYC 4DL)
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.

PHYC 4D. Physics for Scientists and Engineers (3)
Lec-52.5, Lab-17.5
Prereq.: PHYC 4B and PHYC 4BL and MATH 110C
Coreq.: (MATH 120 and MATH 125) or MATH 130
Advise: concurrent enrollment in PHYC 4DL; Completion of or concurrent enrollment in: PHYC 4C and PHYC 4CL
This is the fourth course in a calculus-based four semester sequence. Core topics include special relativity, quantum mechanics, atomic physics, and solid state physics. UC/CSU
C-ID PHYS 200S (PHYC 4A + PHYC 4AL + PHYC 4B + PHYC 4BL + PHYC 4C + PHYC 4CL + PHYC 4D + PHYC 4DL)
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. Offered Spring semesters

PHYC 4DL. Physics Laboratory for Scientists and Engineers (1)
Lab-52.5
Prereq.: PHYC 4B and PHYC 4BL
Coreq.: PHYC 4D
Advise: MATH 110C; completion of or concurrent enrollment in PHYC 4C and PHYC 4CL
Last laboratory course in a calculus-based four semester sequence. Core topics include experiments in modern physics, including the Michelson interferometer, photoelectric effect, longitudinal laser modes, Zeeman effect, and atomic spectra. UC/CSU
C-ID PHYS 200S (PHYC 4A + PHYC 4AL + PHYC 4B + PHYC 4BL + PHYC 4C + PHYC 4CL + PHYC 4D + PHYC 4DL)
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. Offered Spring semesters

PHYC 10. Conceptual Physics (3)
Lec-52.5
Advise: MATH 40
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. UC/CSU

PHYC 10L. Conceptual Physics Laboratory (1)
Lab-52.5
Prereq.: Completion of or concurrent enrollment in: PHYC 10
Labatory course covering basic concepts in physics. Core topics include mechanics, energy, heat, sound, electricity, magnetism, light, and nuclear physics. UC/CSU
Required for students enrolled in the curriculum in RADL

PHYC 20. Physics of Sports (3)
Lec-52.5
Advise: MATH 40 or placement in MATH 60
Conceptual physics taught within the context of sports including
football, baseball, soccer, cycling, and tennis. Content is taught at an introductory level using basic math such as vectors, ratios, square roots, and algebra. Topics include Newton's laws, projectile and rotational motion, momentum, energy, and aerodynamics. UC/CSU

PHYC 40. Elementary Physics (3)
Lec-52.5
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 is intended to prepare students to take a trigonometry-based physics course and may also serve as preparation for a calculus-based physics course. UC/CSU

PHYC 41. Preparatory Physics (3)
Lec-52.5
Prereq.: (MATH 90 or MATH 92) and MATH 95 or placement in MATH 110A
Advise: Completion of or 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. UC/CSU

Physical Science
Credit, Degree Applicable Course:
P SC 11. Physical Science (3)
Lec-52.5, Lab-17.5
Advise: MATH 40 or MATH 60
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. UC/CSU

P SC 11L. Physical Science Laboratory (1)
Lab-52.5
Prereq.: completion/concurrent enrollment in: P SC 11
Advise: MATH 40 or placement in MATH 60
Physical Science laboratory integrates concepts from physics, chemistry, earth science and astronomy. Data handling, critical thinking, and laboratory skills are emphasized. UC/CSU

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. Each course must be completed with a final grade of C or higher or Pass.

Learning Outcomes
Upon completion of this program, 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.
- 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Pilipino

Course..................................................Units
Required core courses:
PIL 1 Elementary Pilipino.................................5.0
PIL 2 Continuation of Elementary Pilipino.............5.0
Choose 6 units from the following elective courses:
PIL 10A Conversational Pilipino..........................3.0
PIL 10B Conversational Pilipino..........................3.0
PIL 10C Intermediate Conversational Pilipino.........3.0
PIL 39A Philippine Literature in Translation: Philippine Literature to 1940..........................3.0
PIL 39B Philippine Literature in Translation: Literature from 1940 to the Present......................3.0
Total:..................................................................16.0

Announcement of Courses

Credit, Degree Applicable Courses:
PIL 1. Elementary Pilipino (5)
Lec-87.5 P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 86 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B or any City College or University foreign language course
Introductory course in Pilipino grammar, composition, and reading. Practice in speaking and understanding Pilipino. UC/CSU

PIL 2. Continuation of Elementary Pilipino (5)
Lec-87.5 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. UC/CSU

Offered on occasion

PIL 10A. Conversational Pilipino (3)
Lec-52.5 P/NP available
Intensive instruction and practice in spoken Pilipino. CSU

PIL 10B. Conversational Pilipino (3)
Lec-52.5 P/NP available
Advise: PIL 10A or demonstration of PIL 10A exit skills.
Intensive instruction and practice in spoken Pilipino. CSU

PIL 10C. Intermediate Conversational Pilipino (3)
Lec-52.5 P/NP available
Advise: PIL 10B or demonstration of PIL 10B exit skills.
Upon completion of this program, 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.

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 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. Assuming students start this AA-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AA-T in Political Science

Course ............................................ Units
Required courses:
POLS 1 American Government .................... 3.0
POLS 2 Comparative Government .................. 3.0
POLS 3 Political Theory ............................ 3.0
POLS 5 International Relations ..................... 3.0

Choose 6 units from the following elective courses:
ECON 5 Introductory Statistics for Economics, Business and Social Sciences .......................... 5.0
or PSYC 5 Statistics for Behavioral Sciences ........ 5.0
POLS 4 The Politics of Globalization .................. 3.0
POLS 12 Ethnic Politics in the United States ........ 3.0
POLS 18 Government & Politics of Latin America .. 3.0
POLS 43 The Constitution and Individual Rights ... 3.0
POLS 45 Governments and Politics of Middle East .. 3.0
POLS 41 Independent Studies in Political Science .... 1.0
Total: ............................................. 18.0

Political Science

Office: Batmale 656
Phone Number: (415) 239-3330
Web Site: www.ccsf.edu/socialsci

Announcement of Curricula

Political Science Major (AA-T)

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 program, 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.

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 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. Assuming students start this AA-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AA-T in Political Science

Course ............................................ Units
Required courses:
POLS 1 American Government .................... 3.0
POLS 2 Comparative Government .................. 3.0
POLS 3 Political Theory ............................ 3.0
POLS 5 International Relations ..................... 3.0

Choose 6 units from the following elective courses:
ECON 5 Introductory Statistics for Economics, Business and Social Sciences .......................... 5.0
or PSYC 5 Statistics for Behavioral Sciences ........ 5.0
POLS 4 The Politics of Globalization .................. 3.0
POLS 12 Ethnic Politics in the United States ........ 3.0
POLS 18 Government & Politics of Latin America .. 3.0
POLS 43 The Constitution and Individual Rights ... 3.0
POLS 45 Governments and Politics of Middle East .. 3.0
POLS 41 Independent Studies in Political Science .... 1.0
Total: ............................................. 18.0

Announcement of Courses

Credit, Degree Applicable Courses:
POLS 1. American Government (3)
Lec-52.5
Introduction to United States and California government and politics, including constitutions, political institutions and processes, and political actors. Examination of political behavior, public policy, political ideas, and public policy. UC/CSU C-ID POLS 110

POLS 2. Comparative Government (3)
Lec-52.5 P/NP available
Central themes of comparative politics: comparative political science methodology, constitutional principles, governmental institutions, the nature of the state, political culture, democracy, and political and economic development. UC/CSU C-ID POLS 130

POLS 3. Political Theory (3)
Lec-52.5 P/NP available
Various theoretical approaches to political problems and proposed solutions. Analysis of selected political theories and thinkers. Relevance of theory to contemporary problems. UC/CSU C-ID POLS 120
POLS 4. The Politics of Globalization (3)
Lec-52.5
ADVISE: ENGL 88 OR ENGL 88A OR ENGL 93 OR ENGL 95 OR ESL 150 OR PLACEMENT IN ENGL 96 OR ENGL 88B OR ESL 160
This course surveys the recent phenomenon called globalization. The course analyzes competing political theories and perspectives on globalization and examines actual policies, including the possibilities and limitations that globalization offers to and imposes on everyday life. UC/CSU

POLS 5. International Relations (3)
Lec-52.5 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. UC/CSU
C-ID POLS 140

POLS 12. Ethnic Politics in the United States (3)
Lec-52.5 P/NP available
ADVISE: ENGL 96 OR ENGL 88 OR ENGL 88B OR PLACEMENT IN ENGL 1A
This course surveys the role of race and ethnicity in American politics. Theories of race, identity, and ethnic political patterns are explored for African Americans, Asians Americans, Latino/a Americans, and European Americans. UC/CSU
MEETS UC BERKELEY’S AMERICAN CULTURES DISTRIBUTION.
Offered on occasion

POLS 18. Government and Politics of Latin America (3)
Lec-52.5 P/NP available
The constitutional systems, political processes, and social problems of Latin-American nations. UC/CSU
Offered on occasion

POLS 22. Environmental Politics and Policy (3)
Lec-52.5 P/NP available
Introduction to the political science subfields and the environment, focusing on environmental politics and policy in the United States, comparative environmental politics and policy, environmental issues in International Relations, and ecopolitical thought. UC/CSU
Offered on occasion

POLS 41. Independent Studies in Political Science (1)
Lab-52.5
An individualized reading or research program. CSU
UC UPON REVIEW

POLS 43. The Constitution and Individual Rights (3)
Lec-52.5, 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 with a civil liberties and civil rights perspective. UC/CSU
Offered on occasion

POLS 45. Governments and Politics of the Middle East (3)
Lec-52.5 P/NP available
A survey of political developments and changes in the Middle East, with emphasis on the Arab states and Israel. UC/CSU
Offered on occasion

Psychology
Office: Batmale 354
Phone Number: (415) 239-3433
Web Site: www.ccsf.edu/behavior

Announcement of Curricula

Psychology Major (AA-T)
The Associate in Arts in Psychology for Transfer 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 program, 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

Students who wish to earn the Associate in Arts in Psychology 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 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.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AA-T in Psychology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>PSYC 1 General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 1B Biological Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 2 Research Methods</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following statistics courses:</td>
<td></td>
</tr>
<tr>
<td>PSYC 5 Statistics for Behavioral Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 80 Probability and Statistics</td>
<td>4.0</td>
</tr>
<tr>
<td>Choose one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>BIO 9 Human Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 11 The Science of Living Organisms</td>
<td>4.0</td>
</tr>
<tr>
<td>ENGL 1B Writing about Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 1C Writing about Nonfiction</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Choose one of the following courses:

PSYC 4 Forensic Psychology ................................................. 3.0
PSYC 9 Psychology of Stress ................................................. 3.0
PSYC 10 Abnormal Psychology .............................................. 3.0
PSYC 11 Theories of Personality ............................................ 3.0
PSYC 21 Lifespan Development ............................................ 3.0
PSYC 23 Psychology of Race and Ethnic Relations ............. 3.0
PSYC 25 Psychology of Gender ........................................... 3.0
PSYC 26 Applied Psychology ............................................ 3.0
PSYC 40 Child and Adolescent Psychology ................... 3.0
SOC 1 Introduction to Sociology ......................................... 3.0
PSYC 32 Social Psychology .............................................. 3.0
ANTH 1 Biological Anthropology ....................................... 3.0
ANTH 3 Introduction to Social and Cultural Anthropology ........ 3.0
POLS 1 American Government ......................................... 3.0
Total: ............................................................................... 19.0 – 21.0

Announcement of Courses

Credit, Degree Applicable Courses:

PSYC 1. General Psychology (3)
Lec-52.5 P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
A scientific approach to the study of behavior and mental processes designed for both majors and non-majors. Topics include: research methods, biology of behavior, sensory systems, learning, memory, lifespan development, motivation, emotion, personality theories, social psychology, abnormal psychology, and psychotherapy. UC/CSU C-ID PSY 110

PSYC 1B. Biological Psychology (3)
Lec-52.5 P/NP available
Prereq.: PSYC 1
Biological Psychology explores the interaction between the body and behavior. Topics include structure and function of the nervous system, neurotransmitters, psychopharmacology, hormones, behavioral genetics, neuroplasticity and cognitive neuroscience. It examines the biological correlates of sensation, movement, sleep, hunger, sex, emotions, memory, language, and neurological and psychological disorders. UC/CSU C-ID PSY 150

PSYC 2. Research Methods (3)
Lec-52.5 P/NP available
Prereq.: PSYC 1; and PSYC 5 or MATH 80
An introduction to scientific research methods in psychology. Emphasis on research design, experimental procedures, descriptive methods, instrumentation, and the collection, analysis, interpretation, and reporting of research data. Primarily for psychology majors, related majors, and other students desiring familiarity with scientific methods and improved critical thinking skills. UC/CSU C-ID PSY 200
Primarily for psychology majors, related majors, and students interested in the scientific method.

PSYC 4. Forensic Psychology (3)
Lec-52.5 P/NP available
Advise: PSYC 1; ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
Explore aspects of the legal system studied by psychologists. Emphasis on research and theories in psychology to understand key participants in the legal system (e.g., criminals, police, victims, witnesses), examine legal controversies (e.g., race and justice, death penalty, insanity defense, profiling and eyewitness identification) which can affect legal outcomes. CSU

Offered on occasion

PSYC 5. Statistics for Behavioral Sciences (5)
Lec-87.5 P/NP available
Prereq.: MATH 60 or MATH 92
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
An introduction to data analysis including measurement and research design. Intended for general education and prospective behavioral science majors. The course will focus on computation, interpretation, and application of both descriptive and inferential statistics. Topics include organization of data, central tendency and variability, hypothesis testing, non-parametric statistics, analysis of variance (ANOVA), and linear regression. UC/CSU

PSYC 9. Psychology of Stress (3)
Lec-52.5 P/NP available
Advise: ENGL 86 or ENGL 91 or ESL 150 or placement in ESL 160 or ENGL 88 or ENGL 93
Critical exploration of psychological research as it applies to understanding the causes, physiology, consequences, and management of stress. Emphasis is on practical applications for better managing stress. CSU

PSYC 10. Abnormal Psychology (3)
Lec-52.5 P/NP available
Advise: PSYC 1
An introduction to the nature and development of disturbances in mental, emotional, and behavioral functioning. Methods of assessment and classification, current diagnostic criteria, and theoretical models for causation and treatment are discussed in-depth. UC/CSU C-ID PSY 110

PSYC 11. Theories of Personality (3)
Lec-52.5 P/NP available
Advise: PSYC 1 and ENGL 88 or ENGL 88A or ENGL 95 or ESL 160 or placement in ENGL 96 or ENGL 88B
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 will also be addressed. UC/CSU

PSYC 14. Psychology of Shyness and Self-esteem (1)
Lec-17.5 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-18 P/NP available
Examination of the development of communication patterns in a psychological and sociological context. Psychological and emotional barriers to effective communication will be explored. Application of
assertiveness techniques to effect behavior change based on cognitive / behavioral theories in psychology are a major focus. Assessment and implementation of appropriate techniques in a variety of situations, including communication with family, friends, and at the workplace are also discussed. CSU

**PSYC 17. Psychology of Eating, Food, and Weight (1)**
Lec-18\^ 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-52.5 \^ P/NP available
Advisory: PSYC 1; ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
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. UC/CSU

**PSYC 23. Psychology of Race and Ethnic Relations (3)**
Lec-52.5 \^ P/NP available
An exploration of the experiences, theories, and research concerning issues of race and ethnicity as they relate to individual and group behavior, emotion, and thinking, including attitudes, identity development, racism, privilege, coping strategies, and intersectional experiences. Psychohistorical analysis of the experiences of African Americans, Asian Americans, Latino(a) Americans, and Native Americans. UC/CSU

**PSYC 24. Queer Psychology (3)**
Lec-52.5 \^ P/NP available
Advisory: ENGL 88 or ENGL 88B or ENGL 96 or placement in ENGL 1A
Examine the psychological experiences of LGBTQ people. Intersectionality, feminist psychology, and queer theoretical perspectives are used to analyze the impact of queer identity on how individuals think, feel, and behave. Critical exploration of current research and models of sexual orientation and gender identity, and impacts of stigma and discrimination. CSU

**PSYC 25. Psychology of Gender (3)**
Lec-52.5 \^ 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. UC/CSU

**PSYC 26. Applied Psychology (3)**
Lec-52.5 \^ 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 32. Social Psychology (3)**
Lec-52.5 \^ P/NP available
The scientific study of individuals in social situations. Examination of current research and theories with an emphasis on how a person's thoughts, feelings, and behaviors are influenced by other people, the sociocultural context, and the physical environment. UC/CSU

**PSYC 40. Child and Adolescent Psychology (3)**
Lec-52.5 \^ P/NP available
Advisory: PSYC 1 and ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 88B or ENGL 96
Introduction to the psychology of children from conception through adolescence. Examination of research and theory, emphasizing how development is enhanced or restricted. Physical, emotional, social, and cognitive development are discussed. Practical information is given for parents, teachers, counselors, and other concerned adults. UC/CSU

**PSYC 46. Adolescent Psychology (3)**
Lec-52.5 \^ P/NP available
Advisory: PSYC 1; ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 88B or ENGL 96
Examines the current research and theories on adolescent development (ages 12-20), including physical, emotional, psychosocial, and cognitive needs. Addresses the interaction of genes and environment; provides strategies on how development can be enhanced. CSU

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**Public Safety**

See Administration of Justice and Fire Science.

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**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.

Announcement of Curricula
Degree Curricula

Diagnostic Medical Imaging

The curriculum in Diagnostic Medical Imaging is accredited by the Joint Review Committee on Education in Radiologic Technology, and approved by the Radiologic Health Branch of the California State Department of Public Health. For more information about these agencies, see the "Overview of the College" section of this Catalog.

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.) BIO 108 (formerly ANAT 25)
   e.) ENGL 93 or 95 or ENGL 88A(or placement in ENGL 96 or 88B); or ESL 160
   f.) BIO 112 (formerly 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 completed 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 meet these requirements, complete the required courses in the curriculum, including the 32-week clinical internship, with final grades of C or higher, will receive an 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.

Diagnostic Medical Imaging Major (AS)

The Associate in Science Degree course of study is designed so that students may satisfy the requirements for graduation from the College. Students must complete the required courses in the curriculum, including the 32-week clinical internship, with final grades of C or higher.

Learning Outcomes

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

- Display effective communication skills as appropriate to a given situation or encounter. (Goal 1. Communication)
- Demonstrate evidence of critical thinking and problem solving methods as appropriate to a given situation or encounter. (Goal 2. Critical Thinking/Problem Solving)
- Effectively apply technical expertise, patient care skills, and radiation protection measures to ensure optimal outcomes when conducting diagnostic radiologic examinations. (Goal 3. Clinical Performance)
- Exhibit professionalism in their practice of diagnostic medical imaging. (Goal 4. Professional Development)
- Graduates will be prepared for successful and productive careers as a Diagnostic Medical Imaging Technologist. (Goal 5. Program Effectiveness)

Assuming students start this AS with transfer-level math and English eligibility, the minimum time for completion is 7 semesters (including 2 summer sessions). Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Diagnostic Medical Imaging

Course .................................................. Units
First Semester:
DMI 49 Introduction to Radiologic Technology ........ 3.0

DMI 50A Introduction to Medical Radiography ........ 3.0
DMI 52 Patient Care and Staff Relationships .......... 3.0
EMT 14 Advanced First Aid and Basic Life Support ... 2.0

First Semester: choose one of the following psychology courses:
CMST 11 Basic Public Speaking ......................... 3.0
CMST 12 Fundamentals of Oral Communication ....... 3.0
CMST 1A Elements of Public Speaking ................ 3.0

Second Semester:
DMI 50B Radiologic Physic. and Equipment .......... 2.5
DMI 55A Radiographic Anatomy and Positioning ... 5.0
DMI 55B Radiographic Exposure Factors ............... 2.0

Second Semester: choose one of the following psychology courses:
PSYC 1 General Psychology ............................ 3.0
PSYC 26 Applied Psychology ........................... 3.0

Summer Session
DMI 62 Clinical Education in DMI I .................... 4.5

Third Semester:
DMI 51A Radiographic Anatomy and Positioning ... 2.0
DMI 51B Radiographic Anatomy and Positioning ... 2.0
DMI 63 Intermediate Diagnostic Procedures .......... 2.0
DMI 64 Clinical Education in DMI II .................. 4.5

Fourth Semester:
DMI 55 Skull Radiography .............................. 2.0
DMI 56 Radiographic Pathology ........................ 2.0
DMI 65 Advanced Imaging Procedures ................. 2.0
DMI 66 Clinical Education in DMI III .................. 4.5
DMI 70 Radiation Protection ............................ 2.0

All General Education graduation requirements should be completed by the end of this semester.

Internship:
DMI 68 Clinical Education in DMI IV .................. 11.5
DMI 69 Clinical Education Internship Summer Bridge ........................................... 5.5
DMI 100 Registry Examination and Career Preparation ........................................... 1.0

Recommended additional coursework:
HLTH 10 Health and Aging .............................. 3.0
HLTH 25 Women’s Health ............................... 3.0
HLTH 27 Men's Health .................................. 3.0
HLTH 33 Introduction to Health and Wellness ....... 2.0
HLTH 53 Health in Society ............................. 3.0
HLTH 64 Health Education Practice .................... 3.0
HLTH 67 HIV and Hepatitis Navigation Skills ......... 3.0

These health courses teach current health issues faced by the local patient population.

Total: ................................................... 73.0

Announcement of Courses

Credit, Degree Applicable Courses:
DMI 49. Introduction to Radiologic Technology (3)
Lec-52.5, field trips
History of radiologic technology, imaging equipment, procedures, patient care, radiation safety, ethics, and professional organizations.
Applications of medical terminology. CSU

Open to all students who may be interested in a career in Radiologic Technology and required of students accepted into the Diagnostic Medical Imaging Program.
DMI 50A. Introduction to Medical Radiography (3)
Lec-35, Lab-52.5, field trips
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 (2.5)
Lec-35, Lab-35, field trips
Prereq.: 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 (5)
Lec-70, Lab-52.5
Prereq.: ANAT 25 or BIO 108; DMI 49; DMI 50A and DMI 52
Coreq.: DMI 50B, DMI 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
INTENDED TO BE TAKEN CONCURRENTLY WITH DMI 50B AND 51B.

DMI 51B. Radiographic Exposure Factors (2)
Lec-35, Lab-17.5
Coreq.: DMI 50B and DMI 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 (3)
Lec-52.5
Coreq.: DMI 50A
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

DMI 54. Vascular and Interventional Procedures (2)
Lec-35, field trips
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-35, 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-35, field trips
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-52.5
Prereq.: ANAT 25 or BIO 108
Coreq.: DMI 63
Anatomy from multiplanar perspectives as visualized on computed tomography (CT), PET, Sonography, and MRI. Imaging protocols. Comparative analysis of CT, PET, Sonography and MRI. CSU

DMI 62. Clinical Education in DMI I (4.5)
Work-280
Prereq.: CMST II or 12 or 1A; and EMT 14
First semester of clinical education experience in a hospital radiology department. CSU
OFFERED SPRING AND SUMMER SEMESTERS

DMI 63. Intermediate Diagnostic Procedures (2)
Lec-35, Lab-17.5
Coreq.: DMI 62, 64, or 66
Basic theories underlying intermediate diagnostic imaging procedures. Relationship of clinical indications, patient demographics, special precautions, quality assurance, equipment, and positioning. CSU

DMI 64. Clinical Education in Diagnostic Medical Imaging II (4.5)
Work-280
Prereq.: DMI 62
Second semester of clinical education in a hospital radiology department. CSU
OFFERED SUMMER AND FALL SEMESTERS

DMI 65. Advanced Imaging Procedures (2)
Lec-35
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 (4.5)
Work-280
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 (11.5)
Work-700 total hours
Prereq.: DMI 66
Performance of clinical internship competencies. On-site meetings with CCSF faculty. CSU

DMI 69. Clinical Education Internship Summer Bridge (5.5)
Work-340 total hours
Prereq.: DMI 66
Performance of clinical internship competencies. On-site meetings with CCSF faculty. CSU
OFFERED ONLY IN SUMMER SEMESTERS

DMI 70. Radiation Protection (2)
Lec-35, Lab-17.5, 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

Offered Fall semesters

Offered Spring and Summer semesters

Offered Summer and Fall semesters

Offered only in Summer semesters

Offered Fall semesters
DMI 100. Registry Examination and Career Preparation (1)
Lec-17.5
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.

**Announcement of Curricula**

### 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. Each course must be completed with a final grade of C or higher or Pass.

#### Learning Outcomes

Upon completion of this program, 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

#### Courses Required for the Certificate of Accomplishment in Russian

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUSS 1A Elementary Russian</td>
<td>3.0</td>
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<tr>
<td>RUSS 1A Intermediate Russian</td>
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</tr>
<tr>
<td>RUSS 2A Elementary Russian</td>
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<tr>
<td>RUSS 2A Intermediate Russian</td>
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<tr>
<td>RUSS 21A Elementary Russian for Bilingual Students</td>
<td>5.0</td>
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<tr>
<td>RUSS 21A Intermediate Russian for Bilingual Students</td>
<td>3.0</td>
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<tr>
<td>RUSS 22A Continuation of Elementary Russian for Bilingual Students</td>
<td>3.0</td>
</tr>
<tr>
<td>RUSS 22A Continuation of Elementary Russian for Bilingual Students</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose 6 units from the following elective courses:

- RUSS 10A Beginning Practical Spoken Russian
- RUSS 10B Continuation of Beginning Practical Spoken Russian
- RUSS 10C Intermediate Conversational Russian
- RUSS 10D Continuation of Intermediate Conversational Russian
- RUSS 15A Advanced Russian Conversation
- RUSS 15B Advanced Russian Conversation
- RUSS 16A Advanced Conversation through Russian Cinema
- RUSS 16B Advanced Conversation through Contemporary Russian Cinema

Total: 15.0

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### Announcements 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-87.5 P/NP available

Advising: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B or any City College or University foreign language course. Introductory course in Russian grammar, composition and reading. Practice in speaking, writing, and understanding Russian and introduction to Russian culture. UC/CSU

*Not recommended for students who have completed RUSS 21.
Offered Fall semesters*

**RUSS 1A. Elementary Russian (3)**

Lec-52.5 P/NP available

Advising: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B or any City College or University foreign language course. Introductory course in Russian grammar, composition and reading. Practice in speaking, writing, and understanding Russian and introduction to Russian culture. UC/CSU

*Not recommended for students who have completed RUSS 21A-21B, RUSS 1A + 1B = RUSS 1
Offered Fall semesters*

**RUSS 1B. Elementary Russian (3)**

Lec-52.5 P/NP available

Prereq.: RUSS 1A or demonstration of RUSS 1A exit skills. Grammar, composition and reading. Practice in speaking and understanding Russian UC/CSU

*Not recommended to students who have completed RUSS 21A-21B, RUSS 1A + 1B = RUSS 1
Offered Fall semesters*

**RUSS 2. Continuation of Elementary Russian (5)**

Lec-87.5 P/NP available

Prereq.: RUSS 1 or 1B or demonstration of RUSS 1/1B exit skills. Second semester course: Continuation of elementary grammar; composition and reading; continued practice in conversation. UC/CSU
Not recommended to students who are enrolled in or who have completed RUSS 22.
Offered on occasion

RUSS 2A. Continuation of Elementary Russian (3)
Lec-52.5 P/NP available
Prereq.: RUSS 1 or 1B or demonstration of RUSS 1/1B exit skills.
Continuation of elementary grammar, composition and reading; continued practice in conversation. UC/CSU
Not recommended to students who are enrolled in or who have completed RUSS 22A-22B. RUSS 2A+2B = RUSS 2
Offered on occasion

RUSS 2B. Continuation of Elementary Russian (3)
Lec-52.5 P/NP available
Prereq.: RUSS 2A or demonstration of RUSS 2A exit skills.
Continuation of elementary grammar, composition and reading; continued practice in conversation. UC/CSU
Not recommended to students who are enrolled in or who have completed RUSS 22A-22B. RUSS 2A+2B = RUSS 2
Offered on occasion

RUSS 3A. Intermediate Russian (3)
Lec-52.5 P/NP available
Prereq.: RUSS 2, 2B, 22, or 22B or demonstration of RUSS 2/2B/22/22B exit skills.
Review of grammar and composition; reading of cultural materials; continuing practice in the use and comprehension of spoken Russian. UC/CSU
RUSS 3A+3B = RUSS 3.
Offered on occasion

RUSS 3B. Intermediate Russian (3)
Lec-52.5 P/NP available
Prereq.: RUSS 3A or RUSS 22B or demonstration of RUSS 3A exit skills
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B or any City College or University foreign language course.
Review of grammar and composition; reading of cultural materials; continuing practice in the use and comprehension of spoken Russian. UC/CSU
RUSS 3A+3B = RUSS 3.
Offered on occasion

RUSS 10A. Beginning Practical Spoken Russian (3)
Lec-52.5 P/NP available
Beginner's course. Extensive oral training in Russian. Emphasis on practical vocabulary and idiom rather than on formal grammar. CSU
Not recommended for native speakers of Russian.
Offered Fall semesters

RUSS 10B. Continuation of Beginning Practical Spoken Russian (3)
Lec-52.5 P/NP available
Advise: RUSS 10A or demonstration of RUSS 10A exit skills.
Second semester course. Extensive oral training in Russian. Emphasis on practical vocabulary and idiom. CSU
Native speakers of Russian are encouraged to speak with the instructor prior to enrolling.
Offered Spring semesters

RUSS 10C. Intermediate Conversational Russian (3)
Lec-52.5 P/NP available
Advise: RUSS 10B or demonstration of RUSS 10B exit skills.
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
Native speakers of Russian are encouraged to speak with the instructor prior to enrolling.
Offered on occasion

RUSS 10D. Continuation of Intermediate Conversational Russian (3)
Lec-52.5 P/NP available
Advise: RUSS 10C or demonstration of RUSS 10C exit skills.
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
Native speakers of Russian are encouraged to speak with the instructor prior to enrolling.
Offered on occasion

RUSS 15A. Advanced Russian Conversation (3)
Lec-52.5 P/NP available
Advise: RUSS 10C OR 10D or 3 or 3B or demonstration of RUSS 10C, 10D, 3, or 3B exit skills.
Advanced conversation on Russian culture and civilization. UC/CSU
RUSS 15A not prerequisite to RUSS 15B.
Offered on occasion

RUSS 15B. Advanced Russian Conversation (3)
Lec-52.5 P/NP available
Advise: RUSS 10C OR 10D or 3 or 3B or demonstration of RUSS 10C, 10D, 3, or 3B exit skills.
Advanced conversation on Russian culture and civilization. UC/CSU
RUSS 15A not prerequisite to RUSS 15B.
Offered on occasion

RUSS 16A. Advanced Conversation Through Russian Cinema (3)
Lec-52.5 P/NP available
Advise: RUSS 10D or RUSS 3 or RUSS 3B or demonstration of RUSS 10C, 10D, 3, or 3B exit skills.
Advanced conversation on Russian Cinema. Extensive oral practice of intermediate to advanced structures and vocabulary most often used in conversation and in film discussions. Designed for students who wish to acquire more advanced skills of spoken Russian. UC/CSU
Offered Fall semesters

RUSS 16B. Advanced Conversation through Contemporary Russian Cinema (3)
Lec-52.5 P/NP available
Advise: RUSS 10D or RUSS 3 or RUSS 3B or demonstration of RUSS 2B exit skills.
Advanced conversation on Russian Cinematography. Extensive oral practice of intermediate to advanced structures and vocabulary most often used in conversation and in film discussions. Designed for students who wish to acquire more advanced skills of spoken Russian. UC/CSU
Offered on occasion

RUSS 21. Elementary Russian for Bilingual Students (5)
Lec-87.5 P/NP available
Advise: Oral fluency in Russian
Beginner's course for bilingual students; elementary grammar, compositions and reading; special emphasis on the written aspect of the language. UC/CSU
RUSS 21A. Elementary Russian for Bilingual Students (3)
Lec-52.5  P/NP available
Advise: Oral fluency in Russian
Prereq.: Oral fluency in Russian or RUSS 21A+
Beginning course for bilingual students; elementary grammar, composition, and reading; special emphasis on the written aspect of the language. UC/CSU
Not recommended to students who are enrolled in or who have completed RUSS 1A+1B. Designed for bilingual students who are effective in oral communication in Russian within their communities, but who have little knowledge and/or no formal training in the written forms of the language. RUSS 21A+21B=RUSS 21
Offered Fall semesters

RUSS 21B. Elementary Russian for Bilingual Students (3)
Lec-52.5  P/NP available
Prereq.: Oral fluency in Russian or RUSS 21A
Beginning course for bilingual students; elementary grammar, composition, and reading; special emphasis on the written aspect of the language. UC/CSU
Not recommended to students who are enrolled in or who have completed RUSS 1A+1B. Designed for bilingual students who are effective in oral communication in Russian within their communities, but who have little knowledge and/or no formal training in the written forms of the language. RUSS 21A+21B=RUSS 21
Offered Fall semesters

RUSS 22. Continuation of Elementary Russian for Bilingual Students (5)
Lec-87.5  P/NP available
Prereq.: Oral fluency in Russian or RUSS 21 or 21B
Second semester course for bilingual students; continuation of elementary grammar, composition and reading; special emphasis on the written aspect of the language. UC/CSU
Not recommended to students who are enrolled in or who have completed RUSS 2 or 2A+2B. Designed for bilingual students who are effective in oral communication in Russian within their communities, but who have little knowledge and/or no formal training in the written forms of the language. RUSS 22A+22B=RUSS 22
Offered on occasion

RUSS 22B. Continuation of Elementary Russian for Bilingual Students (3)
Lec-52.5  P/NP available
Prereq.: Oral fluency in Russian or RUSS 22A
Second semester course for bilingual students, continued.
Continuation of elementary grammar, composition, and reading; special emphasis on the written aspect of the language. UC/CSU
Not recommended to students who are enrolled in or who have completed RUSS 2 or 2A+2B. Designed for bilingual students who are effective in oral communication in Russian within their communities, but who have little knowledge and/or no formal training in the written forms of the language. RUSS 22A+22B=RUSS 22
Offered on occasion

RUSS 41. Russian Culture and Civilization (3)
Lec-52.5  P/NP available
Advise: Eligible for ENGL 1A
A consideration of the major achievements of Russian culture as reflected in language, history, literature, the arts, philosophy, religion and daily life. UC/CSU
No knowledge of Russian required.
Offered on occasion

Sociology
Office: Batmale 354
Phone Number: (415) 239-3433
Web Site: www.ccsf.edu/behavior

Announcement of Curricula

Sociology Major (AA-T)
The AA-T in Sociology offers students a comprehensive lower division program in sociology. The AA-T prepares students who wish to transfer and pursue a baccalaureate degree in Sociology, particularly at California State University campuses.

Learning Outcomes
Upon completion of this program, students will be able to:

- Contrast the major contemporary theoretical perspectives in sociology.
- 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

Students who wish to earn the Associate in Arts in Sociology for Transfer (AA-T) must complete 60 CSU transferrable 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 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.

Assuming students start this AA-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.
Courses Required for the AA-T in Sociology

Course ......................................................... Units

Required core courses:
SOC 1 Introduction to Sociology ..................... 3.0
SOC 2 Social Deviance ................................. 3.0
SOC 3 Social Problems ................................ 3.0
SOC 21 Introduction to Research Methods .......... 3.0

Choose of the following statistics courses:
PSYC 5 Statistics for Behavioral Sciences .......... 5.0
ECON 5 Introductory Statistics for Economics, 5.0
Business and Social Sciences
MATH 80 Probability and Statistics ................. 4.0

Choose 1 (one) of the following courses from Group A:
SOC 2 Social Deviance ................................. 3.0
SOC 25 Sex and Gender in American Society ........ 3.0
SOC 35 Sex, Marriage and Family Relationships .... 3.0
PSYC 32 Social Psychology .......................... 3.0
IDST 37 Introduction to Ethnic Studies .............. 3.0

Choose 1 (one) of the following courses from Group B:
PSYC 1 General Psychology .......................... 3.0
ANTH 3 Introduction to Social and Cultural 3.0
Anthropology
ANTH 3C Introduction to Cultural Anthropology: Focus on 3.0
American Cultures
POLS 1 American Government ........................ 3.0
IDST 17 Human Sexuality ............................. 3.0
PSYC 23 Psychology of Race and Ethnic Relations . 3.0

Any course not taken from Group A above

Total: ......................................................... 19.0 – 20.0

Announcement of Courses

Credit, Degree Applicable Courses:
SOC 1. Introduction to Sociology (3)
Lec-52.5 P/NP available
ADVISE: ENGL 93 or ENGL 95 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
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 or sociological concepts, theories and principles. Topics include culture, socialization, organizations, deviance, stratification, institutions, population, and social change. UC/CSU
C-ID SOCI 110

SOC 2. Social Deviance and Social Issues (3)
Lec-52.5 P/NP available
The study of the nature of deviance, with special attention to the theories that underlay 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). UC/CSU
C-ID SOCI 115

SOC 3. Social Problems (3)
Lec-52.5 P/NP available
ADVISE: ENGL 93 or ENGL 95 or ENGL 88A or ESL 160 or placement in ENGL 88B or ENGL 96
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. UC/CSU
C-ID SOCI 120

SOC 21. Introduction to Research Methods (3)
Lec-52.5 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. UC/CSU
C-ID SOCI 140

SOC 25. Sex and Gender in American Society (3)
Lec-52.5 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. UC/CSU
C-ID SOCI 140

SOC 35. Sex, Marriage, and Family Relationships (3)
Lec-52.5 P/NP available
Critical exploration of the social, psychological, cultural, historical, and economic factors related to gender roles, courtship, marriage, partnership, parenting, and family patterns in U.S. society. UC/CSU
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-T)

The AA-T in Spanish offers students a solid foundation in the study of Spanish. It prepares students who wish to transfer and pursue a baccalaureate degree in Spanish, particularly at California State University campuses.

Degree Requirements. Students who wish to earn the Associate in Arts in Spanish 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 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.

Learning Outcomes

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

- Interact fluently in Spanish in a normal and spontaneous fashion at an intermediate level.
- Analyze current affairs media as well as contemporary literary prose in Spanish.
- Distinguish geography and cultural differences in the Spanish-
Courses Required for the AA-T in Spanish

Required courses:
- SPAN 1 Elementary Spanish: 3.0
- and SPAN 1A Elementary Spanish: 3.0
- or SPAN 2 Continuation of Elementary Spanish: 3.0
- or SPAN 2A Continuation of Elementary Spanish: 3.0
- and SPAN 2B Continuation of Elementary Spanish: 3.0
- and SPAN 3 Intermediate Spanish: 3.0
- or SPAN 3A Intermediate Spanish: 3.0
- and SPAN 3B Continuation of Intermediate Spanish: 3.0
- and SPAN 6 Continuation of Intermediate Spanish: 3.0
- or SPAN 6A Continuation of Intermediate Spanish: 3.0
- and SPAN 6B Continuation of Intermediate Spanish: 3.0

Choose one of the following elective courses:
- SPAN 10B Continuation of Beginning Conversational Spanish: 3.0
- SPAN 10C Intermediate Conversational Spanish: 3.0
- SPAN 10D Continuation of Intermediate Conversational Spanish: 3.0
- SPAN 7 Intro. to Literature in Spanish: 3.0
- SPAN 5 Advanced Spanish: Hispanic Culture and Civilization: 3.0
- SPAN 5S Advanced Spanish: Hispanic Culture and Civilization: 3.0
- SPAN 22A Grammar Review and Composition: 3.0
- SPAN 22B Grammar Review and Composition: 3.0
- SPAN 41 Culture and Civilization of Spain: 3.0

OPTION 2: SPANISH HERITAGE SPEAKERS

Required courses:
- SPAN 3A Intermediate Spanish for Bilingual Students: 3.0
- and SPAN 3B Intermediate Spanish for Bilingual Students: 3.0
- and SPAN 3C Continuation of Intermediate Spanish for Bilingual Students: 3.0

Choose one of the following LIST A elective courses:
- SPAN 5 Advanced Spanish: Hispanic Culture and Civilization: 3.0
- SPAN 5S Advanced Spanish: Hispanic Culture and Civilization: 3.0
- SPAN 7 Intro. to Literature in Spanish: 3.0
- SPAN 41 Culture and Civilization of Spain: 3.0

Choose 2 of the following LIST B elective courses:
- ANTH 11 Latin American Cultures and Societies: 3.0
- ART 105 Ancient Art and Architecture of Latin America: 3.0
- ART 106 Latin American Art History: 3.0
- LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States: 3.0
- LALS 9/ LGBT 9 ’The Latin American and Latina/o LGBT Experience: 3.0
- LALS 10 Latinas in the U.S./ VOCES: 3.0
- LALS 14 Diego Rivera; Art and Social Change in Latin America: 3.0
- HIST 18A The Colonial History of Latin America: 3.0
- HIST 18B History of Latin America: 3.0
- HIST 20 History of Mexico: 3.0
- MUS 25 Music of Latin America and the Caribbean: 3.0

Total: 21.0 – 27.0

Spanish Major (AA)

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.

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 program, students will be able to:
- Communicate in Spanish at a level of proficiency necessary to perform successfully in upper-division course work.
- Communicate in Spanish at a level of proficiency necessary to perform successfully in upper-division course work.
- Analyze publications and current affairs media as well as contemporary literary prose in Spanish.
- Describe geographic and cultural differences in the Spanish-speaking world.
- Perform successfully in upper-division course work.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Major in Spanish

Choose 12 units from the following core courses:
- SPAN 2 Continuation of Elementary Spanish: 5.0
- or SPAN 2A Continuation of Elementary Spanish: 3.0
- and SPAN 2B Continuation of Elementary Spanish: 3.0
- and SPAN 3 Intermediate Spanish: 5.0
- or SPAN 3A Intermediate Spanish: 3.0
- and SPAN 3B Continuation of Intermediate Spanish: 3.0
- and SPAN 6 Continuation of Intermediate Spanish: 5.0
- or SPAN 6A Continuation of Intermediate Spanish: 3.0
- and SPAN 6B Continuation of Intermediate Spanish: 3.0
- SPAN 7 Intro. to Literature in Spanish: 3.0
Spanish Certificate

The Certificate of Accomplishment in Spanish provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. Each course must be completed with a final grade of C or higher or Pass.

Learning Outcomes

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

- Interpret the main points of standard spoken Spanish relating to everyday matters.
- Translate texts which consist mainly of high-frequency everyday or job-related Spanish.
- Manage commonly encountered situations while traveling in an area where Spanish is spoken.
- Write simple connected text on topics which are familiar or of personal interest.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Certificate of Accomplishment in Spanish

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>SPAN 1 Elementary Spanish</td>
<td>5.0</td>
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<tr>
<td>or SPAN 1A Elementary Spanish</td>
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<tr>
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<td>or SPAN 31A Intermediate Spanish for Bilingual Students</td>
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Choose an additional six (6) units from the following elective courses:

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<tr>
<td>SPAN 10A Beginning Conversational Spanish</td>
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<td>SPAN 10B Continuation of Beginning Conversational Spanish</td>
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<tr>
<td>SPAN 10C Intermediate Conversational Spanish</td>
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</tr>
<tr>
<td>SPAN 10D Continuation of Intermediate Conversational Spanish</td>
<td>3.0</td>
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<tr>
<td>SPAN 5 Advanced Spanish: Hispanic Culture and Civilization</td>
<td>3.0</td>
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<tr>
<td>or SPAN 5S Advanced Spanish: Hispanic Culture and Civilization</td>
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</tr>
<tr>
<td>SPAN 41 Culture and Civilization of Spain</td>
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</tr>
</tbody>
</table>

Total: 18.0

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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>SPAN 1. Elementary Spanish (5)</td>
<td>5</td>
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<tr>
<td>Lec-87.5</td>
<td></td>
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<tr>
<td>P/NP available</td>
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<tr>
<td>ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in English 96 or ENGL 88B or any City College or University foreign language course</td>
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<tr>
<td>Beginner's course. Grammar, composition and reading. Practice in speaking and understanding Spanish. UC/CSU</td>
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<tr>
<td>C-ID SPAN 100</td>
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<tr>
<td>SPAN 1A. Elementary Spanish (3)</td>
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<tr>
<td>Lec-52.5</td>
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<tr>
<td>P/NP available</td>
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<tr>
<td>Beginner's course in grammar, composition and reading. Practice in speaking and understanding Spanish. UC/CSU</td>
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<tr>
<td>C-ID SPAN 100 (SPAN 1A + SPAN 1B)</td>
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<td>SPAN 1A+1B = SPAN 1</td>
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<td>SPAN 2. Continuation of Elementary Spanish (5)</td>
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<td>Lec-87.5</td>
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<tr>
<td>ADVISE: SPAN 1A or demonstration of SPAN 1A exit skills</td>
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<tr>
<td>ADVISE: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in English 96 or ENGL 88B or any City College or University foreign language course</td>
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</tr>
<tr>
<td>Beginner's course in grammar, composition and reading. Practice in speaking and understanding Spanish. UC/CSU</td>
<td></td>
</tr>
<tr>
<td>C-ID SPAN 100 (SPAN 1A + SPAN 1B)</td>
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<tr>
<td>SPAN 1A+1B = SPAN 1</td>
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</tbody>
</table>
SPAN 2A. Continuation of Elementary Spanish (3)
Lec-52.5 P/NP available
Prereq.: SPAN 1 or 1B or demonstration of SPAN 1/1B exit skills.
Completion of elementary grammar, composition and reading; continued practice in speaking and understanding Spanish. Continued introduction to Spanish-speaking cultures. UC/CSU
C-ID SPAN 110 (SPAN 2A + SPAN 2B)
SPAN 2A+2B=SPAN 2

SPAN 2B. Continuation of Elementary Spanish (3)
Lec-52.5 P/NP available
Prereq.: SPAN 2A or demonstration of SPAN 2A exit skills.
Completion of elementary grammar, composition and reading; continued practice in speaking and understanding Spanish. Continued introduction to Spanish-speaking cultures. UC/CSU
C-ID SPAN 110 (SPAN 2A + SPAN 2B)
SPAN 2A+2B=SPAN 2

SPAN 3. Intermediate Spanish (5)
Lec-87.5 P/NP available
Prereq.: SPAN 2 or 2B or demonstration of SPAN 2/2B 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. UC/CSU
C-ID SPAN 200

SPAN 3A. Intermediate Spanish (3)
Lec-52.5 P/NP available
Prereq.: SPAN 2 or SPAN 2B or demonstration of SPAN 2A exit skills. Intensive review of grammar, composition, and culture at the intermediate level. Designed for students who need reinforcement and expansion of the structures of the Spanish language. Conducted in Spanish. UC/CSU
C-ID SPAN 200 (SPAN 3A + SPAN 3B)
SPAN 3A NOT PREREQUISITE TO SPAN 3B. SPAN 3A+3B=SPAN 3

SPAN 3B. Intermediate Spanish (3)
Lec-52.5 P/NP available
Prereq.: SPAN 2 or SPAN 2B or demonstration of SPAN 2/2B 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. UC/CSU
C-ID SPAN 200 (SPAN 3A + SPAN 3B)
SPAN 3A NOT PREREQUISITE TO SPAN 3B. SPAN 3A+3B=SPAN 3

SPAN 4. Advanced Spanish: Hispanic Culture and Civilization (3)
Lec-52.5 P/NP available
Prereq.: SPAN 2 or SPAN 2B or demonstration of SPAN 2 or 2B 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. UC/CSU
C-ID SPAN 210
SPAN 4 = SPAN 4A + SPAN 4B
SPAN 4A and 4B do not need to be taken consecutively.
Offered Fall semesters

SPAN 5. Advanced Spanish: Hispanic Culture and Civilization (3)
Lec-52.5 P/NP available
Prereq.: SPAN 2 or SPAN 2B or demonstration of SPAN 2 or 2B 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. UC/CSU
C-ID SPAN 210
SPAN 5 = SPAN 5A + SPAN 5B
SPAN 5A and 5B do not need to be taken consecutively.
Offered Spring semesters

SPAN 6. Continuation of Intermediate Spanish (5)
Lec-87.5 P/NP available
Prereq.: SPAN 3 or SPAN 3B or demonstration of SPAN 3 or 3B 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. UC/CSU
C-ID SPAN 210
SPAN 6 = SPAN 6A + SPAN 6B
Offered on occasion

SPAN 6A. Continuation of Intermediate Spanish (3)
Lec-52.5 P/NP available
Prereq.: SPAN 3 or SPAN 3B or demonstration of SPAN 3 or 3B exit skills; equivalent course work. 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. UC/CSU
C-ID SPAN 210
SPAN 6A and 6B do not need to be taken consecutively.
Offered Spring semesters

SPAN 6B. Continuation of Intermediate Spanish (3)
Lec-52.5 P/NP available
Prereq.: SPAN 3 or SPAN 3B; Exit skills of SPAN 3 or 3B. Advise: SPAN 6A. 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. UC/CSU
C-ID SPAN 210
SPAN 6A and 6B do not need to be taken consecutively.
Offered Fall semesters

SPAN 7. Introduction to Literature in Spanish (3)
Lec-52.5 P/NP available
Prereq.: SPAN 6 or SPAN 6B or demonstration of exit skills. Readings of literary and cultural selections; compositions; review of selected grammar. UC/CSU
Offered on occasion
SPAN 10A. Beginning Conversational Spanish (3)
Lec-52.5 P/NP available
ADVISE: CONCURRENT ENROLLMENT IN SPAN 1, 1A, OR 1B.
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
NOT RECOMMENDED TO NATIVE SPEAKERS OF SPANISH

SPAN 10B. Continuation of Beginning Conversational Spanish (3)
Lec-52.5 P/NP available
ADVISE: SPAN 2 OR SPAN 2A OR SPAN 2B OR SPAN 10A
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
NOT RECOMMENDED TO NATIVE SPEAKERS OF SPANISH

SPAN 10C. Intermediate Conversational Spanish (3)
Lec-52.5 P/NP available
ADVISE: SPAN 10B OR DEMONSTRATION OF SPAN 10B EXIT SKILLS;
Extensive oral practice of structures and vocabulary most often used in conversation at the intermediate high level and study of aspects of the Spanish-speaking world. Elective for Spanish Major and Certificate. CSU
OFFERED ON OCCASION

SPAN 10D. Continuation of Intermediate Conversational Spanish (3)
Lec-52.5 P/NP available
ADVISE: SPAN 10C OR DEMONSTRATION OF EXIT SKILLS
Extensive oral practice of structures and vocabulary most often used in conversation at the intermediate high level. Study of life and culture through contemporary films in Spanish. Designed for students who wish to acquire more advanced skills of spoken Spanish. CSU
NOT RECOMMENDED TO NATIVE SPEAKERS OF SPANISH
OFFERED ON OCCASION

SPAN 22A. Grammar Review and Composition (3)
Lec-52.5 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. UC/CSU
OFFERED ON OCCASION

SPAN 22B. Grammar Review and Composition (3)
Lec-52.5 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. UC/CSU
OFFERED ON OCCASION

SPAN 31A. Intermediate Spanish for Bilingual Students (3)
Lec-52.5 P/NP available
ADVISE: MUST COMMUNICATE FLUENTLY WITH EASE IN SPANISH
Designed for bilingual/heritage students who are effective in oral communication in Spanish within their communities, but have little formal training in written forms of the language. Intensive review of grammar, composition and translation. Emphasis on increasing vocabulary, avoiding English interference, and improving reading and writing skills through short essays and guided compositions. UC/CSU
C-ID SPAN 220 (SPAN 31A + SPAN 31B)
SPAN 31A+31B = SPAN 31

SPAN 31B. Intermediate Spanish for Bilingual Students (3)
Lec-52.5 P/NP available
ADVISE: ORAL FLUENCY IN SPANISH
Intensive review of grammar. Composition and translation. Vocabulary, avoiding false cognates, reading and writing skills. Designed for bilingual students who effective in oral communication in Spanish but with little knowledge in written Spanish. UC/CSU
C-ID SPAN 220 (SPAN 31A + SPAN 31B)
SPAN 31A+31B = SPAN 31
OFFERED SPRING SEMESTERS

SPAN 32A. Intermediate Spanish for Bilingual Students (3)
Lec-52.5 P/NP available
PREREQ: SPAN 31 OR 31B OR DEMONSTRATION OF EXIT SKILLS
Continued intensive review of grammar, composition, translation. Emphasizes increasing vocabulary, avoiding false cognates, developing reading, writing skills. Emphasis on developing advanced academic sentence structure in Spanish, and study of culture of the Spanish-speaking world. Designed for bilingual/heritage students possessing effective oral communication in Spanish, but with little knowledge or formal training in written forms of Spanish. UC/CSU
C-ID SPAN 230 (SPAN 32A + SPAN 32B)
OFFERED ON OCCASION

SPAN 32B. Intermediate Spanish for Bilingual Students (3)
Lec-52.5 P/NP available
PREREQ: SPAN 31 OR 31B OR DEMONSTRATION OF EXIT SKILLS
Further continued intensive review of grammar, composition, translation. Emphasizes increasing vocabulary, avoiding false cognates, developing reading, writing skills. Focus on developing advanced academic sentence structure in Spanish, and expanded study of culture of the Spanish-speaking world. Designed for bilingual/heritage students possessing effective oral communication in Spanish, but with little knowledge or formal training in written forms of Spanish. UC/CSU
C-ID SPAN 230 (SPAN 32A + SPAN 32B)
OFFERED ON OCCASION

SPAN 41. Culture and Civilization of Spain (3)
Lec-52.5 P/NP available
ADVISE: ENGL 96 OR ENGL 88 OR ENGL 88B OR PLACEMENT IN ENGL 1A
Aspects of the culture of Spain as reflected in its geography, history, politics, the arts, and religion, from its beginnings to the Franco era. Course will be taught in English. UC/CSU
NO KNOWLEDGE OF SPANISH REQUIRED.

Theatre Arts
Office: Art 149
Phone Number: (415) 239-3132
Web Site: www.ccsf.edu/theatre

Announcement of Curricula
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.

Theatre Arts Major (AA-T)

The AA-T in Theatre Arts offers students a comprehensive lower division program in Theatre revolving around a basic core program. The AA-T prepares students for transfer to upper division theatre programs at four-year colleges and universities, particularly to California State University (CSU) campuses.

Learning Outcomes

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

• Analyze aspects of acting, including physical, vocal, imaginative, analytic and emotional levels
• Compare and contrast theatrical periods and styles of acting, directing, playwriting and technical elements
• Analyze theatre as a dynamic art form influencing society
• Apply technical processes, including lighting, set and costume and/or make-up design as they pertain to a given dramatic script
• Meet the academic requirements and skills in performance and/or technical production to perform successfully in upper division courses

Degree Requirements: Students who wish to earn the AA-T in Theatre Arts 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 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.

Assuming students start this AA-T with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the AA-T in Theatre Arts

Course ............................................. Units

Required core courses:
TH A 30 Introduction to Theatre ................. 3.0
TH A 150A Beginning Acting Fundamentals ........... 3.0

Choose 3 units from Group 1 or 3 units from Group 2 courses:
Group 1: Play Rehearsal and Presentation
TH A 201A Ensemble Role Comedy Play Rehearsal and Presentation .................... 1.0
TH A 201B Supporting Role Comedy Play Rehearsal Presentation ................. 2.0
TH A 201C Principal Role Comedy Play Rehearsal and Presentation .................... 3.0
TH A 202A Ensemble Role Drama Play Rehearsal and Presentation .................... 1.0
TH A 202B Supporting Role Drama Play Rehearsal and Presentation .................... 2.0
TH A 202C Principal Role Drama Play Rehearsal and Presentation .................... 3.0

Group 2: Technical Theatre Production
TH A 60 Stagecraft ...................................... 3.0
TH A 71 Intro to Make-up and Costume Design ......................... 3.0
TH A 72 Intermediate Costume and Makeup .................... 3.0
TH A 63 Introduction to Lighting Design .................... 4.0
TH A 154A Beginning Acting For The Camera ................. 3.0
TH A 150B Intermediate Acting Fundamentals ........... 3.0

Choose 9 units from the following elective courses:
TH A 150A Beginning Acting Fundamentals ........ 3.0
TH A 203A Ensemble Role Classical Play Rehearsal Presentation .................... 2.0
TH A 204A Ensemble Role Tragedy Play Rehearsal Presentation .................... 1.0
TH A 204B Supporting Role Tragedy Play Rehearsal and Presentation .................... 2.0
TH A 204C Principal Role Tragedy Play Rehearsal and Presentation .................... 3.0

Total: ............................................. 18.0

Acting Foundations Certificate

The Certificate of Accomplishment in Acting Foundations provides students with the fundamental skills necessary to audition for and perform in a variety of professional environments. Students study characterization, vocal and physical development, and acting styles for the stage, which can be applied to film and television work.

Learning Outcomes

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

• Perform practical aspects of acting, including physical, vocal, imaginative, analytic and emotional levels
• Compare and contrast theatrical periods and styles of acting
• Perform special acting styles including Shakespearean and acting for the camera.
• Use fundamental techniques of voice and actor’s craft to audition for a production

Students must complete each course with a grade of C or higher. Where applicable, grades of Pass may be used.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Certificate of Accomplishment in Acting Foundations

Course ............................................. Units

Required courses:
TH A 150A Beginning Acting Fundamentals ........ 3.0
TH A 154A Beginning Acting For The Camera ........ 4.0
TH A 160A Beginning Vocal Production and Audition ........ 3.0
TH A 170A Beginning Shakespeare for Actors ........ 3.0
Choose 3 units from the following elective courses:

TH A 201A Ensemble Role Comedy Play Rehearsal and Presentation............................................. 1.0
TH A 201B Supporting Role Comedy Play Rehearsal and Presentation.......................................... 2.0
TH A 201C Principal Role Comedy Play Rehearsal and Presentation................................................ 3.0
TH A 202A Ensemble Role Drama Play Rehearsal and Presentation.................................................. 1.0
TH A 202B Supporting Role Drama Play Rehearsal and Presentation.............................................. 2.0
TH A 202C Principal Role Drama Play Rehearsal and Presentation................................................... 3.0
TH A 203A Ensemble Role Classical Play Rehearsal and Presentation............................................. 1.0
TH A 203B Supporting Role Classic Play Rehearsal and Presentation.............................................. 2.0
TH A 203C Principal Role Classic Play Rehearsal and Presentation................................................... 3.0
TH A 204A Ensemble Role Tragedy Play Rehearsal and Presentation................................................ 1.0
TH A 204B Supporting Role Tragedy Play Rehearsal and Presentation............................................. 2.0
TH A 204C Principal Role Tragedy Play Rehearsal and Presentation.................................................. 3.0
TH A 171A Beginning Storytelling and Performance............................................................ 3.0
TH A 153A Beginning Improvisation........................................................................................................... 3.0
Total: .............................................................................................................................................. 16.0

Announcement of Courses

Credit, Degree Applicable Courses:
TH A 30. Introduction to Theatre (3)
Lec-52.5
This course focuses on the relationship of theatre to various cultures throughout history, and on the contributions of significant individual artists. This course introduces students to elements of the production process including playwriting, acting, directing, design and criticism. Different periods, styles and genres will be surveyed. UC/CSU
C-ID THTR III

TH A 31. Survey of Classical Drama (3)
Lec-52.5
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. UC/CSU
Offered Spring Semesters

TH A 32. Survey of Modern Drama (3)
Lec-52.5
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. UC/CSU

TH A 33. Survey of the Art of Comedy (3)
Lec-52.5
Advis: ENGL 96 or ENGL 88 or ENGL 88B or Placement in ENGL 1A
Historical analysis of Comedy in its many forms, its performances and literature presented on stage resulting in laughter. Lectures, readings, viewings and discussions of comedic performances and literature from the mimes of ancient Greece through Shakespeare, commedia dell’arte, stand up, improvisational and musical comedy of present day. UC/CSU

TH A 61. Technical Theatre Production (1-3)
Work-60 to 225 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. UC/CSU
C-ID THTR 192

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-35, Lab-70, field trips P/NP available
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. UC/CSU
C-ID THTR 171

Set Design
TH A 62. Introduction to Stage Design (3)
Lec-52.5 P/NP available
Introduction to the basic techniques used in stage design for live performance with emphasis on the art of scenic design, through drafting techniques, model making, ground plans, as well as script analysis for the practical application of these skills. UC/CSU
Offered on Occasion

Lighting Design
TH A 63. Introduction to Lighting Design (4)
Lec-52.5, Lab-52.5 P/NP available
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, safety and uses, drafting techniques as well as color theory for the practical application of these concepts. CSU
C-ID THTR 173
Offered on Occasion

Make up and Costume
TH A 71. Introduction to Make-up and Costume Design (3)
Lec-35, Lab-70 P/NP available
Introduction to the study of facial and body anatomy, facial design, make-up material, construction and decorative materials for costume,
laboratory/shop practice and participation in theatre productions. UC/CSU
C-ID THTR 174 (TH A 71 + TH A 72); C-ID THTR 175 (TH A 71 + TH A 72)
Formerly TH A 3A

TH A 72. Intermediate Make-up and Costume Design (3)
Lec-35, Lab-70 P/NP available
Prereq.: TH A 71
Intermediate level study of facial and body anatomy, facial design, make-up material, construction and decorative materials for costume, laboratory/shop practice and management of theatre productions. UC/CSU
C-ID THTR 174 (TH A 71 + TH A 72); C-ID THTR 175 (TH A 71 + TH A 72)
Formerly TH A 3B

TH A 73. Advanced Make-up and Costume Design (3)
Lec-35, Lab-70 P/NP available
Prereq.: TH A 72
Advanced study and practical experience of facial and body anatomy, facial design, make-up material, construction and decorative materials for costume, laboratory/shop practice and participation in theatre productions. UC/CSU
Formerly TH A 3C

Directing for the Theatre
TH A 107A. Introduction to Directing for the Theatre (3)
Lec-52.5
Introductory-level examination of the function of a stage director and the techniques of stage direction with application through practical experiences focusing on scene-work. UC/CSU
Formerly TH A 107
Offered on occasion

TH A 107B. Intermediate Directing for the Theatre (3)
Lec-52.5
Prereq.: TH A 107A
Intermediate-level examination of the function of a stage director and the techniques of stage direction with application through practical experiences focusing on one-act plays. UC/CSU
Offered on occasion

TH A 107C. Advanced Directing for the Theatre (3)
Lec-52.5
Prereq.: TH A 107B
Advanced-level examination of the function of a stage director and the techniques of stage direction with application through practical experiences focusing on a full-length play. UC/CSU
Offered on occasion

Acting Fundamentals
TH A 150A. Beginning Acting Fundamentals (3)
Lec-52.5
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. UC/CSU
C-ID THTR 151
Formerly TH A 150

TH A 150B. Intermediate Acting Fundamentals (3)
Lec-52.5
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. UC/CSU
C-ID THTR 152

TH A 150C. Advanced Acting Fundamentals (3)
Lec-52.5, field trips
Prereq.: TH A 150B
Advanced level examination, practice and execution of the fundamentals of acting. The focus on mastering staging techniques, improvisation, theatre games, stage movement, and acting terminology. Classroom preparation and presentation of monologues and ensemble work at an advanced level. UC/CSU

Scene Study
TH A 151A. Beginning Character Development and Scene Study (3)
Lec-52.5
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. UC/CSU
Formerly TH A 151
Offered on occasion

TH A 151B. Intermediate Character Development and Scene Study (3)
Lec-52.5
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. UC/CSU
Offered on occasion

TH A 151C. Advanced Character Development and Scene Study (3)
Lec-52.5
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.” UC/CSU
Offered on occasion

Performance Project
TH A 152A. Performance Projects: Student Original Works (3)
Lec-52.5
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. UC/CSU
Offered on occasion
TH A 152B. Performance Projects: Unpublished Plays (3)
Lec-52.5
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. UC/CSU
Offered on occasion

TH A 152C. Performance Projects: Contemporary Plays (3)
Lec-52.5
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. UC/CSU
Offered on occasion

Physical Theatre
TH A 153A. Beginning Improvisation (3)
Lec-52.5
Advise: ENGL 91 or ENGL 86 or ESL 160 or placement in ENGL 88
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. UC/CSU
Formerly TH A 153

TH A 153B. Intermediate Improvisation (3)
Lec-52.5
Prereq.: TH A 153A
Intermediate-level instruction in the acting skill of creating characters through original and spontaneous material developed by performers for presentation through techniques of improvisation and scenario. Focus on actor's improvised communication and character relationships. UC/CSU

TH A 153C. Advanced Improvisation (3)
Lec-52.5
Prereq.: TH A 153B
Advanced-level instruction in the acting skill of creating characters through original and spontaneous material developed 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. UC/CSU

TH A 154A. Beginning Acting For The Camera (4)
Lec-52.5, Lab-60
Advise: ENGL 91 or ENGL 86 or ESL 160 or placement in ENGL 88
Beginning level development of performance skills for video, film and electronic media applications with emphasis on identifying and defining an on-camera persona in a production context. UC/CSU
Formerly TH A 154

TH A 154B. Intermediate Acting For The Camera (4)
Lec-52.5, Lab-60
Prereq.: TH A 154A
Advise: ENGL 86 or ENGL 91 or ESL 160 or placement in ENGL 88
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. UC/CSU

TH A 154C. Advanced Acting For The Camera (4)
Lec-52.5, Lab-60
Prereq.: TH A 154B
Advise: ENGL 91 or ENGL 86 or ESL 160 or placement in ENGL 88
Advanced-level development of performing skills for video, film and electronic media applications with emphasis on application of practical skills to transition to a professional environment. UC/CSU

TH A 162A. Beginning Physical Comedy, Masks and Clowning (3)
Lec-52.5
Prereq.: TH A 150A
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. UC/CSU
Offered on occasion

TH A 162B. Intermediate Physical Comedy, Masks and Clowning (3)
Lec-52.5
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
Offered on occasion

TH A 162C. Advanced Physical Comedy, Masks and Clowing (3)
Lec-52.5
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
Offered on occasion

Acting in Media
TH A 166A. Beginning Performance Art: New Media Workshop (4)
Lec-52.5, Lab-52.5
Prereq.: TH A 153
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. UC/CSU
Formerly TH A 166
Offered on occasion

TH A 166B. Intermediate Performance Art: New Media Workshop (4)
Lec-52.5, Lab-52.5
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
Offered on occasion

TH A 166C. Advanced Performance Art: New Media Workshop (4)
Lec-52.5, Lab-52.5
Prereq.: TH A 166B
Advanced level development of performance art pieces integrating state-of-the-art digital art, computer software used for theatrical and
Vocal Production and Audition
TH A 160A. Beginning Vocal Production and Audition (3)
Lec-52.5
Advise: ENGL 91 or ENGL 86 or ESL 160 or Placement in ENGL 88
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. UC/CSU
Formerly TH A 160
Offered Spring semesters

TH A 160B. Intermediate Vocal Production and Audition (3)
Lec-52.5
Prereq.: TH A 160A
Intermediate instruction in the study of the anatomy of the vocal mechanism. Practice transcription of sounds into International Phonetics for voice and articulation with an emphasis on Standard American English for the stage, and to develop the actor's process in preparation for performance and selection of materials for various audition settings. CSU
Offered Spring semesters

TH A 160C. Advanced-Intermediate Vocal Production and Audition (3)
Lec-52.5
Prereq.: TH A 160B
Advanced-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 and selection of materials in various audition settings. CSU
Offered Spring semesters

TH A 160D. Advanced Vocal Production and Audition (3)
Lec-52.5
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
Offered Spring semesters

Shakespeare for Actors
TH A 170A. Beginning Shakespeare for Actors (3)
Lec-52.5
Advise: TH A 150A and ENGL 91 or ENGL 86 or ESL 160 or Placement in ENGL 88
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. UC/CSU
Offered Fall semesters

TH A 170B. Intermediate Shakespeare for Actors (3)
Lec-52.5
Prereq.: TH A 170A
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 and developing the use of Standard American Speech in order to perform William Shakespeare's canon for an American audience. UC/CSU
Offered Fall semesters

TH A 170C. Advanced Intermediate Shakespeare for Actors (3)
Lec-52.5
Prereq.: TH A 170B
Advanced intermediate 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 "Comic" or "Romance" plays. UC/CSU
Offered Fall semesters

TH A 170D. Advanced Shakespeare for Actors (3)
Lec-52.5
Prereq.: TH A 170C
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" or "Historic" plays. UC/CSU
Offered Fall semesters

Performing Storytelling
TH A 171A. Beginning Storytelling and Performance (3)
Lec-52.5, field trips
Advise: ENGL 91 or ENGL 86 or ESL 160 or Placement in : ENGL 88
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. UC/CSU
Offered Fall semesters

TH A 171B. Intermediate Storytelling and Performance (3)
Lec-52.5, field trips
Prereq.: TH A 171A
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. UC/CSU
Offered Fall semesters

TH A 171C. Advanced Intermediate Storytelling and Performance (3)
Lec-52.5, field trips
Prereq.: TH A 171B
Advanced intermediate level instruction in the acting skill of editing for the presentation of stories through performance exercises, improvisations, and the use of material from holiday tales and creation mythology, focusing on production of a public performance. UC/CSU
Offered Fall semesters
TH A 171D. Advanced Storytelling and Performance (3)  
Lec-52.5, field trips  
Prereq: TH A 171C  
Advanced level instruction in the acting skill of storytelling. Focus on individual skill through performance exercises, improvisations, writing of original work. Uses the literature of folklore, myth, and monologue, focusing on narrative, creation of character and characters' narrative monologues. UC/CSU  
Offered on occasion

Drama-Play Rehearsal and Performance  
TH A 201A. Ensemble Role Drama-Play Rehearsal and Presentation (1)  
Lab-52.5  
Prereq: Limitation on enrollment - by audition/interview  
Ensemble role preparation and interpretive training process at a basic level as an introduction to theatrical performances of a comic play presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform in a "Drama" in order to receive credit. UC/CSU  
Offered on occasion

TH A 201B. Supporting Role Drama-Play Rehearsal Presentation (2)  
Lab-105  
Prereq: Limitation on enrollment - by audition/interview  
Supporting role preparation and interpretive training process at an intermediate level in order to perform in a theatrical performances of a comic play presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform a supporting role in a "Drama" in order to receive credit. UC/CSU  
Offered on occasion

TH A 201C. Principal Role Drama-Play Rehearsal and Presentation (3)  
Lab-157.5  
Prereq: Limitation on enrollment - by audition/interview  
Principal (leading) role preparation and interpretive training process at an intensive level in order to perform in theatrical performances of a "Drama" presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform a principal role in a "Drama" in order to receive credit. UC/CSU  
Offered on occasion

Comedy-Play Rehearsal and Performance  
TH A 202A. Ensemble Role Comedy-Play Rehearsal and Presentation (1)  
Lab-52.5  
Prereq: Limitation on enrollment - by audition/interview  
Ensemble role preparation and interpretive training process at a basic level as an introduction to theatrical performances of a comic play presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform in a "Comedy" in order to receive credit. UC/CSU  
Offered on occasion

TH A 202B. Supporting Role Comedy-Play Rehearsal Presentation (2)  
Lab-105  
Prereq: Limitation on enrollment - by audition/interview  
Supporting role preparation and interpretive training process at an intermediate level in order to perform in a theatrical performances of a "Comedy" presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform a supporting role in a "Comedy" in order to receive credit. UC/CSU  
Offered on occasion

TH A 202C. Principal Role Comedy-Play Rehearsal and Presentation (3)  
Lab-157.5  
Prereq: Limitation on enrollment - by audition/interview  
Principal (leading) role preparation and interpretive training process at an intensive level in order to perform in theatrical performances of a "Comedy" presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform a principal role in a "Comedy" in order to receive credit. UC/CSU  
Offered on occasion

Classical-Play Rehearsal and Performance  
TH A 203A. Ensemble Role Classical-Play Rehearsal and Presentation (1)  
Lab-52.5  
Prereq: Limitation on enrollment - by audition/interview  
Ensemble role preparation and interpretive training process at a basic level as an introduction to theatrical performances of a "Classical" presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform in a "Classical" play in order to receive credit. UC/CSU  
Offered on occasion

TH A 203B. Supporting Role Classical-Play Rehearsal and Presentation (2)  
Lab-105  
Prereq: Limitation on enrollment - by audition/interview  
Supporting role preparation and interpretive training process at an intermediate level in order to perform in theatrical performances of a "Classical" presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform a supporting role in a "Classical" in order to receive credit. UC/CSU  
Offered on occasion

TH A 203C. Principal Role Classical-Play Rehearsal and Presentation (3)  
Lab-157.5  
Prereq: Limitation on enrollment - by audition/interview  
Principal (leading) role preparation and interpretive training process at an intensive level in order to perform in theatrical performances of a "Classical" presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform a principal role in a "Classical" in order to receive credit. UC/CSU  
Offered on occasion

Tragedy-Play Rehearsal and Performance  
TH A 204A. Ensemble Role Tragedy-Play Rehearsal and Presentation (1)  
Lab-52.5  
Prereq: Limitation on enrollment - by audition/interview  
Ensemble role preparation and interpretive training process at a basic level as an introduction to theatrical performances of a "Tragedy" presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform a supporting role in a "Tragedy" in order to receive credit. UC/CSU  
Offered on occasion

TH A 204B. Supporting Role Tragedy-Play Rehearsal and Presentation (2)  
Lab-105  
Prereq: Limitation on enrollment - by audition/interview  
Supporting role preparation and interpretive training process at an intermediate level in order to perform in theatrical performances of a "Tragedy" presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform a supporting role in a "Tragedy" in order to receive credit. UC/CSU  
Offered on occasion

TH A 204C. Principal Role Tragedy-Play Rehearsal and Presentation (3)  
Lab-157.5  
Prereq: Limitation on enrollment - by audition/interview  
Principal (leading) role preparation and interpretive training process at an intensive level in order to perform in theatrical performances of a "Tragedy" presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform a principal role in a "Tragedy" in order to receive credit. UC/CSU  
Offered on occasion
TH A 204B. Supporting Role Tragedy-Play Rehearsal and Presentation (2)
Lec-52.5, Lab-105
Prereq: Limitation on enrollment - by audition/interview
Supporting role preparation and interpretive training process at an intermediate level in order to perform in a theatrical performances of a “Tragedy” presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform a supporting role in a “Tragedy” in order to receive credit. UC/CSU
Offered Spring semesters

TH A 204C. Principal Role Tragedy-Play Rehearsal and Presentation (3)
Lec-167.5, Lab-105
Prereq: Limitation on enrollment - by audition/interview
Principal (leading) role preparation and interpretive training process at an intensive level in order to perform in a theatrical performances of a “Tragedy” presentation in a Theatre Arts Department production. Students must audition for, be cast in, rehearse and perform a principal role in a “Tragedy” in order to receive credit. UC/CSU
Offered Spring semesters

Related Courses:
BCST 115. Announcing and Performance (3)
Lec-52.5
Advise: BCST 120
Introduction to basic theory and practice in interpretation of copy, pronunciation, and announcer’s duties for radio, television, cable and webcast. Study and practice of oral skills for effective communication of meaning in scripts, newscasts and commercial messages with emphasis on development of voice, articulation and pronunciation. CSU

CMST 38. Forensics Competition (3)
Lec-52.5, Lab-17.5, field trips
P/NP available
Advise: CMST 1A or CMST 3 or CMST 4 or ESL 79
Students can repeat three times (total 4 enrollments)
Students develop speaking and argumentation skills, specializing in one or more of the following areas: oral interpretation of literature, debate, platform speaking or limited preparation speaking. Students who repeat the course master communication skills through further instruction and practice. Participation in tournament, campus or community presentations is required. CSU
Formerly SPCH 38.

Trade Skills
See Automotive/Motorcycle, Construction, and Building Maintenance.

Transitional Studies
Office: Mission Center
Phone Number: (415) 920-6131
Web Site: www.ccsf.edu/TRST

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 and/or HiSET (High School Equivalency Test); 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 studying for the high school equivalency tests in Spanish are required to be fluent and literate in Spanish.

Offered at the following centers:
John Adams Center (Kate Gougoutas) . . . . . . (415) 561-1013
Adult Learning Center (Diane Fredericks) . . (415) 561-1871
Mission Center (Julita McNichol) . . . . . . . . . (415) 920-6043

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 three ways: by completing course work, by earning 12.5 points for each GED subtest and 10 points for each HiSet subtest that the students successfully passes.

The 2014 General Educational Development (GED) Test is administered on a computer at Mission Center 1125 Valencia which is an authorized Pearson VUE Testing Center. Currently, the GED Test is given in English or Spanish.

The GED test will be about 7.5 hours long with the timing for each module as follows:
- Reasoning through Language Arts is 150 minutes (including a 10-minute break)
- Mathematical Reasoning is 115 minutes
- Science is 90 minutes
- Social Studies is 90 minutes

HiSET Test Definition
The High School Equivalency Test (HiSET) exam is the new alternative to the GED test, and can help you achieve the important state-issued high school equivalency credential. The HiSET exam has also been aligned to the Office of Vocational and Adult Education (OVAE) College and Career Readiness (CCR) Standards for Adult Education that were released in April 2013. The HiSET diploma/certificate is
Upon completion of this program, students will be able to:

**Learning Outcomes**

The CCSF High School Diploma's Program Learning Outcomes are degree-applicable class in the Mathematics Department. the Transitional Studies core required mathematics classes, or a CCSF degree must have completed with a grade of “C” or better, at least one of the Transitional Studies core required classes 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.

The HiSET exam includes five subtests and will be about 7 hours long with the timing for each subset as follows:

- Language Arts Reading is 65 minutes
- Language Arts Writing is 120 minutes
- Mathematics is 90 minutes
- Science is 80 minutes
- Social Studies is 70 minutes

For more information on both these tests go to https://www.ccsf.edu/en/student-services/matriculation_services/ged_center/ged_definition.html

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 this program, 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.
- 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.
- 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.
- 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.
- 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.
- 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.

The minimum time for completion of this certificate is 4 semesters. Completion time will vary based on student preparation and number of classes completed per semester.
Courses Required for the HS Diploma in CCSF High School Diploma Program

Course ........................................ Hours
Total 160 High School Credits
Natural Sciences ...................................... 20.0
Social & Behavioral Sciences ................. 30.0
Humanities ........................................... 10.0
English ................................................ 30.0
Mathematics ......................................... 20.0
Electives ............................................... 50.0
Note that these are not “hours” but “high school credits.”
Total: .............................................. 160.0

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.

Learning Outcomes
Upon completion of this program, 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in Adult Basic Education Level 1
Course ........................................ Hours
Required Courses
TRST 5038 Introduction to Academic Success ........ 90.0
TRST 5035 Individualized Reading and Writing .. .54.0-180.0
TRST 5036 Reading/Writing Lab ..................... 90.0
Total: .............................................. 234.0 – 360.0

Adult Basic Education Level 2 Noncredit Certificate
A certificate of completion will lead to improved employability or job placement opportunities. Students will be able to continue on with GED test preparation instruction.

Learning Outcomes
Upon completion of this program, students will be able to:
- Demonstrate command of the conventions of Standard English grammar and usage.
- Read clearly to determine what the text says explicitly and to make logical references from it.
- 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.

The minimum time for completion is two semesters. Advise TRST 5039 or placement into TRST 5041

Courses Required for the Noncredit Certificate in Adult Basic Education Level 2
Course ........................................ Hours
Required Courses
TRST 5038 Introduction to Academic Success ........ 90.0
TRST 5039 ABE/Pre-High School Equivalency .. .54.0-180.0
TRST 2422 Math Skills Lab ............................. 90.0
Total: .............................................. 234.0 – 360.0

Adult Secondary Education Level 3 Noncredit Certificate
The Adult Secondary Education Level 3 certificate of completion will lead to improved employability or job placement opportunities. Students will be prepared to take the General Education Exam or the High School Equivalency Exam.

Learning Outcomes
Upon completion of this program, students will be able to:
- Interpret explicit and implicit meaning in texts.
- Write informative/explanatory texts to examine and convey complex ideas and information through the effective selection, organization, and analysis of content.
- Apply grammatical rules when editing.
- Use mathematical reasoning, expressions, equations, and formulas to solve problems.

Advise TRST 5039 or placement into TRST 5041

The minimum time for completion is two semesters.

Courses Required for the Noncredit Certificate in Adult Secondary Education Level 3
Course ........................................ Hours
Required Courses
TRST 5041 High School Equivalency Prep: Language Arts ........................................... 90.0
TRST 5043 High School Equivalency Prep: Social Studies ........................................... 90.0
Upon completion of this program, 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.

The minimum time for completion of this certificate is 1 semester. Completion time will vary based on student preparation and number of classes completed per semester.

Courses Required for the Noncredit Certificate in Academic Skills Intermediate Level 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>TRST 5038 Introduction to Academic Success</td>
<td>90.0</td>
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<tr>
<td>TRST 1321 Academic Reading 1</td>
<td>180.0</td>
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<tr>
<td>TRST 1322 Academic Reading and Writing 1.5</td>
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<td>TRST 1324 Academic Writing 1</td>
<td>180.0</td>
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<tr>
<td>TRST 1422 Math Skills Development 1</td>
<td>90.0</td>
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Announcement of Courses

Noncredit Courses:

Individualized Learning Labs, Self-paced, Open-entry, Multi-level, Ongoing Classes

TRST 5035. Individualized Reading and Writing (180 hrs)
A basic reading and writing course. Emphasizes reading comprehension and study skills and will prepare students for further educational and/or job demands. Course work is individualized and self-paced.
Open enrollment.
Formerly TRST 035
Offered on occasion

TRST 5036. Reading/Writing Lab (90 hrs)
A self-paced reading and writing skills lab to prepare students for higher level English TRST courses and for the high school equivalency Language Arts subtest. Upon successful completion of course, students can earn five high school credits.
Offered on occasion

TRST 5038. Introduction to Academic Success (90 hrs)
The students will learn tools for students' success in the educational setting such as time management, goal setting, and basic study skills. In addition, students will learn about the City College of San Francisco resources available to them.
Offered Spring semesters

TRST 5039. ABE/Pre-High School Equivalency (180 hrs)
Reading, writing, and mathematics skills development. Prepares students to enter TRST 5041, 5042, 5043 and 5054, the High School
Education academic skills in mathematics. Credits earned may be applied toward meeting the CCSF High School Social Science requirements.

TRST 5047. Media Literacy (90 hrs)
ADVISOR: TRST 2322 or placement into TRST 3331
Prepares students for the GED Media Literacy test. It is a self-paced lab allowing students to earn credits that may be applied to the CCSF High School Social Science requirements.

Formerly TRST 047B
Offered Spring semesters

Level I
Beginning and Basic Instruction in Reading, Writing, Communicating and Mathematics

TRST 1321. Academic Reading 1 (180 hrs)
ADVISOR: ESL LEVEL 7, PLACEMENT INTO TRST 1321
A beginning high school English course designed to develop reading and critical thinking skills.

TRST 1322. Academic Writing 1 (180 hrs)
A beginning course designed to develop reading and writing.

Offered Fall semesters

TRST 1323. Academic Writing 1.5 (90 hrs)
A beginning course designed to develop reading and writing.

TRST 1324. Academic Writing 1 (180 hrs)
ADVISOR: ESL LEVEL 7, PLACEMENT INTO TRST 1324
This is a beginning course in writing with emphasis on sentence mechanics and paragraph development.

TRST 1422. Math Skills Development 1 (90 hrs)
ADVISOR: PLACEMENT IN TRST 1422
This course introduces basic number theory and whole number operations as used in everyday life situations. It will also cover the basic measurement, geometry and pre-algebra.

Level II
Intermediate Instruction in Reading, Writing, Communicating and Mathematics

TRST 2322. Academic Reading/Writing 2.5 (90 hrs)
ADVISOR: TRST 1321 AND/OR TRST 1324, PLACEMENT INTO TRST 2322
An intermediate course designed to develop reading, writing, and critical thinking skills. Fulfills English City College of San Francisco High School requirements.

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.

TRST 2421. Math Skills Development 2 (90 hrs)
ADVISOR: TRST 1422 OR PLACEMENT INTO TRST 2421
This course focuses on the study of decimal, fractions, rations, proportions, percentages, basic algebra and geometry.
Offered Spring semesters

TRST 2422. Math Skills Lab (90 hrs)
This is a self-paced lab in basic mathematics, which includes whole numbers, fractions, decimals, percentages, measurement, and an introduction to algebra and geometry. It is an open entry, open exit course.

TRST 2533. Health Education (90 hrs)
Introduction to basic health information that addresses the promotion of physical, mental, emotional, and social dimensions of health.

TRST 2731. The Americas in Film (90 hrs)
Advise: TRST 1322
The study of Latin America and United States society using film. Themes such as conformity, rebellion, racism and feminism will be explored.

Offered Spring seminars

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. Academic Reading and Writing 3 (90 hrs)
Advise: TRST 1321 or TRST 1324
This course is a high school level academic reading and writing course with an emphasis on reading expository text and writing informative essays.

TRST 3332. Grammar and Writing (90 hrs)
Prereq.: TRST 1324 or placement in TRST 3332
This course will focus on grammar as a tool to write clearly. Students will also go through the steps of the writing process.

TRST 3333. Introduction to Public Speaking (90 hrs)
This course is designed to give students basic skills to deliver oral presentations that convey clear perspectives and solid reasoning.

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.

TRST 3335. Exploring Literature (90 hrs)
Advise: TRST 3334 or placement into TRST 3335
An intermediate course designed to continue development of critical reading and writing skills using significant works of literature to study recurrent patterns and themes.

TRST 3346. Literature and Composition (90 hrs)
Advise: placement in TRST 3346
An advanced course designed to develop student awareness of their own ideological framework and writing style, and strengthen their writing, editing, and critical thinking skills in response to multicultural literature in preparation for college English courses.

TRST 3347. Contemporary American Writers (90 hrs)
Advise: Placement in TRST level 3300 or completion of TRST level 2321
A high school English course in which students interpret, analyze, and respond to contemporary American fiction and nonfiction texts.

Offered Spring semesters

TRST 3348. Academic Writing 2 (90 hrs)
Advise: TRST 3346, 3347 or placement into TRST 3348
Students focus on writing coherent and focused essays that convey a well-defined thesis.

Offered Fall semesters

TRST 3421. High School Algebra 1A (90 hrs)
Advise: Placement into TRST 2421 or completion of TRST 2421
A first course in High School Algebra: Operations on integers and rational numbers; properties of rational numbers; exponents; expressions, inequalities, polynomials, factoring, and word problems.

TRST 3422. High School Algebra 1B (90 hrs)
Advise: Placement in 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.

TRST 3423. High School Geometry 1A (90 hrs)
Advise: TRST 3421
A first course in high school geometry: point, lines, and planes; classification of angles; triangles and the Pythagorean theorem; classifications of polygons; surface areas and volume of several shapes.

TRST 3424. Geometry 1B (90 hrs)
Advise: TRST 3423 or placement into TRST 3424
A second course in geometry: 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.

TRST 3531. High School U.S. History 1 (90 hrs)
Advise: Placement in TRST 3531
A high school history survey of the eras between the Discovery and Exploration of the Americas to the Antebellum Era of the United States. Fulfills Social Science Core high school credits.

Offered Spring semesters

TRST 3532. High School U.S. History 2 (90 hrs)
Advise: Placement into TRST 3532
A high school history survey of the eras between the Civil War and the Eve of the Great Depression. Fulfills Social Science Core high school credits. Complies with Historical Thinking Standards from National Center for History and Common Core Standards.

Offered Fall semesters

TRST 3533. Civics (90 hrs)
Advise: Placement into TRST 3533
This course focuses on the United States Constitution, the rights and responsibilities of citizens and the party system.

TRST 3534. High School Economics (90 hrs)
Advise: Placement into TRST 3534
This course examines the ways economics affects individuals and groups in the private and public sector. It will also study basic economic principles and their applications in the free enterprise system.

TRST 3535. Modern World History (90 hrs)
Advise: PLACEMENT INTO TRST 3535 or completion of TRST 2321
A study of the major turning points that shaped the modern world, from the early 20th century to World War II.

Offered Fall semesters
TRST 3536. Social Justice (90 hrs)
Advise: TRST 1322 or placement into TRST 2322
Focusing primarily on the United States, students will examine issues of social, economic and environmental justice in order to develop an understanding of patterns of injustice and methods for obtaining justice.
Offered Spring semesters

TRST 3537. High School United States History 3 (90 hrs)
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. High School Physical Science (90 hrs)
This high school course is a general introduction to Physical Science and scientific methodology. It will cover the basics of physics, chemistry and astronomy to prepare the students for future science classes. Basic math will be used to illustrate some of the basic scientific principles.

TRST 3632. High School Biology (90 hrs)
A general introduction to cell structure and functions, the cell cycle, principles of molecular and organism genetics.
Offered on occasion

TRST 3633. High School Ecology (90 hrs)
An introductory course in ecological concepts, including: structure and function of the biosphere, biomes, biotic and abiotic factors in an ecosystem, biochemical and nutrient cycles, interaction among species, changes in populations, and current conservation in society.

TRST 3641. High School Physics (90 hrs)
Advise: 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.

TRST 3642. High School Biology (90 hrs)
Students learn techniques, elements of art, principles of design and the historical and cultural contexts of visual art by viewing reproductions of works and producing original works of their own.
Offered Spring semesters

TRST 3643. High School Physical Science (90 hrs)
This course focuses on the historical development and core beliefs of five of the world’s religions: Hinduism, Buddhism, Judaism, Christianity and Islam.
Offered Fall semesters

TRST 3733. High School Art and Literature (90 hrs)
An advanced course designed to develop student awareness of the ways in which literature and visual art address similar themes, and to strengthen their writing, editing skills and visual art techniques.

Vocationally Related Courses
Prepare for Employment, Entry Into Job Training Programs, or Further College Study

TRST 4600. Vocational Foundation Skills-Reading and Writing (30-90 hrs)
Advise: Placement into TRST 4600
Competency-based course designed to support student academic success in career, technical and vocational programs. Students learn and use workplace essential skills in reading and writing.
Offered Spring semesters

TRST 4604. Vocational Foundation Skills - Mathematics (90 hrs)
Semester-long competency-based course designed to support student academic success in career, technical and vocational programs. Students learn and use vocational foundation skills in mathematics.

TRST 4605. Job Readiness, Study Skills, and Test Taking Strategies (30-90 hrs)
Competency-based course designed to support students’ academic success in career, technical and vocational programs. Students learn and use the vocational foundation skills of job readiness, learning strategies, and pre-employment exams.

TRST 4606. Vocational Foundation Skills - Mathematics I (45 hrs)
Preliminary short-term competency-based course designed to support student academic success in career, technical and vocational programs. Students learn and use vocational foundation skills in mathematics. Short version of TRST 4604

TRST 4607. Applied Vocational Foundation Skills - Mathematics II (35-45 hrs)
Applied short-term competency-based course designed to advance student academic success in career, technical and vocational programs. Students apply the basics of vocational foundation skills in mathematics. Short version of TRST 4604

TRST 4640. Vocational Foundation Skills-Reading, Writing and Study Skills (22.5 hrs)
Competency-based course designed to support student academic success in career and technical programs. Focus is on the vocational foundation skills of reading, writing and studying necessary for career and academic success. May be offered bilingually in Spanish and/or in other languages.
Offered on occasion

Visual Media Design
Office: Visual Arts 103
Phone Number: (415) 239-3481
Web Site: www.ccsf.edu/vmd

Announcement of Curricula
General Information
The Visual Media Design Department provides educational programs for a broad range of design activities and media platforms. Enrollment is open to all interested students.
Our curriculum includes courses in graphic/visual design and production for interactive and print media, typography, digital illustration, digital imaging, animation, game design, book arts and letterpress. Our degree and certificate programs prepare students for entry-level employment or transfer to university programs for further study. Curriculum specifics given on the following pages.
**Graphic Design Major (AA)**

We live in the ‘information age’—subjected to a constant stream of text, images, and sounds. The role of the graphic designer is to shape content in a meaningful way, visualizing and communicating ideas to users in the most effective and 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 current digital tools and production methods. Advanced students have the opportunity to further develop their skills in Emerge Studio, a design studio practicum that provides quality communications pieces to the campus community. Our City College of San Francisco American Institute of Graphic Artists (AIGA) student group provides additional educational, networking and outreach opportunities within the professional design community.

The Graphic Design major is designed for students with no previous college degree, and prepares students to continue their studies in a 4-year institution or enter the design profession. Students are encouraged to meet with a program advisor to discuss their goals.

**Learning Outcomes**

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

- Employ and document a structured design process to develop design solutions, working both individually and collaboratively
- Combine appropriate aesthetic form and content to create effective communication design
- Select appropriate tools, materials and processes for a range of design contexts and media platforms
- Analyze and discuss the merits of design work, using relevant concepts and terminology
- Develop and maintain a professional portfolio of work

Completion of ENGL 91 or 86 or ESL 140 or 184 or placement in ENGL 92 or 95 or ESL 150 is advised to start the program.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the Major in Graphic Design**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 100 Orientation to Visual Media Design</td>
<td>1.0</td>
</tr>
<tr>
<td>VMD 101/DSGN 101/PHOT 100 Design Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 105 Visual Media Digital Skills</td>
<td>3.0</td>
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</table>

**First Semester:**

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<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>VMD 120 Graphic Design I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 130 Typography I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 140 Web Production I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 152 InDesign I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 154 Photoshop I</td>
<td>3.0</td>
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</table>

**Second Semester:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>VMD 150 Illustrator I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 154 Photoshop I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 112/DSGN 110 Design Drawing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 130A Basic Drawing</td>
<td>3.0</td>
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</table>

**Choose one of the following courses:**

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<th>Course</th>
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<tbody>
<tr>
<td>VMD 101/DSGN 101/PHOT 100 Design Fundamentals</td>
<td>3.0</td>
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</tbody>
</table>

**Fourth Semester—choose one of the following design courses:**

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>VMD 200A Design Studio Practicum</td>
<td>3.0</td>
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</tbody>
</table>

**Certificate Curricula**

We offer stackable certificate programs to meet the needs of a diverse student population. Start your studies with foundational certificate programs in Digital Art or Visual Design. These provide a short-term focused study in essential areas of visual design practice.

Foundational certificates can stand-alone or be combined with more advanced coursework to prepare students to enter the workforce in the emphasis areas of Digital Animation, Digital Illustration, Game Development, Visual & Interactive Design, or Visual Media Production.

We partner with other design disciplines to offer the Collaborative Design Certificate.

Prospective students are encouraged to meet with a faculty advisor to discuss their goals and plan a program of study.

**Digital Art Foundation Certificate**

The Digital Art Foundation certificate provides essential knowledge and skills for digital artists. It can serve as a stand-alone certificate, or as the basis for continued study in digital illustration, animation, gaming or other areas.

**Learning Outcomes**

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

- Apply an iterative design process to creative projects.
- Employ the elements and principles of design in creative work.
- Employ drawing techniques in various areas of design practice.
- Analyze and apply color in creative work.
- Use industry-standard digital media software to create and edit files.
- Critique, verbally and in writing, visual media design work.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Digital Art Foundation**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>VMD 100 Orientation to Visual Media Design</td>
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<tr>
<td>VMD 105 Visual Media Digital Skills</td>
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<tr>
<td>VMD 150 Illustrator I</td>
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<tr>
<td>VMD 154 Photoshop I</td>
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<tr>
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<tr>
<td>ART 130A Basic Drawing</td>
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**Choose one of the following courses:**

<table>
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<th>Course</th>
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</thead>
<tbody>
<tr>
<td>VMD 101/DSGN 101/PHOT 100 Design Fundamentals</td>
<td>3.0</td>
</tr>
</tbody>
</table>
ART 125A Basic Design ........................................ 3.0
Choose one of the following courses:
VMD 118/DSGN 150 Color in Design .................... 3.0
ART 126 Color ............................................... 3.0
Total: ..................................................... 20.5

**Visual Design Foundation Certificate**

The Visual Design Foundation certificate provides essential knowledge, processes, principles and skills for visual design and production for print and interactive communications. It can serve as a stand-alone certificate, or as the basis for advanced study in graphic design, visual media production or other areas. All courses must be completed with a grade of “C” or higher.

**Learning Outcomes**

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

- Demonstrate an understanding of iterative design process
- Demonstrate an understanding of the elements and principles of visual design
- Demonstrate an awareness of type selection, specification and practices
- Demonstrate awareness of computer tools and processes used in visual communication
- Create and edit files using industry-standard software
- Analyze and critique communication design work in verbal and written form

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Visual Design Foundation**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>VMD 100 Orientation to Visual Media Design</td>
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<tr>
<td>VMD 101/DSGN 101/PHOT 100 Design Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 105 Visual Media Digital Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 120 Graphic Design I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 130 Typography I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 140 Web Production I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 150 Illustrator I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 152 InDesign I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 154 Photoshop I</td>
<td>3.0</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>25.0</strong></td>
</tr>
</tbody>
</table>

**Collaborative Design Certificate**

The Collaborative Design Certificate provides students with a strong foundation in multidisciplinary approaches to design and collaboration.

*See Maker Studies section of the catalog.

**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 or demonstration of equivalent knowledge and skills.

**Learning Outcomes**

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

- Define and apply principles of animation in creative work.
- Create work using tools and processes of professional animation.
- Create, edit and troubleshoot files using industry-standard software.
- Produce animations both independently and collaboratively.
- Analyze and critique creative 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.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the 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>3.0</td>
</tr>
</tbody>
</table>
| Choose one of the following advanced animation courses:
  |       |
| VMD 162A 2D Animation I | 3.0 |
| VMD 162B 2D Animation II | 3.0 |
| VMD 164 3D Animation | 3.0 |
| VMD 166 Storytelling and Storyboarding | 3.0 |
| VMD 194B Internship/Work Experience II | 2.0 |
| VMD 190 Portfolio Preparation | 3.0 |
| **Total:** | **20.0** |

**Digital Illustration Certificate**

The Digital Illustration certificate builds on the Digital Art Foundation Certificate for students interested in digital illustration for a variety of applications. The Digital Illustration Certificate Program combines the study of illustration, art and design with digital tools and techniques to create communicative imagery that is disseminated through all forms of visual media. This certificate prepares students for freelance illustration positions in print and interactive media publishing, web and mobile design, advertising, animation, and gaming. This certificate requires successful completion of the Digital Art Foundation Certificate or demonstration of equivalent knowledge and skills. All courses must be completed with a grade of “C” or higher.

**Learning Outcomes**

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

- Conceptualize and create original illustrations
- Use an iterative process including research, sketching, development and refinement
Upon completion of this program, students will be able to:

**Learning Outcomes**

- Employ professional design/production studio practices, such as project management, record keeping, asset management, file naming and archiving.
- Maintain a portfolio of game artwork.

The minimum time for completion of this certificate is 2 semesters. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Achievement in Game Development**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>VMD 180 Exploring Game Worlds</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 182 Game Production Workflow</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 166 Storytelling and Storyboarding</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 162A 2D Animation I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 164 3D Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>VMD 188 Portfolio Development for Games</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 190 Portfolio Preparation</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>VMD 200A Design Studio Practicum</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 112/DSGN 110 Design Drawing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>ART 130B Intermediate Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 132B Intermediate Figure Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>20.0 – 22.0</strong></td>
</tr>
</tbody>
</table>

**Visual & Interactive Design Certificate**

The Visual & Interactive Design certificate builds on the Visual Design Foundation Certificate for students interested in working as visual/interactive designers for communications. It provides advanced study and application of design thinking to a broad range of communications projects (web, mobile and print). Students will refine their skills in Emerge Studio, our on-campus design studio practicum. The CCSF AIGA Student Group provides additional educational, networking and outreach opportunities within the professional design community. The certificate requires key courses, but allows the student to customize the program to meet their personal goals through electives.

**Learning Outcomes**

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

- Employ and document a structured design process to develop design solutions, working both individually and collaboratively.
- Combine appropriate aesthetic form and content to create effective design solutions.
- Select appropriate tools, materials and processes for a range of interactive and print projects.
- Critically analyze and discuss the merits of design work, using relevant concepts and terminology.
- Employ professional design/production studio practices, such as project management, record keeping, asset management, file naming and archiving.
- Develop and maintain a professional portfolio of work.

This certificate requires successful completion of the Visual Design Foundation Certificate or demonstration of equivalent knowledge and skills. All courses must be completed with a grade of “C” or higher.

The minimum time for completion of this certificate is 3 semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.
Courses Required for the Certificate of Achievement in Visual & Interactive Design

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 110 History of Graphic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 118/DSGN 150 Color in Design</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 122 Graphic Design II</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 127 User Experience</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 131 Typography II</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 190 Portfolio Preparation</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required courses:

- VMD 190 Portfolio Preparation

Capstone Course

- VMD 200A Design Studio Practicum

Select any two of the following non-sequential required courses:

- VMD 124A Information Design
- VMD 124B Package Design
- VMD 124C User Interface Design

Choose 6 units from the following elective courses:

- VMD 111 Print Processes for Designers
- VMD 114A Letterpress Printing I
- VMD 116A Bookbinding & Book Arts I
- VMD 134 Calligraphy
- VMD 135 Hand-Lettering
- VMD 141 Web Production II
- VMD 151 Illustrator II
- VMD 142 Web Production III
- VMD 152 InDesign II
- VMD 155 Photoshop II
- VMD 192 Professional Practice
- VMD 194A Internship/Work Experience I
- VMD 194B Internship/Work Experience II
- VMD 200B Design Studio Practicum

Total: 31.0

Visual Media Production Certificate

The Visual Media Production certificate builds on the Visual Design Foundation Certificate for students interested in visual media production for screen and print. Production artists are proficient with industry-standard software, tools, and techniques, and have a working understanding of design processes, layout, type, and color. The program prepares students to enter the workplace in a range of production jobs for interactive and print work. Students will refine their skills in Emerge Studio, our on-campus design studio practicum that provides quality communications pieces to the campus community. They also have the option of supervised work-experience in a local firm. The CCSF AIGA Student Group provides additional educational, networking and outreach opportunities within the professional design community. The certificate requires key courses, but allows the student to customize the program to meet their unique goals through electives.

Learning Outcomes

- Apply appropriate design and typographic principles to create, edit, and troubleshoot files for a variety of media,
- Demonstrate proficiency with current tools, materials and processes for a range of screen and print projects,
- Analyze and discuss the merits of work, using relevant concepts and terminology.
- Produce work independently and as a member of a collaborative team,
- Employ professional design/production studio management practices,
- Develop and maintain a professional portfolio of digital media work.

The certificate requires successful completion of the Visual Design Foundation Certificate or demonstration of equivalent knowledge and skills. All courses must be completed with a grade of “C” or higher. The minimum time for completion of this certificate is three semesters. Completion time will vary based on student preparation and number of units or classes completed per semester.

Courses Required for the Certificate of Achievement in Visual Media Production

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 124A Information Design</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 124B Package Design</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 124C User Interface Design</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Required Courses:

- VMD 110 History of Graphic Design
- VMD 118/DSGN 150 Color in Design
- VMD 122 Graphic Design II
- VMD 127 User Experience
- VMD 131 Typography II
- VMD 190 Portfolio Preparation

Select 9 units from the following elective courses:

- VMD 111 Print Processes for Designers
- VMD 127 User Experience
- VMD 194A Internship/Work Experience I
- VMD 194B Internship/Work Experience II
- VMD 200B Design Studio Practicum
- BCST 146 Video Motion Graphics
- VMD 131 Typography II
- VMD 134 Calligraphy
- VMD 135 Hand-Lettering
- VMD 141 Web Production II
- VMD 151 Illustrator II
- VMD 152 InDesign II
- VMD 155 Photoshop II
- VMD 192 Professional Practice
- VMD 194A Internship/Work Experience I
- VMD 194B Internship/Work Experience II
- VMD 200B Design Studio Practicum

Total: 33.0

Announcement of Courses

Visual Media Design

Credit, Degree Applicable Courses:

VMD 100. Orientation to Visual Media Design (1)
Lec-18 P/NP available
Overview of visual communication fields and the programs of study in Visual Media Design. Lectures provide an overview of professional practice in fields such as graphic design, illustration, imaging, publication design and web front end development. The course further explores programs of study in VMD, transfer options and concrete employment opportunities in the Bay Area. Students will identify potential career options, explore the necessary skills to succeed in these fields, and outline a future program of study. CSU

VMD 101. Design Fundamentals (3)
Lec-35, Lab-70, field trips P/NP available
ADVICE: ENGL 96 or ENGL 88 or ENGL 88A or Placement in ENGL 96 or ENGL 88B
Foundational 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. UC/CSU

VMD 101 = DSGN 101 = PHOT 100
VMD 105. Digital Skills for Visual Media (3)
Lec-35, Lab-70
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-52.5
Prereq.: VMD 105
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. UC/CSU
Formerly GRPH 110
Offered Fall semesters

VMD 111. Print Processes for Designers (3)
Lec-35, Lab-70 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. CSU
Formerly GRPH 27

VMD 112. Design Drawing Techniques (1.5)
Lec-17.5, Lab-35 P/NP available
Prereq.: VMD 105
Advised: DSGN 101 or VMD 101 or PHOT 100; ESL 160 or ENGL 93 or ENGL 88 or ENGL 88A or placement in ENGL 96 or ENGL 88B
Quick sketching methods for ideation and visual problem solving for designers, animators, illustrators and makers. Terminology, techniques and conventions of rapid visualization are covered, with hands-on practice with line, shape, form, perspective, lighting, shade and shadow. UC/CSU
VMD 112 = DSGN 110
Offered Fall semesters

VMD 114A. Letterpress Printing I (2)
Lec-35, Lab-17.5, field trips P/NP available
The art and craft of letterpress printing, hand set type and use of proofing presses. Emphasis is placed on skills development in hand set type, layout, proofreading, makeup, shop safety and press operations. CSU
Formerly GRPH 92A

VMD 114B. Letterpress Printing II (2)
Lec-35, Lab-17.5, field trips P/NP available
Prereq.: 114A
Continued study of the art and craft of letterpress using the platen jobbing press. Further development of skills in the letterpress printing processes, polymer plate production and usage, stock selection and calculation, and presswork. CSU

VMD 116A. Bookbinding & Book Arts I (2)
Lec-35, Lab-17.5, field trips P/NP available
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
Offered Spring semesters

VMD 116B. Bookbinding & Book Arts II (2)
Lec-35, Lab-17.5, field trips P/NP available
Prereq.: VMD 116A
Continued study of the various practical methods of contemporary book design and production, including codex structures, tunnel, and accordion books, using both adhesive and sewn binding techniques. CSU
Offered Spring semesters

VMD 116C. Bookbinding & Book Arts III (2)
Lec-35, Lab-17.5, field trips
Prereq.: VMD 116B
Advanced methods of contemporary book design and production including pop-ups and box structures using both traditional and non-traditional materials. CSU
Offered Spring semesters

VMD 118. Color in Design (3)
Lec-35, Lab-70 P/NP available
Prereq.: VMD 101 or DSGN 101 or ART 125A or PHOT 100 and VMD 105
Advised: completion of or concurrent enrollment in: DSGN 101 or VMD 101 or PHOT 100 and VMD 105
An exploration and application of the historical, cultural symbolic personal and professional uses of color through individual and collaborative projects. Topics include the properties and theory of color; creating color relationships and harmonies; and optical, psychological and spatial uses of color in various media and design disciplines. UC/CSU
VMD 118 = DSGN 150

VMD 120. Graphic Design I (3)
Lec-35, Lab-70 P/NP available
Prereq.: VMD 101 or DSG 101 or ART 125A or PHOT 100
Advised: ENGL 95 or ENGL 93 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
A beginning graphic design course focusing on fundamental visual problem-solving skills for print and screen. Principles of visual communication, iterative design process, introduction to typography, grids, identity and branding. UC/CSU
Formerly GRPH 35

VMD 122. Graphic Design II (3)
Lec-35, Lab-70, field trips P/NP available
Prereq.: VMD 120, 140, and 152
Continued study of communication design, covering both interactive (web/mobile) and print projects. Topics of study include research, design processes and deliverables for a range of interactive and print projects. CSU
Formerly GRPH 36
Offered Fall semesters

VMD 124A. Information Design (2)
Lec-26.5, Lab-26.5 P/NP available
Prereq.: VMD 122
An exploration of the visual design and presentation of numeric or objective data through exercises and a design project. The pace and
scope of the class is intended for advanced design students looking to expand their skills and design portfolio. CSU

**Offered Spring semesters**

**VMD 124B. Package Design (2)**
Lec-26.5, Lab-26.5  P/NP available
Prereq: VMD 122
An exploration of package design through practical exercises and a design project. The pace and scope of the class is intended for advanced design students looking to expand their skills and design portfolio. CSU
VMD 124A, 124B AND 124C ARE NOT SEQUENTIAL.

**Offered Spring semesters**

**VMD 124C. User Interface Design (2)**
Lec-26.5, Lab-26.5  P/NP available
Prereq: VMD 122 and VMD 127
The exploration of user interface design through exercises and projects. The pace and scope of the class is intended for advanced students looking to expand their skills and portfolio. CSU

**Offered on occasion**

**VMD 127. User Experience (3)**
Lec-52.5, Lab-17.5  P/NP available
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**

**Offered Fall semesters**

**VMD 130. Typography I (3)**
Lec-52.5, Lab-17.5  P/NP available
Prereq: DSGN 101/VMD 101 or VMD 103
Coreq: VMD 152
Introduction to typography as key element of visual communication. Exploration of the fundamental aspects of typographic form and use. Students will develop the ability to see, select and use type in meaningful ways through exercises and assignments. CSU

**Formerly GRPH 53A**

**Offered Spring semesters**

**VMD 131. Typography II (3)**
Lec-35, Lab-70  P/NP available
Prereq: VMD 130 and VMD 152
Continued study of typography with emphasis on the development of an awareness of typographic form and structure. The role of typography in communication will be explored through practical exercises in typesetting and typographic design. CSU

**Formerly GRPH 53B**

**Offered Spring semesters**

**VMD 134. Calligraphy (1)**
Lec-16, Lab-8  P/NP available
Advise: VMD 130
Instruction in calligraphic tools, materials, and techniques. Study and practice of various historical and contemporary calligraphic styles and techniques, creative exercises in calligraphic layout, and discussion of contemporary lettering art and artists. CSU

**Formerly GRPH 151**

**Offered Fall semesters**

**VMD 135. Hand-Lettering (1)**
Lec-16, Lab-8  P/NP available
Advise: VMD 130
Instruction in hand-lettering tools, materials, and techniques. Practice with various lettering styles, creative exercises in lettering design and discussion of contemporary lettering art and artists. CSU

**Offered Spring semesters**

**VMD 136. Digital Font Creation (2)**
Lec-35, Lab-17.5, field trips  P/NP available
Prereq: VMD 150
Advise: VMD 130, VMD 134
Hands-on experience in creating digital fonts. Practice in all aspects of the process, from concept to execution. Discussion of the standards and techniques of type design, and of the current state of the type design profession. CSU

**Formerly GRPH 152**

**Offered on occasion**

**VMD 140. Web Production I (3)**
Lec-35, Lab-70  P/NP available
Prereq.: VMD 105
This course will provide students with an overview of web site planning, development and production through a hands-on approach. Topics include web pre-production, design and production techniques. Assignments will focus on pre-production planning and production of web sites. CSU

**VMD 141. Web Production II (3)**
Lec-52.5, Lab-17.5  P/NP available
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**

**Offered Fall semesters**

**VMD 142. Web Production III (3)**
Lec-52.5, Lab-17.5  P/NP available
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**

**Offered Spring semesters**

**VMD 150. Illustrator I (3)**
Lec-52.5, Lab-17.5  P/NP available
Prereq.: VMD 105
Coreq.: VMD 111
An introductory course in Adobe Illustrator, covering concepts of vector-based image creation. Students will reproduce existing images to learn the various tools available within the application. Document construction and accuracy with vector tools are emphasized. CSU

**Formerly GRPH 100A**
VMD 151. Illustrator II (3)  
Lec-52.5, Lab-17.5  
Prereq.: VMD 150  
Advis: VMD 120  
Continued study and use of Adobe Illustrator for print and screen with emphasis on advanced features and creative projects. CSU  
Formerly GRPH 100B

VMD 152. InDesign I (3)  
Lec-52.5, Lab-17.5  
Prereq.: VMD 105  
Advis: VMD 154, VMD 150, or VMD 111  
An introduction to Adobe InDesign for print and screen page design. Topics include introduction to interface, typesetting, styles, master pages, creating objects, importing graphics, layers, transparency, pre-flight and packaging. Emphasis on best practices. CSU  
Formerly GRPH 101A

VMD 153. InDesign II (3)  
Lec-52.5, Lab-17.5  
Prereq.: VMD 152  
Continued study and use of Adobe InDesign for print and screen with emphasis on advanced features and design projects. Introduction to tables, books, interactive documents for web and tablets. CSU  
Formerly GRPH 101B

VMD 154. Photoshop I (3)  
Lec-52.5, Lab-17.5  
Prereq.: VMD 105  
An introduction to Adobe Photoshop for digital image editing. Topics include interface, layers, painting, composing, color correction, retouching, asset optimization and prototyping. Emphasis on best practices. CSU  
Formerly GRPH 98A

VMD 155. Photoshop II (3)  
Lec-52.5, Lab-17.5  
Prereq.: VMD 154  
Advis: VMD 120, 130 and 140  
Continued study and use of Adobe Photoshop with an emphasis on advanced features. The course focuses on complex document construction, smart objects, masking, compositing, color correction, retouching, and screen workflows. CSU  
Formerly GRPH 98B

VMD 162A. 2D Animation I (3)  
Lec-35, Lab-70, field trips  
Prereq.: VMD 105 and (VMD 101 or DSGN 101 or PHOT 100 or ART 125A)  
Advis: ART 130A  
An overview of the techniques and principles of 2D animation as well as the specific tools used and roles found in the animation industry. CSU  
Formerly VMD 162.

VMD 162B. 2D Animation II (3)  
Lec-35, Lab-70, field trips  
Prereq.: VMD 162A  
An advanced course in the techniques and principles of 2D animation using digital tools, including emphasis on advanced visual effects and developing original visual narratives. CSU  

VMD 164. 3D Animation (3)  
Lec-35, Lab-70, field trips  
Prereq.: VMD 105 and VMD 101/DSGN 101/PHOT 100 or ART 130A  
Advis: DSGN 110 and VMD 162 and VMD 166  
Introduction to techniques used in 3D animation. An overview of the 3D animation industry and the specific tools and techniques used in 3D modeling and rendering. CSU  
Formerly MMSP 147  
Offered on occasion

VMD 166. Storytelling/Storyboarding (3)  
Lec-52.5, Lab-17.5, field trips  
Prereq.: VMD 101/DSGN 101/PHOT 100 and VMD 105  
Advis: ART 130A  
Referencing and using traditional storytelling methods, the students will explore multiple ways to generate and script content for digital animation projects. Emphasis put on development of skills and techniques of storyboarding. CSU  
Formerly MMSP 145  
Offered on occasion

VMD 170. Digital Illustration I (3)  
Lec-35, Lab-70  
Prereq.: VMD 105 and ART 130A  
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. UC/CSU  
Formerly GRPH 110A

VMD 172. Digital Illustration II (3)  
Lec-35, Lab-70  
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  
Formerly GRPH 110B  
Offered Spring semesters

VMD 177. Portfolio Development for Illustration (2)  
Lec-35, field trips  
Prereq.: VMD 170  
A course in portfolio development, copyright law and professional practices for aspiring digital illustrators. CSU  
Offered on occasion

VMD 180. Exploring Game Worlds (3)  
Lec-52.5, Lab-17.5, field trips  
Prereq.: VMD 105  
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 and introduction to the career opportunities in the
game industry. Students will learn how individual games are made, distributed and sold both via physical media and online. CSU

**Formerly GAME 100**

**Offered Fall semesters**

VMD 182. Game Production Workflow (3)
Lec-52.5, Lab-17.5
Prereq.: VMD 180 and VMD 105
Advise: VMD 164 and VMD 166
This course develops fundamental skills in production and project management for interactive games. This course will explore the process of game production through designing, scheduling and creating and original playable prototype in a 3D game engine. Students will design independently and as part of a team. UC/CSU

**Formerly GAME 130**

**Offered Spring semesters**

VMD 184. Team Production of Games (3)
Lec-35, Lab-70
Prereq.: VMD 182
Advise: VMD 162 and VMD 164
This course provides students with the experience of working in a video game development team. It enables students to understand the collaborative model employed in the commercial video game production environment where different departments each bring special skill-sets to a single product. CSU

**Offered on occasion**

VMD 188. Career Portfolio for Games (3)
Lec-52.5, Lab-17.5, field trips
Prereq.: VMD 150, 154, 162 and 182
Development of a demonstration portfolio for employment in an entry-level position in the interactive game industry. This course will include resume writing, design documents, informational interviewing. Licensing and other tropic based on students’ particular track and special interests within the industry will also be addressed. CSU

**Formerly GAME 150**

**Offered on occasion**

VMD 190. Portfolio Preparation (3)
Lec-52.5
Coreq.: VMD 200A
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 (1)
Lec-17.5, Lab-17.5
Prereq.: VMD 105 or BCST 119
Advise: VMD 140, CNIT 129, BCST 135 and BCST 136
This course teaches students how to use social media tools such as Facebook, Twitter, Pinterest, LinkedIn and YouTube to develop, integrate and leverage social networks. Students will learn how to create personal and professional brands and critique current social media practices. CSU

**Offered Spring semesters**

VMD 192. Professional Practice (1)
Lec-17.5
Prereq.: VMD 120 and VMD 130 and VMD 140 and VMD 150 and VMD 152 and VMD 154
Emerge Studio, an in-house visual media design studio, provides an environment for students to gain real-world skills creating and producing projects for actual clients. Students will gain practice with client communications, iterative design process, technical problem-solving, and project management for individual and collaborative design projects including websites, posters, marks, brochures, and other communications projects. CSU

**Formerly MMSP 160**

VMD 200A. Design Studio Practicum (3)
Lec-17.5, Lab-122.5
Prereq.: VMD 120 and VMD 130 and VMD 140 and VMD 150 and VMD 152 and VMD 154
Continued experience in Emerge Studio, our in-house visual media design studio. Students take on greater responsibilities in project management, client relations, critiques, and overall project planning and implementation. Students will also encounter larger and more complex communications projects and work with greater autonomy and independence. CSU

**Formerly GRPH 68A**

**Offered on occasion**

VMD 200B. Design Studio Practicum II (3)
Lec-17.5, Lab-122.5
Prereq.: VMD 200A
Announcement of Curricula

Women’s Studies
Office: Cloud 402C
Phone Number: (415) 452-5825
Web Site: www.ccsf.edu/women

Social Justice Studies: Gender Studies Major (AA-T)
Associate in Arts in Social Justice Studies: Gender Studies for Transfer offers students breadth of knowledge through a set of introductory courses addressing gender, sexuality, race, ethnicity, and class, and depth of knowledge through courses that focus on women’s experiences from an intersectional feminist perspective. We aim to
understand and dismantle not only sexism, but also racism, homophobia/heterosexism, classism, ableism, ageism, transphobia, and other forms of institutionalized oppression. The AA-T prepares students who wish to transfer and pursue a baccalaureate degree in a field related to Social Justice, particularly at the California State University campuses. Related fields include Women and Gender Studies, Feminist Studies, Sexuality Studies, Ethnic Studies, Critical Race Studies, or any of a number of other CSU Majors included in this “area of emphasis.” It is advised that potential majors meet with an affiliated counselor or department chair to discuss educational goals, course options, and transfer issues.

**Learning Outcomes**

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

- Examine the process of gender socialization.
- Analyze sexism in conjunction with other forms of institutionalized oppression.
- Distinguish and analyze women’s experiences across cultures.
- Examine and evaluate women’s political, historical and artistic achievements.

Students who wish to earn the Associate in Arts in Social Justice Studies: Gender Studies for Transfer (AA-T) degree 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 units for the major as specified below. Each course in the major must be completed with a grade of “C” or better. Courses that meet the major requirements may also be used to meet IGETC or CSU GE requirements.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the AA-T in Social Justice Studies: Gender Studies**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required courses:</strong></td>
<td></td>
</tr>
<tr>
<td>WOMN 25 Introduction to Women's Studies: Feminism Demystified</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 37 Introduction to Ethnic Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>LGBT 5 Introduction to Lesbian, Bisexual, Gay, and Transgender Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>or LBCS 70A Who Built America? From the Colonial Era to the Civil War and Reconstruction</td>
<td>3.0</td>
</tr>
<tr>
<td>Select 3 courses from at least 2 areas for a minimum of 9 units. Courses used in one area (or as a core course) cannot be used to fulfill a requirement for another area:</td>
<td></td>
</tr>
<tr>
<td><strong>Area 1: History or Government</strong></td>
<td></td>
</tr>
<tr>
<td>HIST 12A United States Women's History: Pre-colonial Through 1880s</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST 12B United States Women's History: 1890-Present</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Area 2: Arts &amp; Humanities</strong></td>
<td></td>
</tr>
<tr>
<td>WOMN 10 Women and Film</td>
<td>3.0</td>
</tr>
<tr>
<td>AFAM 60 African American Women in the US</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 108 Women Through Art History</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 35 Asian American Women</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 57 Survey of Women's Literature</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 58 Contemporary Women's Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST 12A United States Women's History:</td>
<td></td>
</tr>
<tr>
<td>Pre-colonial Through 1880s</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST 12B United States Women's History: 1890-Present</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 25 Women in the Arts</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 31 Women in the Middle East</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Area 3: Social Science**

WOMN 54 The Politics of Sexual Violence | 3.0
AFAM 60 African American Women in the US | 3.0
ANTH 20 Lesbian Gay Bisexual Transgender Anthropology | 3.0
ANTH 25 Culture, Gender and Sexuality | 3.0
ASAM 35 Asian American Women | 3.0
BCST 105 Gender & Mass Media | 3.0
ECON 25 Women in the Economy | 3.0
IDST 31 Women in the Middle East | 3.0
LALS 10 Latinas in the U.S./VOCES | 3.0
LGBT 5 Introduction to Lesbian, Bisexual, Gay, and Transgender Studies | 3.0
LGBT 21 Issues in Lesbian Relationships | 3.0
HIST 12A United States Women's History: Pre-colonial Through 1880s | 3.0
HIST 12B United States Women's History: 1890-Present | 3.0
PSYC 25 Psychology of Gender | 3.0
SOC 25 Sex and Gender in American Society | 3.0

Total: ........................................ 18.0

**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 program, students will be able to:

- Examine the process of gender socialization.
- Analyze sexism in conjunction with other forms of institutionalized oppression.
- Distinguish and analyze women’s experiences across cultures.
- Examine and evaluate women’s political, historical and artistic achievements.
- Evaluate and apply strategies for improving communication and healthy behaviors in their own lives.

Assuming students start this AA with transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the Major in Women’s Studies**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Required course:</strong></td>
<td></td>
</tr>
<tr>
<td>WOMN 25 Introduction to Women’s Studies: Feminism Demystified</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Choose three units from the following Behavioral Sciences courses:
- PSYC 25 Psychology of Gender ................................ 3.0
- SOC 25 Sex and Gender in American Society .......... 3.0
- ANTH 20 Lesbian Gay Bisexual Transgender
  Anthropology ........................................ 3.0
- ANTH 25 Culture, Gender and Sexuality ............... 3.0

Choose three units from the following Social Sciences courses:
- ECON 25 Women in the Economy ..................... 3.0
- HIST 12A United States Women's History: Pre-colonial
  Through 1880s ........................................ 3.0
- HIST 12B United States Women's History: 1890-Present .. 3.0

Choose six units from the following Humanities courses:
- WOMN 10 Women and Film ................................ 3.0
- HUM 25 Women in the Arts ................................ 3.0
- ART 108 Women Through Art History .................. 3.0
- BCST 105 Gender & Mass Media ......................... 3.0
- ENGL 57 Survey of Women's Literature ................. 3.0
- ENGL 58 Contemporary Women's Writing ............... 3.0

Choose three units from the following Diversity Focus courses:
- IDST 81B Diversity and Social Justice: Anti-Semitism/
  (Age-based Oppression) .................................. 0.5
- IDST 80A Diversity and Social Justice: Racism .......... 0.5
- IDST 80C Diversity and Social Justice: Sexism .......... 0.5
- IDST 81B Diversity and Social Justice: Anti-Semitism/
  Anti-Arabism ........................................ 1.0
- IDST 80D Diversity and Social Justice: Heterosexism . 0.5

Choose three units from the following Life-Work Focus courses:
- WOMN 54 The Politics of Sexual Violence ............... 3.0
- WOMN 55 Ending Sexual Violence: Peer Education .. 3.0
- HLTTH 25 Women's Health ................................ 3.0
- SUPV 236 Women Leaders at Work ..................... 3.0
- PSYC 14 Psychology of Shyness and Self-esteem ....... 1.0
- PSYC 15 Assertive Behavior ................................ 1.0
- PSYC 17 Psychology of Eating, Food, and Weight .... 1.0

Recommended
Students are encouraged to take English 1A or Communication Studies
1A with a Women's Studies focus.
Total: .................................................. 21.0

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 an opportunity to identify various
markers of sexual health, which will enable them to promote

Learning Outcomes
Upon completion of this program, students will be able to:
- Provide accurate, timely information about safe and healthy sex
  practices.
- Apply behavior change theory to real-life situations.
- Offer appropriate agency and clinic referrals.
- Provide general sexual health advice sensitive to diverse cultures,
genders, and sexual orientations.
- 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.
- Recognize and address co-factors which increase the risk of
  HIV/STI infection.
- Create and produce sexual health education events.

Requirements for the Certificate of Achievement. The certificate
requires completion of 16 units, which can be completed in one semes-
ter. 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, and
course work is transferable to the California State University.

Credit toward other CCSF Certificates. Several of the required and
elective courses of the Certificate satisfy required or elective courses
of the Community Health Worker, Infectious Disease Prevention
in Priority Populations, and Trauma Prevention and Recovery
Certificates.

The minimum time for completion of this certificate is 1 semester.
Completion time will vary based on student preparation and number
of classes completed per semester.

Courses Required for the Certificate of Achievement in Sexual Health
Educator

Course ................................................. Units

Required courses:
- WOMN 54 The Politics of Sexual Violence ................ 3.0
- WOMN 55 Ending Sexual Violence: Peer Education .. 3.0
- IDST 17 Human Sexuality ................................ 3.0
- HLTTH 54 Introduction to Public Health ............... 3.0

Choose 4 units from the following courses:
- SOC 25 Sex and Gender in American Society .......... 3.0
- SOC 35 Sex, Marriage and Family Relationships ....... 3.0
- PSYC 9 Psychology of Stress ............................ 3.0
- PSYC 25 Psychology of Gender .......................... 3.0
- ANTH 20 Lesbian Gay Bisexual Transgender
  Anthropology .......................................... 3.0
- ANTH 25 Culture, Gender and Sexuality ............... 3.0
- HLTTH 64 Health Education Practice ................... 3.0
- HLTTH 67 HIV and Hepatitis Navigation Skills ......... 3.0
- HLTTH 97 Stress and Resilience .......................... 3.0
- LGBT 21 Issues in Lesbian Relationships ............... 3.0
- LGBT 24 Intimacy and Relationships between Men .... 3.0
Women’s Studies

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-52.5
Feminist film studies. Applying introductory level feminist film studies to classic and current films. UC/CSU

WOMN 20. Her/His/Ourstories (3)
Lec-52.5, field trips
Advise: ENGL 91 or ENGL 86 or ESL 150 or placement in ENGL 88 or ENGL 95 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-52.5
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. Study of the formation of gender and its intersections with race, class, sexuality, disability, age, religion, and other systems of difference. UC/CSU

WOMN 54. Politics of Sexual Violence (3)
Lec-52.5, field trips
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

WOMN 55. Ending Sexual Violence: Peer Education (3)
Lec-52.5, field trips
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

AFAM 60. African American Women in the United States (3)
Lec-52.5
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. UC/CSU

ANTH 20. LGBT Anthropology (3)
Lec-52.5
This course explores how gender and sexuality are expressed in various cultures around the world. Focuses on gender in non-Western cultures such as Native American, African and Asian societies. Discusses relationships of gender to aspects of culture such as kinship, economics, politics, and religion. UC/CSU

ART 108. Women Through Art History (3)
Lec-52.5, 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. UC/CSU

ASAM 35. Asian American Women (3)
Lec-52.5
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. UC/CSU

BCST 105. Gender & Mass Media (3)
Lec-52.5
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B
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 individuals of each gender. An update on opportunities for women in each of the mainstream and alternative media industries. UC/CSU

Offered on occasion
ECON 25. Women in the Economy (3)
Lec-52.5  P/NP available
Women's roles in the U.S. economy, including varying experiences related to race, ethnicity, sexuality, and class. Women's occupations and earning; unpaid household activities; experiences of women from three American cultures; related public policy. Applies and contrasts mainstream economic and political economy theories of gender inequality. UC/CSU Offered Fall semesters

ENGL 57. Survey of Women's Literature (3)
Lec-52.5, field trips  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. UC/CSU Offered on occasion

ENGL 58. Contemporary Women's Writing (3)
Lec-52.5, 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 from diverse social, cultural and ethnic backgrounds. UC/CSU Formerly ENGL 58A Offered on occasion

HIST 12A. United States Women's History: Pre-colonial Through 1880s (3)
Lec-52.5  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 across racial, ethnic, and class lines. UC/CSU HIST 12A is not prerequisite to HIST 12B.

HIST 12B. United States Women's History: 1890-Present (3)
Lec-52.5  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 across racial, ethnic, and class lines. UC/CSU HIST 12A is not prerequisite to HIST 12B.

HUM 25. Women in the Arts (3)
Lec-52.5, field trips  P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ESL 160 or placement in ENGL 96 or ENGL 88B
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. UC/CSU Offered Fall semesters

IDST 17. Human Sexuality (3)
Lec-52.5  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ENGL 150 or ESL 186 or ENGL 95 or ENGL 88
A human sexuality course that integrates content and methodology from the disciplines of anthropology, biology, ethics, health education, history, jurisprudence, and psychology. UC/CSU C-ID PSY 130

IDST 31. Women in the Middle East (3)
Lec-52.5, field trips  P/NP available
An interdisciplinary survey of women in the Middle East focusing on diversity, colonization, nationalism, religion, gender, sexuality, family, law, literature, music, art, and film. UC/CSU Offered Spring semesters

IDST 80A. Diversity and Social Justice: Racism (.5)
Lec-9  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ENGL 150 or ESL 186 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of race-based oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about racism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

IDST 80C. Diversity and Social Justice: Sexism (.5)
Lec-9  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ENGL 150 or ESL 186 or ENGL 93 or ENGL 88
A consciousness raising analysis and evaluation of sexism on individual, institutional, and cultural levels in the United States. Expanding one's knowledge about sexism, increasing personal awareness of one's own sexism and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU

IDST 80D. Diversity and Social Justice: Heterosexism (.5)
Lec-9  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ENGL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
A consciousness-raising analysis and evaluation of homophobia and heterosexism (discrimination based on perceived or real sexual orientation and identity) oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about heterosexism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU

IDST 80E. Diversity and Social Justice: Ableism (.5)
Lec-9  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ENGL 150 or ESL 186 or ENGL 95 or ENGL 93 or ENGL 88
A consciousness raising analysis and evaluation of ableism (disability-based oppression) on individual, institutional, and cultural levels in the US. Expanding knowledge about ableism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU Offered Fall semesters
IDST 80F. Diversity and Social Justice: Class and Classism (.5)
Lec-9  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A consciousness-raising analysis and evaluation of class oppression and classism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about class, class oppression and classism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU
Offered Spring semesters

IDST 80G. Diversity and Social Justice: Transphobia (.5)
Lec-9  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A consciousness-raising analysis and evaluation of transphobia and gender oppression on individual, institutional, and cultural levels in the U.S. Emphasis on expanding knowledge about transphobia and gender diversity, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change. CSU
Offered Fall semesters

IDST 81B. Diversity and Social Justice: Anti-Semitism/Anti-Arabism (1)
Lec-18  P/NP available
Advise: ESL 140 or ESL 184 or ENGL 91 or ENGL 86 or placement in ESL 150 or ESL 186 or ENGL 95 or ENGL 88
A consciousness-raising analysis and evaluation of anti-Semitism and anti-Arabism on individual, institutional, and cultural levels in the U.S. Expanding knowledge about anti-Semitism and anti-Arabism, increasing awareness of one's own socialization and assumptions, and the application of this knowledge and awareness for individual and social change are emphasized. CSU
Offered Spring semesters

LALS 10. Latinas in the U.S./VOCES (3)
Lec-52.5  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. UC/CSU

LGBT 21. Issues in Lesbian Relationships (3)
Lec-52.5  P/NP available
This class addresses intimate partner personal relationship issues (money, power, sex) about lesbian, bisexual and queer-identified women new to relationships or who have difficulties sustaining successful ones. Topics are applicable to persons of all genders and sexualities. Learning modality is critical analysis through self-exploration and sharing personal experiences via online class forum postings and confidential reports, student meetings and papers submitted to the instructor. CSU

PSYC 14. Psychology of Shyness and Self-esteem (1)
Lec-17.5  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-18  P/NP available
Examination of the development of communication patterns in a psychological and sociocultural context. Psychological and emotional barriers to effective communication will be explored. Application of assertiveness techniques to effect behavior change based on cognitive/behavioural theories in psychology are a major focus. Assessment and implementation of appropriate techniques in a variety of situations, including communication with family, friends, and at the workplace are also discussed. CSU

PSYC 25. Psychology of Gender (3)
Lec-52.5  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. UC/CSU
Offered Fall semesters

SOC 25. Sex and Gender in American Society (3)
Lec-52.5  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. UC/CSU
C-ID SOCI 140
Offered Spring semesters

SUPV 236. Women Leaders at Work (3)
Lec-52.5  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
Offered Spring semesters

Noncredit Courses:
WOMN 2501. Self-Defense (16 hrs)
Instruction and practice in physical and psychological aspects of self-defense. Emphasis on developing strategies to emerge from threatening situations without sustaining serious physical or psychological trauma. The attainment of these skills can boost self-esteem, facilitating the pursuit of life and career goals.
Word Processing

For credit and noncredit courses in word processing see the Computer Applications for Business course listings of the Business Department in this section of the Catalog.

World Languages and Cultures

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. Besides being excellent intellectual training and meeting transfer requirements, language courses allow you to add an international dimension to your abilities including international business and international relations, help you communicate with the peoples of the world and understand their cultures. Students often major or minor in languages in conjunction with majors in other areas.

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, 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 World Languages and Cultures Department.

For foreign language studies abroad, contact the International Education Coordinator, 239-3778.

For short term noncredit World Languages and Cultures language classes, contact the Continuing Education Coordinator, 561-1860.

Announcement of Course

Credit, Degree Applicable Course:

WORL 100. Introduction to Intercultural Communication and Language Learning (3)
Lec-52.5 P/NP available
Advise: ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or ESL 160 or placement in ENGL 96 or ENGL 88B

Introduction to language learning at CCSF. Investigation of intercultural communication and cultural competence in the context of learning languages. Acquisition of simple conversational skills in each language taught, basic cultural competency to communicate more effectively in a multicultural world. Exploration of strategies for efficient language learning. Knowledge of how the acquisition of other languages can enrich careers and lives. UC/CSU

Formerly FORL 100
Compliance with College Rules and Regulations

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.

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.


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, or any other sexual misconduct.


*These categories are not subject to the State Chancellor’s jurisdiction.

Responsible District Officer

The compliance officer/coordinator responsible for the District’s compliance with this policy and all applicable laws is the District Title 5/EOO/ADA/Title IX Compliance Officer, 50 Phelan Avenue, B619, San Francisco, CA 94112, (415) 452-5053. Information concerning the provisions of the applicable laws and complaint procedures is available from the District Title 5/EOO/ADA/Title IX Compliance Officer.

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.

- **“Consent”** means, as defined by California Education Code section 67386, “affirmative consent,” which means affirmative, conscious, and voluntary agreement to engage in sexual activity. It is the responsibility of each person involved in the sexual activity to ensure that he or she has the affirmative consent of the other or others to engage in the sexual activity. Lack of protest or resistance does not mean consent, nor does silence mean consent. Affirmative consent must be ongoing throughout a sexual activity and can be revoked at any time. The existence of a dating relationship between the persons involved, or the fact of past sexual relations between them should never by itself be assumed to be an indicator of consent.

- **“Dating violence”** means violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with the victim. The existence of a romantic or intimate relationship will be determined based on the length of the relationship, the type of relationship and the frequency of interaction between the persons involved in the relationship.

- **“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.
  4. 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.

- "Discrimination on the basis of sex" means sexual harassment or discrimination on the basis of gender, e.g., sexual harassment, sexual assault, sexual violence and/or sexual misconduct.

- "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.

- "Domestic violence" includes felony or misdemeanor crimes of violence committed by:
  1. A current of former spouse of the victim;
  2. By a person with whom the victim shares a child in common;
  3. By a person who is cohabitating with or has cohabitated with the victim as a spouse;
  4. By a person similarly situated to a spouse of the victim under California law; or
  5. By any other person against an adult or youth victim who is protected from that person's acts under California law.

- "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.

- "Gender" means a person's gender identity and gender-related appearance and behavior whether or not stereotypically associated with the person's assigned sex at birth. This includes transgender, non-binary and gender non-conforming individuals.

- "Gender-based harassment" means unwelcome conduct based on a student's actual or perceived sex, including harassing conduct (verbal, nonverbal, physical aggression, intimidating or hostile) based on an individual's gender expression, gender identity, transgender status, gender transition, or nonconformity with sex stereotypes.

- "Harassment" is unwelcome conduct which is severe or pervasive and both subjectively and objectively offensive based on a protected category or categories, so as to create an abusive environment.

- "Hostility based on sex or sex-stereotyping" includes conduct such as refusing to use a transgender student's preferred name or pronouns, when the school uses preferred names for gender-conforming students or when the refusal is motivated by animus toward people who do not conform to sex stereotypes.

- "Hostile environment harassment" in either education or employment, means that the complainant was subjected to unwelcome conduct of a sexual or discriminatory nature based on other protected categories, which is severe or pervasive and both subjectively and objectively offensive so as to alter the educational or employment environment and create an abusive educational or employment environment.

- "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 assault” includes but is not limited to, rape, forced sodomy, forced oral copulation, rape by a foreign object, sexual battery, or threat of sexual assault.

• “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 unwelcomed.
  (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.
  (4) 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.
  (5) 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.
  (6) 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.
  (7) 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.

• Harassment in the form of hostile environment harassment on the basis of any protected category is also prohibited discrimination.

“Sexual misconduct” includes a range of behaviors such as sexual assault (which includes rape and any kind of nonconsensual sexual contact), sexual harassment, intimate partner violence, stalking, voyeurism, and any other conduct of a sexual nature that is nonconsensual, or has the purpose or effect of threatening, intimidating, or coercing a person, such as intimidation or bullying.

• “Sexual orientation” means heterosexually, homosexuality, or bisexuality.

• “Stalking” means engaging in a course of conduct directed at a specific person that would cause a reasonable person to fear for his or her safety or the safety of others, or to suffer substantial emotional distress.

• “Unlawful discrimination” means discrimination, or the unjust or prejudicial treatment of different categories of people, based on a category protected under Title 5, section 59300 et seq., or Title IX of the Education Amendments of 1972, including sexual harassment, harassment based on a protected group or category status as set forth in this Policy, and retaliation. In addition, the District will accept complaints of discrimination or harassment on any additional basis prohibited by District policy.

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.

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 SFCCCD 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 (415) 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 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 at (415)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 - Director 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 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, 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 Dean of Student Activities. The Dean’s decision may be appealed to the Associate Dean of Student Affairs & Wellness.

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 student organizations purport to represent the entire student body of City College of San Francisco.

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 Dean of 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 guide lines 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 view-points.

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 Dean of 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 Dean of 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 Vice Chancellor of Student Development for his/her specific recommendation to the Chancellor.
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 Dean of 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 Dean of 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 City College of San Francisco campus must obtain permission from the Dean of Student Activities. Materials originating from sources outside City College must bear the official approval of the Dean of 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 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 center.

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 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 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 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.

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 BP 5.16 and AP 5.16, the Code of Student Conduct, and by adopting BP 5.17 and AP 5.17, the Student Discipline Procedures. 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 code 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 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 about student conduct procedures, please contact the Office of Student Affairs & Wellness at (415) 239-3211 or at studenaffairs@ccsf.edu or visit Conlan Hall, Room 106.

**Code of Student Conduct**

Disciplinary sanctions may be imposed for good cause, which includes, but is not limited to, the following offenses:

**General Behavioral Misconduct and Non-Compliance Violations**

1. Disruptive behavior, willful non-compliance, willful and persistent profanity or vulgarity, or the open and/or persistent defiance of the authority of, or persistent abuse of, District personnel or officials acting in the performance of their duties, violating the rights of other students.

2. Failure to comply with directions of District officials, faculty, staff or campus police officers who are acting in the performance of their duties, including failure to identify oneself when on District property or at a District sponsored or supervised event, or upon the request of a District official acting in the performance of his/her duties.

3. Persistent or continued serious misconduct where other means of correction have failed to bring about proper conduct.
Physical and Verbal Misconduct Violations
4. Willful misconduct which results in injury or death to a student or District personnel or which results in cutting, defacing, or other injury or damage to any real or personal property owned by the District; or injury or damage to property belonging to a member of the District community or to an authorized District visitor while on District property.

5. Assault or battery, abuse, extortion, or any threat of force, violence, or death, or any terrorist threats as defined in Education Code section 48900.7(b), directed toward any member of the District community (including but not limited to students and employees), or District visitor engaged in authorized activities, or to any District property, or aiding and abetting, as defined in Penal Code section 31, the infliction or attempted infliction of physical injury on another person.

6. Disorderly, lewd, indecent, obscene, slanderous, libelous or offensive conduct or expression (including clothing) that interferes with the District's primary educational responsibility or that breaches the peace on District property or at any District sponsored or supervised function, or such conduct or expression that so incites students as to create a clear and present danger of the commission of unlawful acts, or substantial disruption of the orderly operations of the District on any District property or at any District sponsored or supervised function.

7. Instructors in special areas (i.e., gymnasium and laboratories) and in specialized fields or disciplines (e.g., Construction, Nursing, Physical Education) may require students to wear particular clothing for suitability or to meet health and/or safety regulations.

Academic Dishonesty Violation
8. 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 having improper or unapproved access to answers or exams. Plagiarism is defined as the unauthorized use of the written language and thought of another author without proper quoting or citing and representing him/her as one's own.

Financial and Monetary Misconduct Violations
9. Dishonesty such as theft or the unlawful taking of property from the rightful owner, or knowingly receiving stolen property belonging to the District or any other rightful owner, knowingly furnishing false information to the District including misrepresentation of oneself or of an organization as an agent of the District, or forgery, alteration, or misuse of District documents, records or identification.

10. Failure to satisfy District financial obligations, including but not limited to damages to District property and equipment.

11. Participation in gambling, which includes betting, wagering or selling pools, playing card games for money, or using District resources (including but not limited to telephones and computers) to facilitate gambling.

Disturbance, Unauthorized Use and/ or Misuse of Facilities, Property, Services, Classes, Resources, Equipment
12. Unauthorized entry to or use of District facilities, supplies or equipment (including but not limited to computing, networking and information resources).

13. Defacement and/or destruction (without approval) of District property, equipment, and records are prohibited.

14. Violation of District rules and regulations, including those concerning student organizations, the use of District facilities, or the time, place and manner of public expression or distribution of materials, as defined in Education Code section 66301.

15. Violation of other applicable federal, state and municipal laws and District rules and regulations in connection with attendance at programs or services offered by the District or while on District property or at District sponsored activities.

16. Violation of parking rules and regulations as well as traffic regulations on District property, including but not limited to speeding, driving in the wrong direction, or other reckless driving behavior.

17. Entry of visitors (including infants and children) in a classroom without the prior consent of the instructor. If a child or infant interferes with the instructor's ability to teach, students whose children or infants require the use of childcare services should register with CCSF's childcare resources.

18. Entry of animals in classrooms or labs except as necessary to provide reasonable accommodations and assistance to disabled students. Students who require the use of a service or comfort animal should register with and provide documentation to Disabled Students Programs and Services (DSPS).

19. Obstruction or physical or verbal disruption of classes, computer laboratories or study facilities (including but not limited to Library and Learning Assistance Center), student activities, administration, disciplinary procedures, governance processes, or other authorized District activities, services, operations or functions or prevention of authorized guests from carrying out the purpose for which they are on District property.

Technology and Weapons Violations
20. Violation of the District's Computer Usage Policy (see appropriate sections of the CCSF College Catalog for a complete version of the Policy).

21. Use by any person, including a student, of any electronic listening or recording device in any classroom without the prior consent of the instructor (as defined in Education Code 78907), 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.

22. Persistent and willful use of a cell phone or other communication device by a student in a classroom or laboratory (e.g., talking, text-messaging, recording) without the prior consent of the instructor or laboratory monitor.

23. 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, sand club, 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 that can be used as a threat to do bodily harm.
Health and Substance Violations
24. Unlawful use, sale, distribution or possession of, or the presence on campus while under the influence of any controlled substance as listed in the California Health & Safety Code (except as expressly permitted by law and evidenced by medical authorization), or the use, sale, or distribution of any poison classified by laws defining controlled substances, while on District property or at District functions, or the unlawful use, possession of or offering, arranging or negotiating the sale of any drug paraphernalia.

25. Willful or persistent smoking including vaping and expectorating chewing tobacco in any area where smoking has been prohibited.

Sexual Misconduct Violations
26. Violation of the District’s Sexual Harassment Policy as defined by Board Policy 1.36.
27. Violation of the District’s Sexual and Other Assaults on Campus Policy as defined by Board Policy and Administrative Procedure 2.09.

Harassment, Threatening, Stalking and Hazing Violations
28. Harassing, provoking, intimidating or threatening anyone who is a witness in a school disciplinary proceeding, administrative proceeding or law enforcement investigation for the purpose of preventing the individual from being a witness or retaliation for being a witness.

29. Engaging in intimidating conduct or bullying against another student or employee of the District through words or actions, including direct physical contact, verbal assaults such as teasing, name-calling, social isolation, manipulation, and cyberbullying (e.g., baiting or sexting) or engaging in intimidating conduct or bullying through other electronic means (e.g., social media, cellular phones, and email).

30. Causing, threatening or attempting to cause or participating in an act of hate violence, as defined in Education Code Section 233(e).

31. Stalking, defined as a pattern of conduct by a student with intent to follow, alarm or harass another person and which causes that person to reasonably fear for his or her safety, and where the student has persisted in the pattern of conduct after the student has been told to cease the pattern of conduct. Violation of a restraining order shall also constitute stalking under the Code of Student Conduct.

32. Participation in hazing (e.g., verbal abuse, threats or implied threats, beating, paddling, branding, other forms of assault, and forced or coerced behavior of any kind).

Disciplinary sanctions for the above offenses shall include but are not limited to warning; verbal and/or written reprimand; a failing grade on an assignment or test or in a class in proven cases of cheating, plagiarism or other forms of academic dishonesty; disciplinary probation; ineligibility to participate in extra-curricular activities; removal from class by the instructor for no more than two class meetings; removal from an instructional laboratory, facility, center or other supervised student activity by the designated site administrator for no more than two days, sessions, meetings or days; 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; expulsion.

Suspension or recommended 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 the implementation and enforcement of the Code of Student Conduct shall be adopted and implemented by the Chancellor or his or her designee.

In addition, in AP 5.17 teachers are authorized to issue "a failing grade on an assignment or test or in a class in proven cases of cheating, plagiarism or other forms of academic dishonesty."

Forms of Disciplinary Sanctions
- Warning: A written or oral statement to the student that the student has violated the Code of Student Conduct.
- Reprimand: A written notice by the Disciplinary Officer that the student has violated Code of Student Conduct issued and placed in the student’s college disciplinary record.
- Restriction: Limitation of a student’s access to specified campus classes, resources, services, events or facilities for a specific period of time.
- Restitution: Reimbursement to the District for damage(s) to property or for misappropriation of funds.
- Disciplinary Probation: A period of observation and/or conditional participation in campus and academic affairs, activities or events. This period should not exceed one (1) calendar year. The Disciplinary Officer may require that the student meet specific conditions for being removed from disciplinary probation status. The Disciplinary Officer may reduce the length of probation upon a showing of good cause by the student.
- Removal from an Academic Program: Temporary or permanent exclusion from a specified academic program at the College.
- Removal from a Class, Activity or Site: Temporary or permanent removal from a specific class (or classes as necessary), activity, lab or location.
- Suspension: Exclusion of the student from all district classes, activities, programs and locations for a definite period of time (one or more semesters). The Disciplinary Officer may require that the student meet specific conditions to have the suspension status lifted; the Disciplinary Officer may also reduce the length of suspension upon a showing of good cause by the student or the length of the suspension may be extended for good cause.
- Expulsion: Permanent, indefinite exclusion of a student from all district classes, activities, services, programs and locations.

Student Due Process
Due process is a student’s right to a fair, equitable and just process.

- Notification and Communication: the right to receive proper notification when/if a violation of the Code of Student Conduct occurs; the right to clear and timely communication(s) regarding the process until the matter is resolved; the right to clear explanation and clarification of disciplinary processes, procedures and decisions.
- Formal and Informal Hearings: the right to be informed in writing of the charges, the evidence relied upon and the basis for the decision or the recommendation; the right to present and question witnesses and inspect evidence; the right to remain silent during hearings; the right to be heard by impartial decision makers; the right to have an advocate (no lawyers are permitted); the right to waive hearing and appeal opportunities.
- Opportunity: the opportunity to be heard; the opportunity to appeal disciplinary sanctions (applies only in cases of recom
Informal Process for Complaint Against a Faculty Member

A complaint against a faculty member that the member 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 are governed by the following procedure:

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 ten (10) 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 ten (10) semester instructional days then the matter will be considered dropped unless renewed by the student within the first ten (10) 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 Affairs & Wellness 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 his/her 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 Committee (hereinafter “the Committee”) is composed of students, faculty, and administrators. Its
charge is to review student grievances regarding course grades and file contents. After reviewing a grievance, the Committee recommends appropriate action to the Chancellor, to the instructor, and to the student. The Committee acts as an arbitrating body and does not have the power to change grades directly, as stated in legislation:

California Education Code 76224 (a) When grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor of the course and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith or incompetency, shall be final.

**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 students believe that discrepancies exist between grades given by their instructors and the grades they believe were achieved, those students should follow the steps for the appeal procedure below.

**Informal Grade Review Process**

*Meeting with the Instructor and/or the Department Chair*

Students wishing to appeal a grade should discuss the issue with the instructor in an office-hour conference or by appointment. If, for any reason, the students are unwilling or unable to confer with the instructor, they must then consult with the instructor's department chair. Every effort should be made to resolve the issue at this level.

*Meeting with the School Dean*

If the department chair and instructor are unable to resolve the grade dispute, the students shall bring the matter to the attention of the school dean (i.e., the department chair's supervisor), who will confer with all parties to resolve the dispute.

All parties are expected to make every effort to address the grade dispute in a timely manner. If the grade dispute remains unresolved, the Vice Chancellor of Student Development will refer the matter to the Dean of Student Affairs & Wellness.

*Important Notice.* The informal process must be completed within ten (10) working days after receipt of a midterm grade, and for final grades, within forty-five (45) calendar days from the start of instruction in the immediately following Fall or Spring semester.

**Formal Process with the Dean of Students**

If the grade dispute is unresolved after the informal process, the students may initiate a formal review process by submitting a Petition for Grade Review to the Dean of Student Affairs & Wellness. The Dean shall discuss the merits of the student's claims and advise the students of the grade review policies and procedures.

The Dean of Student Affairs & Wellness shall verify that the petition has been submitted in a complete and timely manner, review the petition with regards to content and advise students on the appropriateness of further appeal to the Grade and File Review Committee.

**Deadline Notice.** A Petition for Grade Review must be filed within fourteen (14) calendar days following the end of the informal process. The 14-day period will begin at the time the students are first informed either by the department chair, school dean, or Dean of Student Affairs & Wellness that the informal process has concluded.

Filing a formal petition requires the students to document the grade dispute in writing (typed and double-spaced). The students shall provide a copy of the petition with their written statement to the instructor. Once notified a petition has been filed, the instructor shall within two (2) weeks provide the Dean of Student Affairs & Wellness a copy of the course syllabus, attendance and grade records, graded assignments, relevant e-mails or any additional information deemed relevant to the dispute.

The Dean verifies the student and instructor have submitted all required information and forwards the file in its entirety to the Committee Chair and to the Student Grade and File Review Committee.

**Grade Review Hearings**

a. Upon receipt of a Petition for Grade Review, the Student Grade and File Review Committee shall meet to determine if a formal hearing is warranted. Should the Committee deem a hearing is not warranted, the Committee Chair shall advise all parties of the basis for the decision by e-mail. The grade shall stand and the grade review process shall conclude.

b. Should the Committee determine that a hearing is warranted, the petition will be assigned to a subcommittee composed of a student, a faculty member and an administrator. The subcommittee shall convene to review the petition, request any additional information deemed relevant from the student/instructor, hear testimony, question witnesses and consider all available evidence relevant to the case.

c. The student and instructor shall have the right to present written or oral statements concerning the grievance. Each party may bring a representative; however, the representative may not ask or answer questions, offer evidence or address the subcommittee on behalf of the petitioner or faculty member.

d. The subcommittee shall weigh the relevance and merit of all written and oral information obtained, limiting its investigation to the specific case under review and make its recommendations to the full Committee.

e. The Committee shall make a final recommendation and submit that recommendation in a written report to the Chancellor. The Committee shall provide a copy of the final recommendations to the student, instructor, department chair, school dean and Dean of Students.

f. The Chancellor may concur with or overrule the recommendation of the Committee. Only the Chancellor has the authority to change a student's grade. The Chancellor's decision shall be final. California Education Code 76224 (a) When grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor of the course and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith or incompetency, shall be final.

Further information and assistance may be obtained from the Dean of Student Affairs & Wellness, Conlan Hall, Room E106.
**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.

Follett operates several bookstores to serve the City College population. Textbooks and many supplies for City College courses may be purchased and/or rented at any 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 12:30 am 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 officers 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 Policy**

Effective Fall 2014, City College’s new Board Approved Protocol regarding a ‘Smoke-Free Environment’ will be enforced. The policy covers Ocean and specific Center Campuses. City College of San Francisco will become a smoke-free environment, with limited designated smoking areas. A tobacco-free campus creates a healthier environment for students, faculty, staff, and visitors.

Cigarettes (tobacco), e-cigarettes, cigars, pipes, hookahs, water pipes, vapor/vapor-less equipment etc. Note, campus administration and appropriate designee has the authority to assign any other smoking type device to this policy.

Designated smoking areas are noted on the Campus map, located on the following link: [http://www.ccsf.edu/en/about-city-college/administration/police_services/dsa.html](http://www.ccsf.edu/en/about-city-college/administration/police_services/dsa.html)


Enforcement of the policy focuses on educating the community about the policy and promoting smoking cessation resources. The success of this policy relies on the respectfulness, consideration and cooperation of both tobacco users and non-tobacco users. All members of the college community share the responsibility adhering to and enforcing the policy and having the responsibility for bringing it to the attention of visitors and guests. Violation of this policy by students, faculty, or staff will be addressed in a manner consistent with any other CCSF policy violation.

Students who would like information and support regarding smoking cessation can contact the City College Student Health Services at 415/239-3110 or [www.ccsf.edu/stuhealth](http://www.ccsf.edu/stuhealth).

**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.

Additional Board Policies and Administrative Procedures

Information about Board Policies and Administrative Procedures is available on the Board of Trustees website: http://www.ccsf.edu/board
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 indoctrination. Nor can faculty invoke the principle of academic freedom to justify non-professional conduct.

**Credits and Grades**

**Unit of Credit**

In accordance with Title 5, Section 55022.5 and Title 5, Section 55256.5, City College of San Francisco has established a ratio of 3.2 school hours of lecture, laboratory work, and/or study for each unit of credit. For work experience courses, each unit of credit requires 40 hours of unpaid work or 60 hours of paid 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 Catalog 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 online through Web4 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.

**Other Symbols**

Symbol = Definition

"E" = Exclusion

"EW" = Excused Withdrawal

"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.

"EW" Excused Withdrawal. "Excused Withdrawal" shall be assigned when a student is permitted to withdraw from a course(s) due to specific, verified events beyond the control of the student that affect his or her ability to complete a course(s). The student must supply to Admissions & Records supporting documentation to verify these events.
These events may include a job transfer outside the geographical region, an accident in the family where the student is the primary caregiver, when the student who is incarcerated in a California state prison or county jail is released from custody or involuntarily transferred before the end of the term, when the student is the subject of an immigration action, or other extenuating circumstances (verified cases of accidents, illnesses or other circumstances beyond the control of the student) making course completion impracticable. In the case of an incarcerated student, an excused withdrawal cannot be applied if the failure to complete the course(s) was the result of a student’s behavioral violation or if the student requested and was granted a mid-semester transfer.

Excused Withdrawal does not count against a student for the purposes of progress probation and academic dismissal calculations. Excused Withdrawal also does not count toward the permitted number of withdrawals or count as an enrollment attempt.

“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 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 also does not count toward the permitted number of withdrawals or count as an enrollment attempt.

“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

Noncredit Grading

Grading options for noncredit courses are determined on a course-by-course basis, and are one of the following options:

- Letter or Pass/No Pass or Satisfactory Progress
- Pass/No Pass or Satisfactory Progress
- No Grade

Since noncredit courses are offered on an open-entry/open-exit basis, it is possible for a student to attend only part of a class during a semester. The Satisfactory Progress notation is used to indicate that a student was making satisfactory progress in achieving the desired learning outcomes of a course, but had not yet completed the course (and so should not receive a final letter grade or Pass/No Pass symbol).

Students on financial aid receive grades in all their noncredit classes, even if grades are not usually assigned in those courses.
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 prerequisites 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 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.
C. The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner.
D. The prerequisite or corequisite has not been established in accordance with the District's process for establishing prerequisites or corequisites.
E. 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 graduation will be delayed by one or more semesters if he/she 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 F, 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 attendance 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 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,” “INC.,” or “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 Affairs & Wellness (Conlan Hall, Room E 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](http://www.ccsf.edu).

Repetition of Credit Courses
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 within the limitations.

Effective Fall 2013, Title 5 Section 55041 permits only the following to be repeatable:

- Courses for which prepetition 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.

Repetition of a course is allowed under the following general circumstances.

1. When a course is designated as repeatable up to a specific number of units.
2. When a course is included in a Family of Classes with similar primary educational activities in which skill levels or variations are separated into distinct courses.
3. When a professional or vocational program prerequisite requires the course be completed within a recent timeframe. There must have been a significant lapse of time (at least three years) since receiving a passing grade in the course.
4. When a training program mandates the course be repeated every licensing period.
5. When there has been a significant change in the industry or licensure standards since the student previously took the course and the student must take the course again for employment or licensure.
6. When a student with disabilities is repeating a DSPS class.
7. When the district finds that the student's passing grade is, at least in part, the result of extenuating circumstances
8. When a student has attempted a course at least two times and received substandard grades (D, F, NP, or W), the student may repeat the course due to extenuating circumstances.

Description of General Circumstances for Course Repetition

1. 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.

2. Enrollment Limitations on Physical Education and Visual or Performing Arts Courses
   Effective Fall 2013, Title 5 Section 55041, students may not enroll more than four (4) times in active participatory courses that are related in areas of physical education or visual and performing arts, including art, dance, music and theatre. The limitation includes attempts with a substandard grade or a withdrawal (W).

Courses that are related in content are identified as “families of courses” and are those courses with similar primary educational activities in which skill levels or variations are separated into distinct courses.

3. Recency Requirement/Significant Lapse of Time
   A student receiving a satisfactory grade may repeat a course if a recency prerequisite has been established for a course or a program after a significant lapse of time. The district determines that no less than thirty-six (36) months is a significant lapse of time since that grade was obtained.
   - If 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, the minimum thirty-six (36) month lapse of time requirement may be waived. The student must provide documentation that the repetition is necessary for his or her transfer to the institution of higher education.

4. 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 must provide documentation from the employer, identifying the requirement for the training.

5. Significant Change in Industry or Licensure Standards
   Students may repeat a course when there have been significant changes in industry or licensure standards. The student must provide documentation identifying the significant change in industry or licensure standards to repeat the course.

6. Student with Disabilities
   The Disabled Students Program & 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 nondiscrimination 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:
   - When continuing success of the student in other general and/or special classes is dependent on additional repetitions of a specific special class.
   - When additional repetitions of a specific special class are essential to completing a student's preparation for enrollment into other regular or special classes.
   - 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.

7. Extenuating Circumstances
   Students may repeat a course if the district determines that their previous grade, whether satisfactory or substandard, was the result of extenuating circumstances. Extenuating circumstances are verified cases of accidents, illness or occurrences beyond the control of the student. Students must provide documentation supporting the extenuating circumstances.

8. Alleviating Substandard Coursework
   Students receiving a substandard grade of D, F, FW, NP or W
Students are reminded of the following:

A request for academic renewal will be granted under the following conditions:

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 circumstances other than alleviating a substandard grade or approved extenuating circumstances, the original grade and any subsequent grades are used in calculating the student's CCSF grade point average.
3. When course repetition is approved based on extenuating circumstances, the original passing grade remains a part of the permanent record, but will not be used in calculating the student's CCSF grade point average.
4. When a student repeats a course to alleviate a substandard grade of D, F, NP, W, 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 withdraws from a course, that withdrawal counts as a repetition.
6. Courses that were excluded from the student's grade point average through the process of Academic Renewal are counted in the course repetition limitations.
7. Some transfer institutions may calculate all grades in the overall grade point average, regardless of CCSF exclusion.
8. Student may repeat a course after graduation from CCSF.

Effect of Course Repetition on the Transcript

1. At least one year must have elapsed since the last D or F or FW grade to be excluded.
2. A student must have completed at an accredited college at least 12 degree-applicable semester units with a cumulative grade point average of at least 3.0, at least 18 degree-applicable semester units with a cumulative grade point average of 2.5, or at least 24 degree-applicable semester units with a cumulative grade point average of at least 2.0. These units must be earned subsequent to the last grade of D or F or FW to be excluded.
3. A maximum of 24 units can be excluded from the grade point average. Academic renewal will be granted only once.

A request for academic renewal will be granted under the following conditions:

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 circumstances other than alleviating a substandard grade or approved extenuating circumstances, the original grade and any subsequent grades are used in calculating the student's CCSF grade point average.
3. When course repetition is approved based on extenuating circumstances, the original passing grade remains a part of the permanent record, but will not be used in calculating the student's CCSF grade point average.
4. When a student repeats a course to alleviate a substandard grade of D, F, NP, W, 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 withdraws from a course, that withdrawal counts as a repetition.
6. Courses that were excluded from the student's grade point average through the process of Academic Renewal are counted in the course repetition limitations.
7. Some transfer institutions may calculate all grades in the overall grade point average, regardless of CCSF exclusion.
8. Student may repeat a course after graduation from CCSF.

If the student does not meet the any of the eligibility requirements for Course Repetition, please see Auditing in the College Catalog.

Academic Renewal/Exclusion

A student may petition to have previous substandard college grades of "D," "F" or "FW" 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" or "FW" grade to be excluded.
2. A student must have completed at an accredited college at least 12 degree-applicable semester units with a cumulative grade point average of at least 3.0, at least 18 degree-applicable semester units with a cumulative grade point average of 2.5, or at least 24 degree-applicable semester units with a cumulative grade point average of at least 2.0. These units must be earned subsequent to the last grade of "D" or "F" or "FW" 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 homepage.
- Under the For Students column, click on Web4 link.
- Log in with your student ID and PIN number.*
- Click on Student Services and Financial Aid.
- Click on Student Records.
- Click on Order Your Official Transcript.
- Read and follow the instructions on each page carefully.
- Submit your order. If payment is required, follow directions for submitting payment.

For free unofficial transcripts:

- Click the myCCSF link located on the CCSF homepage.
- Under the For Students column, click on Web4 link.
- Log in with your student 10 or as an option your SSN; click on the III forgot my PIN" button. You will be required to answer your personal question. If you do not remember your answer, click on the "Forgot Answer" link. A replacement PIN will be sent to your email on file. For questions, please email corrects@ccsf.edu.

If you have records predating Fall 1998 and the system cannot locate 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 the CCSF homepage.
- Under the For Students column, click on Web4 link.
- Log in with your student 10 number and PIN number.*
- Click on Student Services and Financial Aid.
- Click on Student Records.
- Click on Academic Transcript.
- Click the Submit Button.
- To print a copy of your unofficial transcript, use your browser print option.

* If you forgot your PIN number, enter your student 10 or as an option your SSN; click on the III forgot my PIN” button. You will be required to answer your personal question. If you do not remember your answer, click on the “Forgot Answer” link. A replacement PIN will be sent to your email on file. For questions, please email corrects@ccsf.edu.

When requesting an Academic Transcript of Record the following information must be included:

- Student's full name while attending CCSF.
It is strongly recommended that students wishing to transfer to another college/university complete and submit a request well in advance of the date in which the transcript is needed. Processing time during peak periods may take up to four (4) weeks. Academic transcripts are reviewed and processed as they are submitted.

Processing Fee
The first two requested official and/or unofficial Academic Transcript of Records are free of charge. A processing fee of $5.00 is assessed for each transcript after the first two.

Rush Service
Students may contact the Transcript Department and request Rush Services for the issuance of Academic Transcript of Records. Normal processing time for this service is 2 or 3 business days and 4 or 5 business days during peak period. The fee for this service is $10.00 per requested copy.

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 must be met with courses from CCSF or other 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. Note that both the units and the actual grades received from the other college or university will be accepted by CCSF.

The Office of Admissions & Records (A&R) will approve the transfer of units that will be applied toward electives for graduation after students submit an official transcript and complete the Request for Transcript Evaluation form. Forms are available in Admissions and Records, Conlan Hall 107.

Admissions & Records will approve equivalencies for specific program or general education requirements when a course that is transferred to CCSF is clearly equivalent to a CCSF course. This equivalency is determined through the use of assist.org or C-ID articulation, according to specific CCSF course descriptions, or according to past Department approval and practices.

When the course equivalency is not clear, the student may be required to request course equivalency from the chair of the department offering a comparable course. The chair will review a copy of the official transcript and complete the Course Equivalency/Comparability form. Approval is based on a review of the sending institution's course learning outcomes, subject matter, breadth, scope, units, rigor, and prerequisites. If approved, chairs forward the form to A&R. Forms are available in counseling offices.

A department chair may also elect to substitute an appropriate comparable course for one required for a major or certificate offered by that department. Substitutions are signed off by the department chair on the graduation petition form (which the student completes with a counselor) or on CCSF letterhead.

Student inquiries with either a specific department or with A&R should occur as soon as possible after enrolling in courses at CCSF to ensure timely completion of education goals and graduation. Students are advised to submit all transcripts for evaluation no later than the semester prior to filling out a certificate or graduation petition in order to allow the necessary time for evaluation.

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 2.0, 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 or 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.

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2. Credit by AP, CLEP and IB Examinations

Students may be eligible for credit by AP, CLEP, and IB examinations if they are enrolled and in good standing, have not earned a grade point average below 2.00, and have not attempted the course(s) for which they are seeking credit by exam.

Credit under AP, CLEP, and IB programs is usually granted only to students with no college work completed. Students who have completed college work prior to taking the examinations 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, CLEP, and IB credit, or should consult a CCSF counselor.)

1) Advanced 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

California State University (CSU) and University of California will accept certain AP exams to meet statewide general education requirements (for details, go to www.ccsf.edu/artic and select CSU, then Resources, or UC, then Resources). Individual CSU or UC campuses may accept additional AP exams for credit and/or apply them towards graduation requirements. Students should check with the specific CSU or UC campus for information on how the campus applies AP exam credit.

2) College Level Examination Program (CLEP)

City College will grant general education credit toward graduation for some CLEP examinations.* 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).

*See table for City College general education credit for CLEP examinations

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. University of California (UC) campuses do not accept CLEP credit.

3) International Baccalaureate (IB)

City College will grant general education credit toward graduation for some International Baccalaureate Higher Level (HL) examinations.* Students must pass the examinations with a score 5, 6, or 7 to earn City College of San Francisco credit.

*See table for City College general education credit for IB examinations

California State University (CSU) and University of California will accept certain IB exams to meet statewide general education requirements (for details, go to www.ccsf.edu/artic and select CSU, then Resources, or UC, then Resources). Individual CSU or UC campuses may accept additional IB exams for credit and/or apply them towards graduation requirements. Students should check with the specific CSU or UC campus for information on how the campus applies IB exam credit.
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 earned by the end of their last semester a grade point average between 3.30 and 3.49, inclusive, will be graduated with honors. Those who have earned by the end of their last semester a grade point average between 3.50 and 3.74, inclusive, will be graduated with high honors. Those who have earned by the end of their last semester a grade point average between 3.75 or higher, inclusive, will be graduated with highest honors.

The Honors grade point average calculation will include grades from all degree applicable coursework including coursework from outside institutions. If a student graduates with honors, a notation will be placed on the student's official and unofficial transcripts.

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.

Additional Board Policies and Administrative Procedures
Information about Board Policies and Administrative Procedures is available on the Board of Trustees website: http://www.ccsf.edu/board
## 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>
<td><strong>Art</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art History</td>
<td>3/4/5</td>
<td>Area E</td>
<td>3</td>
<td>Art 101</td>
</tr>
<tr>
<td>Studio Art: Drawing</td>
<td>3/4/5</td>
<td>Area E</td>
<td>3</td>
<td>Consult with Department Chair</td>
</tr>
<tr>
<td>Studio Art: 2-D</td>
<td>3/4/5</td>
<td>Area E</td>
<td>3</td>
<td>Consult with Department Chair</td>
</tr>
<tr>
<td>Studio Art: 3-D</td>
<td>3/4/5</td>
<td>Area E</td>
<td>3</td>
<td>Consult with Department Chair</td>
</tr>
<tr>
<td><strong>Biology</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>3/4/5</td>
<td>Area C</td>
<td>4</td>
<td>Consult with Department Chair</td>
</tr>
<tr>
<td><strong>Chemistry</strong></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Chemistry</td>
<td>3/4/5</td>
<td>Area C</td>
<td>4</td>
<td>Consult with Department Chair</td>
</tr>
<tr>
<td><strong>Computer Science</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS “A” test</td>
<td>3</td>
<td>Area A</td>
<td>3</td>
<td>CS 111A or 110A</td>
</tr>
<tr>
<td>CS “A” test</td>
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<td>Area A</td>
<td>3&amp;3</td>
<td>CS 111A or 110A &amp; CS 111B</td>
</tr>
<tr>
<td>CS “AB” test</td>
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<td>Area A</td>
<td>3</td>
<td>CS 111A or 110A</td>
</tr>
<tr>
<td>CS “AB” test</td>
<td>3</td>
<td>Area A</td>
<td>3&amp;3</td>
<td>CS 111A or 110A &amp; CS 111B</td>
</tr>
<tr>
<td>CS “AB” test</td>
<td>4/5</td>
<td>Area A</td>
<td>3&amp;3&amp;3</td>
<td>CS 111A or 110A &amp; CS 111B &amp; CS 111C</td>
</tr>
<tr>
<td><strong>Economics</strong></td>
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<td></td>
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<tr>
<td>Macroeconomics</td>
<td>3/4/5</td>
<td>Area D</td>
<td>3</td>
<td>Econ 1</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>3/4/5</td>
<td>Area D</td>
<td>3</td>
<td>Econ 3</td>
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<td><strong>English</strong></td>
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<tr>
<td>Language &amp; Composition</td>
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<td>Area B</td>
<td>3</td>
<td>English 1A</td>
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<td>Area B</td>
<td>3</td>
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<td>Environmental Science</td>
<td>3/4/5</td>
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<td>4</td>
<td>Consult with Department Chair</td>
</tr>
<tr>
<td><strong>Geography</strong></td>
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<td></td>
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<tr>
<td>Human Geography</td>
<td>3/4/5</td>
<td>Area D</td>
<td>3</td>
<td>Consult with Department Chair</td>
</tr>
<tr>
<td><strong>Government and Politics</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>United States</td>
<td>3/4/5</td>
<td>Area D or F</td>
<td>3</td>
<td>Pols 1</td>
</tr>
<tr>
<td>Comparative</td>
<td>3/4/5</td>
<td>Area D</td>
<td>3</td>
<td>Pols 2</td>
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<td>Areas D &amp; F</td>
<td>3&amp;3</td>
<td>Hist 17A &amp; 17B</td>
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<td>3/4/5</td>
<td>Areas D &amp; E</td>
<td>3&amp;3</td>
<td>Hist 4A &amp; 4B</td>
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<tr>
<td>World History</td>
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<td>3</td>
<td>No equivalent</td>
</tr>
<tr>
<td><strong>Language other than English</strong></td>
<td></td>
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<tr>
<td>Chinese Language &amp; Culture</td>
<td>3/4/5</td>
<td>Areas A &amp; E</td>
<td>6</td>
<td>Take Foreign Language Placement Test and Consult with Department Chair</td>
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<tr>
<td>French Language &amp; Culture</td>
<td>3/4/5</td>
<td>Areas A &amp; E</td>
<td>6</td>
<td>See above</td>
</tr>
<tr>
<td>German Language &amp; Culture</td>
<td>3/4/5</td>
<td>Areas A &amp; E</td>
<td>6</td>
<td>See above</td>
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<tr>
<td>Italian Language &amp; Culture</td>
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<td>Areas A &amp; E</td>
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<tr>
<td>Japanese Language &amp; Culture</td>
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<tr>
<td>Latin</td>
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<td>Score</td>
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<td>CCSF Units Awarded</td>
<td>Course Equivalence - Only if needed for CCSF Major or Certificate</td>
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<td>Areas A &amp; E</td>
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<td>Take Foreign Language Placement Test and Consult with Department Chair</td>
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<td>3/4/5</td>
<td>Areas A &amp; E</td>
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<td>See above</td>
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<tr>
<td>Spanish Literature &amp; Culture</td>
<td>3/4/5</td>
<td>Area E</td>
<td>6</td>
<td>See above</td>
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<tr>
<td><strong>Mathematics</strong></td>
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<tr>
<td>Calculus AB</td>
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<td>Area A &amp; Math Grad. Requirement</td>
<td>5 or 3</td>
<td>Math 110A or 100A</td>
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<td>Calculus BC</td>
<td>3/4</td>
<td>See above</td>
<td>5 or 3</td>
<td>Math 110A or Math 100A</td>
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<td>(5 &amp; 5) or 3</td>
<td>(Math 110A &amp; 110B) or Math 100A</td>
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<td>Music Theory</td>
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<td><strong>Physics</strong></td>
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<tr>
<td>Physics 1</td>
<td>3/4/5</td>
<td>Area C</td>
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<td>Consult with Department Chair</td>
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<tr>
<td>Physics 2</td>
<td>3/4/5</td>
<td>Area C</td>
<td>3</td>
<td>Consult with Department Chair</td>
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<tr>
<td>Physics C Mechanics</td>
<td>3/4/5</td>
<td>Area C</td>
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<td>Physics C Elect. &amp; Magnetism</td>
<td>3/4/5</td>
<td>Area C</td>
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<td><strong>Psychology</strong></td>
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<td>Psychology</td>
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<td>Statistics</td>
<td>4/5</td>
<td>See above</td>
<td>4</td>
<td>Math 80</td>
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</table>
**CCSF Credit For College Level Examination Program (CLEP) Test Scores**

The following credit and general education equivalencies are based on statewide guidelines for California community colleges. Students who seek course equivalency credit should consult with the department chair for the proposed equivalent course.

<table>
<thead>
<tr>
<th>CLEP Examination</th>
<th>CCSF GE Area</th>
<th>Passing Score</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>Area D</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>American Literature</td>
<td>Area E</td>
<td>50</td>
<td>3</td>
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<tr>
<td>Analyzing and Interpreting Literature</td>
<td>Area E</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>Biology</td>
<td>Area C</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>Calculus</td>
<td>Area A</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Area C</td>
<td>50</td>
<td>3</td>
</tr>
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<td>College Algebra</td>
<td>Area A</td>
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<td>College Algebra-Trigonometry</td>
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<td>English Literature</td>
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<td>French Level II</td>
<td>Area E</td>
<td>59</td>
<td>3</td>
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<tr>
<td>German Level II</td>
<td>Area E</td>
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<td>3</td>
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<td>History, United States I</td>
<td>Area D</td>
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<td>3</td>
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<tr>
<td>History, United States II</td>
<td>Area D</td>
<td>50</td>
<td>3</td>
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<td>Human Growth and Development</td>
<td>Area D</td>
<td>50</td>
<td>3</td>
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<td>Humanities</td>
<td>Area E</td>
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<td>3</td>
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<td>Introductory Psychology</td>
<td>Area D</td>
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<td>3</td>
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<td>Introductory Sociology</td>
<td>Area D</td>
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<td>Natural Sciences</td>
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<td>Pre-Calculus</td>
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<td>Area D</td>
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<tr>
<td>Principles of Microeconomics</td>
<td>Area D</td>
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<td>Western Civilization II</td>
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**CCSF Credit For International Baccalaureate (IB) Test Scores**

The following credit and general education equivalencies are based on statewide guidelines for California community colleges. Students who seek course equivalency credit should consult with the department chair for the proposed equivalent course.

**Test Scores of 5, 6 or 7**

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<th>IB Examination</th>
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<td>Economics HL</td>
<td>Area D</td>
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<td>Geography HL</td>
<td>Area D</td>
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</tr>
<tr>
<td>History (any region) HL</td>
<td>Area D</td>
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<tr>
<td>Language A1 (any language, except English) HL</td>
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<td>Language A2 (any language, except English) HL</td>
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<td>Language A1 (any language) HL</td>
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<td>Language A2 (any language) HL</td>
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<td>Language B (any language) HL</td>
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<td>Psychology HL</td>
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<td>Theatre HL</td>
<td>Area E</td>
<td>3</td>
</tr>
</tbody>
</table>
Regular Faculty and Administrators

A

AABERGE, LUTHER, Interim Associate Vice Chancellor/Chief Budget Office
B.S., University of Montana, Missoula; M.B.A., University of Montana, Missoula

ABAUNZA, VALERIE M., Continuing Student Counseling
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AVILA, JORGE, Latino Services Network
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BARRIOS, ANGELITA, Registered Nursing
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BARRON, ERWIN C., English
M.A.T., Winthrop College; M.D.V., Princeton Theological Seminary

BASS, JAMEY, Mathematics
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BATTISTE, LEILANI F., Deputy General Council & Title 5/EOO/ADA/Title IX Compliance
B.A., University of the Pacific; J.D., University of California Hastings College of the Law; LL.M., S.J.D., Golden Gate University School of Law

BEARD, CHRISTINE H., Transitional Studies
B.A., M.S., San Francisco State University; M.A., University of San Francisco
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Role</th>
<th>Institution/University</th>
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<tbody>
<tr>
<td>BECK, SARAH</td>
<td>Disabled Students Programs</td>
<td>B.A., St. Olaf College; M.A., San Francisco State University</td>
</tr>
<tr>
<td>BEGNAZAROV, TANAKA</td>
<td>Business</td>
<td>B.S., Fresno State University; M.A., San Francisco State University</td>
</tr>
<tr>
<td>BELL, JORGE</td>
<td>Dean, Mission Center</td>
<td>A.S., City College of San Francisco; B.A., Jose Simeon Canas University, El Salvador; M.A., University of San Francisco</td>
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<tr>
<td>BELL, LOREN</td>
<td>English</td>
<td>B.A., St. Louis University; M.F.A., Bowling Green State University</td>
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<tr>
<td>BELLO, LEONEL</td>
<td>Business</td>
<td>B.A., University of San Francisco / Saint Mary’s; M.B.A., University of Phoenix</td>
</tr>
<tr>
<td>BERGER, VALERIE</td>
<td>English as a Second Language</td>
<td>B.A., University of California, Santa Cruz; M.A.T., School for International Training, Brattleboro, Vermont</td>
</tr>
<tr>
<td>BERSTON, SUSAN</td>
<td>Business</td>
<td>B.S., University of California; M.B.A., University of San Francisco</td>
</tr>
<tr>
<td>BERTENS, MATTHEW</td>
<td>Mathematics</td>
<td>B.S., California Polytechnic State University, San Luis Obispo; M.A., San Francisco State University</td>
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<tr>
<td>BERTHOLD, TIM</td>
<td>Health Education</td>
<td>B.A., Brown University, R.I.; M.P.H., Harvard University, Massachusetts</td>
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<tr>
<td>BIBLIOWICZ, MORRIS</td>
<td>English as a Second Language</td>
<td>B.A., Boston University, Massachusetts; M.A., San Francisco State University</td>
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<tr>
<td>BLOOD, DAVID</td>
<td>Physical Education &amp; Dance</td>
<td>B.S., University of Washington; M.F.A., University of Utah</td>
</tr>
<tr>
<td>BOEGEL, THOMAS</td>
<td>Interim Vice Chancellor of Academic Affairs</td>
<td>B.S., Rensselaer Polytechnic Institute; M.S., University of California, Berkeley</td>
</tr>
<tr>
<td>BOGATSKY, ARIADNA M.</td>
<td>Biological Sciences/Anatomy</td>
<td>B.A., San Francisco State University; M.A., University of California, San Francisco</td>
</tr>
<tr>
<td>BORNSTEIN, ABIGAIL</td>
<td>Computer Networking &amp; Information Technology</td>
<td>B.S., Indiana University; M.B.A., California State University, Hayward</td>
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<tr>
<td>BOSSON, MONICA</td>
<td>English</td>
<td>B.A., University of California, Berkeley; M.A., San Francisco State University</td>
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<tr>
<td>BOWNE, SAMUEL</td>
<td>Computer Networking &amp; Information Technology</td>
<td>B.S., Edinboro University of PA; Ph.D., University of Illinois, Urbana Champaign</td>
</tr>
<tr>
<td>BRADY, STEPHEN</td>
<td>Automotive/ Motorcycles/Construction &amp; Building Maintenance</td>
<td>A.A., City College Of San Francisco; B.A., San Francisco State University</td>
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<td>BRANAGAN, LAURA</td>
<td>Biological Sciences</td>
<td>M.S., Rutgers University</td>
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<td>BRAVEWOMAN, MARY</td>
<td>Mathematics</td>
<td>B.A., M.A., San Francisco State University</td>
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<td>BREE, CLAIRE</td>
<td>Art</td>
<td>B.A., San Francisco State University; M.F.A., California College of Arts</td>
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<td>BRICK, AARON</td>
<td>Computer Science</td>
<td>B.S., Johns Hopkins; M.S., University of California, Berkeley</td>
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<td>BROCK, ELIZABETH A.</td>
<td>English</td>
<td>B.A., University of California, Berkeley; M.F.A., Mills College</td>
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<td>BROWN III, HAROLD</td>
<td>Physical Education &amp; Dance</td>
<td>B.A., Gonzaga University; M.A., St. Mary’s College</td>
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<td>BROWN, LORI</td>
<td>Library and Learning Resources</td>
<td>B.S., MLIS, Florida State University; M.B.A., Tampa College</td>
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<tr>
<td>BROWN, MARY L.</td>
<td>Licensed Vocational Nursing</td>
<td>B.A., M.A., Webster College</td>
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<tr>
<td>BROWN, STEVEN WAYNE</td>
<td>Department Chair, Environmental Horticulture &amp; Floristry B.S., California Polytechnic State University</td>
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<td>BROZDA, LISA</td>
<td>Registered Nursing</td>
<td>B.A., M.A., Webster College</td>
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<td>BRUCKMAN, STEVE</td>
<td>General Counsel</td>
<td>B.A., University of Michigan, Ann Arbor; JD, Hastings College of Law</td>
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<td>BUCHSBAUM, JESSICA</td>
<td>English as a Second Language</td>
<td>B.A., Harvard University; M.A., Monterey Institute of International Studies</td>
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<td>BURT, TRACY</td>
<td>Child Development &amp; Family Studies</td>
<td>B.A., Colgate University, Hamilton, NY; M.A., Harvard University, Cambridge, MA</td>
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<td>BUTLER, REBECCA</td>
<td>Business</td>
<td>B.B.A., University of Texas, San Antonio; M.Acc., University of Tulsa; CPA, State of Texas</td>
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<td>BYNUM, TORRANCE L.</td>
<td>Dean, Evans and Southeast Centers</td>
<td>B.S., Tennessee State University</td>
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<td>CABADING, LEON</td>
<td>New Student Counseling</td>
<td>B.A., M.S., San Francisco State University</td>
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<td>English as a Second Language</td>
<td>B.A., San Francisco State University; M.A., Monterey Institute of International Studies</td>
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<td>CAHILL, GREGORIA NOVA</td>
<td>African American Scholastic Programs</td>
<td>B.A., Beloit College, WI; M.S. California State University, Hayward</td>
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<td>CAHILL, PAULA</td>
<td>Student Health Services</td>
<td>B.S.N., Simmons College, Boston; M.S.N., University of California, San Francisco</td>
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<td>CAMPOS-ROJAS, MARCIA</td>
<td>Transitional Studies</td>
<td>B.A., Universidad Metropolitana de las Ciencias de la Educacion, Chile; M.A., San Francisco State University</td>
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<td>CANNON, JOSEPH P.</td>
<td>Biological Sciences</td>
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<td>CANOY, MARIA</td>
<td>APASS</td>
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<td>CARBALLO, PEBBLE</td>
<td>Business</td>
<td>B.S., University of Southern California; M.B.A., Pepperdine University; CPA – State of California</td>
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<td>CARLSON, LENNIS</td>
<td>Music</td>
<td>B.A., California State University, Northridge; M.A., Portland State University</td>
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<td>CARRESE, JOHN MATTHEW</td>
<td>Workforce/Economic Development</td>
<td>M.S., Columbia University</td>
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<td>CASSIA, ANNE J.H.</td>
<td>English</td>
<td>B.A., University of California, Berkeley; M.A., San Francisco State University</td>
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</table>
CASTILLO, PATRICIA, Counseling  
M.A., Santa Clara University

CAUL, LISA, Health Care Technology/  
Echocardiography, Technician  
B.S., University of San Francisco

CAUTHEN, ALFRED, Physics  
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University of California, Santa Cruz

CECIL, MALCOLM, Broadcast Electronic  
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University; Ph.D., Concordia University

CHAN, YOK HUI KELLY, Library and  
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CHAVARIA, FREDERICK R.,  
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University

CHEE, CURTIS, Mathematics  
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Francisco State University

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Language  
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CHEN, PEIJUE, Child Development &  
Family Studies  
B.A., Zhongshan University, China; M.A.,  
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CHU, EMILY, Chemistry  
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Barbara

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DE JESUS, PEACHY I., Licensed Vocational  
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B.S., The Philippines

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DIETER, DARRYL, Director of Research
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DUCkworth, MATTHEW DAVID, English
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B.A., Occidental College; B.A., B.S., Georgetown University

ESTRADA, MICHAEL, Social Sciences/Political Science
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ETLINGER, MARIANNE, English as a Second Language
M.A., San Francisco State University

FEALES-CARPENTER, ADELE, Women's Studies
B.A., California Institute of Integral Studies; M.A. California Institute of Integral Studies

FARNBACH, INGRID, English as a Second Language
B.A., University of Pennsylvania; M.A., San Francisco State University

FARRAR, VINCENT, African American Studies
B.A., Harvard University; M.A., Ph.D, University of California, Berkeley

FAUSTO, ALICIA, New Student Counseling
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FEINGERSH-STELE, NATHANIEL E., Educational Technology
B.A., M.A., San Francisco State University

FELICIANO, ANTHONY, Physical Education & Dance
M.A., Saint Mary's College of California

FELIU, VERÓNICA E., World Languages & Cultures
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FERNANDEZ, OLALLO L., Architecture
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FERREIRA DA SILVA, CLAUDIA, Computer Networking & Information Technology
B.S. Centro Federal de Educacao Tecnologica, Brazil; M.A. University of Phoenix,

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FONG, CYNTHIA, Child Development & Family Studies
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FONG, LAWRENCE K., Chemistry
B.S., University of Nevada, Reno; M.A., Ph.D, Harvard University

FONG, RAYMOND, Extended Opportunity Programs and Services
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