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 noncredit 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.

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...
administration of justice and fire science

office: batmale 213
phone number: 239-3202
web site: www.ccsf.edu/admnjust

Announcement of curricula

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

Administration of Justice

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

Admission. Enrollment is open to all interested students.

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

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

Approval of Instruction. The curriculum is offered in cooperation with local agencies concerned with the administration of justice and is reviewed annually by an advisory committee composed of persons active in the field of law enforcement. In-service courses within the curriculum are certified by the Commission on Peace Officers Standards and Training of the Department of Justice of the State of California. For more information about this agency, see the “Overview of the College” section of this Catalog.

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

**Administration of Justice Major (AS-T)**

Associate in Science in Administration of Justice for Transfer. This course of study prepares students for transfer, particularly to CSU, to complete work for a bachelor’s degree in criminal justice. Students will be able to describe the individual functions and components of the modern criminal justice system; use introductory concepts of legal research as it relates to discussing the content of statutory and case law; and explain the underlying cause of antisocial and criminal behavior. This program is appropriate for students considering law school or careers in law enforcement.

**Learning Outcomes**

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

- Evaluate various local, state, and federal law enforcement career options.
- 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 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 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 Administration of Justice**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMJ 52 Concepts of Criminal Law</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 57 Introduction to Administration of Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 58 Principles and Procedures of the Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 60 Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 66 Forensic Evidence</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 69 Crime Scene Documentation</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 70A Patrol Procedures</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 71 Police Work Experience</td>
<td>1.0-8.0</td>
</tr>
<tr>
<td>ADMJ 72 Criminal Justice Work Experience</td>
<td>1.0-3.0</td>
</tr>
<tr>
<td>ADMJ 73 Police Career Preparation</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 85 PC. 832 Arrest and Control Certification</td>
<td>3.0</td>
</tr>
<tr>
<td>F SC 145 Introduction to Homeland Security</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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

**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 of Achievement in Administration of Justice provides students with foundational, practical, and theoretical knowledge in the main components of the American criminal justice system, and prepares students for entry-level positions in a wide range of criminal justice occupations including law enforcement, courts, corrections, and private security.

Learning Outcomes

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

- Describe the history, structure, and functions of the main components of the American criminal justice system.
- Analyze principles and applications of California and Constitutional law, particularly the requirements adhered to by law enforcement, courts, and corrections.
- Produce written communications that meet the professional standards of the criminal justice system.
- Examine critically contemporary problems and issues within criminal justice.
- Implement investigative and forensic skills, techniques, and procedures in a variety of practical settings.

This certificate is available for students who do not choose to complete the general education requirements for graduating with the AS degree in Administration of Justice.

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

Courses Required for the Certificate of Achievement in Administration of Justice

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMJ 52 Concepts of Criminal Law</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 57 Introduction to Administration of Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 62 Criminal Investigation</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 64 Progressive Policing in the 21st Century</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 68 Criminal Justice Report Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>18.0</td>
</tr>
</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 course system, procedures from incident to final disposition in the criminal justice system, and principles of civil law with constitutional, federal, state and local emphasis. The concepts and skills covered in this certificate provide support for employment in fields such as detective and criminal investigators, fire investigators, forensic science technicians, administrative law judges or hearing officers, immigration and custom inspectors, lawyers, and government property inspectors and investigators.

Learning Outcomes

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

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

- Define occupational safety and health concerns as it relates to emergency service organizations.
- Recognize medical emergencies and activate the EMS system.
- Compare fire suppression systems and fire prevention programs that protect the public in various types of building construction.
- Compare the effects of topography, aspect, and environmental factors on wildland fire behavior and wildland fire suppression, and types of fire prevention programs for the wildland setting.
- Students must complete six of the core courses at CCSF.

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

Course .................................................................Units
Required core courses:
F SC 50 Introduction to Fire Science .....................3.0
F SC 52A Fire Protection Equipment & Systems ........3.0
F SC 53 Building Construction for Fire Protection .......3.0
F SC 57 Principles of Fire and Emergency Services:
  Safety and Survival .........................................3.0
F SC 61A Introduction to Fire Prevention .................3.0
F SC 64 Fire Behavior and Combustion ..................3.0
Choose one of the following options:
OPTION ONE
EMT 100 Emergency Medical Technician ...............8.0
OPTION TWO
F SC 17 Public Safety: Emergency Medical Response ...3.0
F SC 62 Rescue Practices .......................................3.0
Electives: choose 3 units from the following courses, if not used above:
F SC 51A Fire Tactics and Strategy .......................3.0
F SC 62 Rescue Practices .....................................3.0
F SC 107A Fire Training Work Experience ............1.0
F SC 107B Fire Training Work Experience ............2.0
F SC 111 Firefighter One Academy .......................11.5
F SC 63 Vehicle Extrication ..................................0.5
LCBS 94D Labor Relations in America .................1.0
F SC 145 Introduction to Homeland Security ..........3.0
F SC 150 Fire Service Career Preparation ...............2.0
Total: .................................................................27.0 – 29.0

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 multiunit operations 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>
<tr>
<td>F SC 75C Company Officer 2C: Fire Inspections and Investigations</td>
<td>2.0</td>
</tr>
<tr>
<td>F SC 75D Company Officer 2D: All-Risk Command Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>F SC 75E Company Officer 2E: Wildland Incident Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>F SC 75F Instructor I Fire Science Methodology</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>12.0</strong></td>
</tr>
</tbody>
</table>

Firefighter 1 Academy Certificate

Includes the principles, procedures, and techniques of firefighting and rescue. Technical and manipulative skills and concepts of fire control, fire behavior, tactics and strategy, and emergency management will be reviewed and put into practice during this course. The student will be trained according to the National Fire Protection Association, Standard 1001, and the California State Fire Marshal Office of State Fire Training Firefighter One that emphasize training in Firefighter One, Wildland Firefighter, and Hazardous Materials First Responder Operations. Students completing this certificate program will be qualified to test for employment with agencies and departments hiring entry level firefighters.

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

- Apply the standards for Firefighter as established by the National Fire Protection Association and the California State Fire Marshal Office of State Fire Training
- Apply the standards for Hazardous Materials First Responder Operations as established by the National Fire Protection Association and the California State Fire Marshal Office of State Fire Training

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

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

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

Courses Required for the Certificate of Achievement in Firefighter 1 Academy

<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 55 Wildland Fire Control</td>
<td>3.0</td>
</tr>
<tr>
<td>F SC 62 Rescue Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>PE 29A Beginning Firefighting and Public Safety Conditioning</td>
<td>2.0</td>
</tr>
<tr>
<td>F SC III Firefighter One Academy</td>
<td>11.5</td>
</tr>
</tbody>
</table>

Choose one of the following required courses:

- F SC 17 Public Safety: Emergency Medical Response | 3.0 |
- EMT 100 Emergency Medical Technician | 8.0 |

**Total:** | **25.5 – 30.5**

Fire Protection Certificate

This program is designed to prepare students for employment or career advancement in fire protection jobs. It may be of particular interest to students with existing degrees looking to change careers. It is also available for persons who do not want to complete the general education requirements for graduation.

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

- Evaluate fire suppression and fire prevention systems that protect the public in various types of building construction.
- Explain the effects of topography, aspect, and environmental factors on wildland fire behavior, suppression, and prevention operations.
- Analyze occupational safety and health concerns as they relate to emergency services.
- Describe fire department organizational structure and operational levels.
- Provide basic life support or advanced life support assistance in medical emergencies.

Students must complete 6 of the 8 core courses 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 units or classes completed per semester.
Courses Required for the Certificate of Achievement in Fire Protection

Course ......................................................... Units

Required Courses:
F SC 50 Introduction to Fire Science ............... 3.0
F SC 52A Fire Protection Equipment & Systems .... 3.0
F SC 53 Building Construction for Fire Protection ... 3.0
F SC 55 Wildland Fire Control ......................... 3.0
F SC 57 Principles of Fire and Emergency Services:
  Safety and Survival ...................................... 3.0
F SC 61A Introduction to Fire Prevention ............ 3.0
F SC 64 Fire Behavior and Combustion ............... 3.0

Choose one of the following courses:
EMT 100 Emergency Medical Technician ........... 8.0

Total: ..................................................... 24.0 – 29.0

Homeland Security Certificate

The Homeland Security Certificate of Achievement is designed to give students an up-to-date overview of the issues in Homeland Security, with an emphasis on the role of first responders. Using an “all-hazards” perspective, this certificate will help prepare students for public or private sector employment in Homeland Security and related areas, such as transportation security officers, program analysts, intelligence researchers, criminal investigators, and border patrol agents. Veterans with a background in homeland security related issues are encouraged to consider this program as a way to leverage military experience into civilian employment.

Learning Outcomes

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

- Compare and contrast the main issues and threats in homeland security
- Analyze law enforcement first responder roles in providing public safety from Homeland Security threats
- Analyze fire service first responder roles in providing public safety from Homeland Security threats
- Demonstrate first responder skills required to prevent and respond to Homeland Security threats

Students must complete each course with a grade of “C” or higher. Students must complete 5 of the 7 courses at City College of San Francisco. All courses must be taken within a three-year period. The minimum time for completion of this certificate is 4 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 Homeland Security

Course ......................................................... Units

Required courses:
F SC 145 Introduction to Homeland Security ......... 3.0
ADMJ 57 Introduction to Administration of Justice .... 3.0
ADMJ 67 Terrorism and Counterterrorism .......... 3.0
F SC 50 Introduction to Fire Science ................. 3.0

Select one of the following required courses:
F SC 17 Public Safety: Emergency Medical Response ... 3.0
EMT 100 Emergency Medical Technician ............ 8.0

Choose at least six (6) units from the following elective courses:
ADMJ 66 Forensic Evidence .............................. 3.0
ADMJ 85 PC. 832 Arrest and Control Certification .... 3.0
F SC 61A Introduction to Fire Prevention ............ 3.0
F SC 52A Fire Protection Equipment & Systems .... 3.0
F SC 75C Company Officer 2C: Fire Inspections and Investigations .................. 2.0
F SC 106 Fire Safety Director ............................ 1.5

Total: ..................................................... 21.0 – 26.0

Announcement of Courses

Administration of Justice

Credit, Degree Applicable Courses:
ADMJ 51. Juvenile Procedures (3)
Lec-52.5
This course examines juvenile procedure within the administration of justice system, analyzing societal responses to juvenile crime through historical records and crime trend data. Facets of juvenile law enforcement as well as prevention, rehabilitation, and detention will be covered, with emphasis on procedural change in justice policy. CSU C-ID AJ 220
Offered Fall and Spring semesters

ADMJ 52. Concepts of Criminal Law (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Principles of California criminal law, including laws of arrest, search and seizure, application sections of the Constitution of the United States and relevant cases as they apply to and affect contemporary law. An understanding of the California Penal Code and other criminal statutes. UC/CSU C-ID AJ 120
Offered Fall and Spring semesters

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 53=L A 70
Offered Fall and Spring semesters

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
Offered Fall and Spring semesters

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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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  
Offered Fall and Spring semesters

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  
Offered Fall and Spring semesters

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  
P/NP available  
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 Fall and Spring semesters

ADMJ 65. Criminal Justice, Drugs, Crime and the Law (3)  
Lec-52.5  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
Provides a student with a comprehensive explanation of the history of psychoactive drug use; primarily in the United States and peripherally in the world. Students study a menu of psychoactive substances and explore the critical intersection between criminal organizations, crime, drug use, and the law. Students will analyze and evaluate public policy initiatives and laws targeting intervention, prevention strategies, and criminal justice community treatment programs. CSU  
Offered Fall semesters

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 and Summer semesters

ADMJ 67. Terrorism and Counterterrorism (3)  
Lec-52.5, field trips  
P/NP available  
This course introduces the issues of terrorism, terrorist tactics, terrorist ideology, and the terrorist threats to public safety as well as methods and techniques of countering terrorism and preparing for and dealing with its impacts. UC/CSU  
Offered Spring semesters

ADMJ 68. Criminal Justice Report Writing (3)  
Lec-52.5  
P/NP available  
Prerequisite: Completion of or concurrent enrollment in: ENGL 1A  
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  
Offered Fall and Spring semesters

ADMJ 69. Crime Scene Documentation (3)  
Lec-52.5  
P/NP available  
Recommended Prep: ADMJ 68  
Myths and realities of CSI, scientific thinking, duties of forensic and investigative personnel, steps in crime scene processing, preservation of evidence, and legal issues involved in searching and seizing evidence. Emphasis on methods used to document various crime scenes and commonly encountered evidence. Practical exercises include technical photography, production of accurate diagrams, detailed note taking and report formatting, and application of skills to final mock crime scene. CSU  
Offered Fall semesters

ADMJ 70A. Patrol Procedures (3)  
Lec-52.5, field trips  
P/NP available  
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.  
Offered Spring semesters

ADMJ 71. Police Work Experience (1-8)  
Work-60 to 600, field trips  
P/NP only  
Prerequisite: 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 law enforcement agency training such as the San Francisco Police Department. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU

ADMJ 80. Community Corrections (3)  
Lec-52.5, field trips  
Recommended Prep: ADMJ 57  
Overview and examination of the development, purpose, goals and role of community based corrections; including it's various components of evidence based practices, probation, parole, diversion, restorative justice, and intermediate sanctions and emerging alternatives to incarceration. Critical policies, issues, and legal trends will be explored along with supervision of special populations including management of juvenile offenders. CSU  
Offered Fall semesters
ADMJ 82. Criminal Justice Work Experience (1-3)
Work-60 to 225
Prereq: ADMJ 57
Recommended Prep: ADMJ 51 or ADMJ 52 or ADMJ 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
Offered Fall and Spring semesters
ADMJ 83. Police Career Preparation (3)
Lec-52.5, Lab-10 P/NP only
This course will prepare students to take the entry level Q2 Police Officer examination for the San Francisco Police Department and entry level positions in law enforcement agencies. Emphasis will be placed on test taking strategies for written, oral, and physical agility components, preparation, skill development for all test areas, and developing a career plan. CSU
Offered Fall and Spring semesters
ADMJ 85. P.C. 832 Arrest and Control Certification (3)
Lec-52.5, Lab-10 P/NP available
This course is mandated by State Commission on Peace Officer Standards and Training (POST) for all persons exercising Limited Peace Officer Powers as well as Institutional, Park Ranger and other Peace Officer positions. This course covers such topics as history of law enforcement, professionalism, ethics, community relations, the criminal justice system, presentation of evidence, criminal law, preliminary investigations, laws of arrest, use of force and search and seizure. CSU
Offered Spring semesters
ADMJ 88. Law Enforcement and the Media (.5)
Lec-16 P/NP available
Prereq: ADMJ 51 or ADMJ 52 or ADMJ 64
Recommended Prep: BOSS 5500; PE 29A; ENGL 88 or ESL 188 or readiness for college-level English
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 peace officer in California (1280 in-class hours). CSU
Offered on occasion
ADMJ 89. Continuing Professional Training (2)
Lec-36, Lab-4 P/NP only
Prereq: ADMJ 51 or ADMJ 52 or ADMJ 64
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
Students may petition to repeat this course to meet a legally mandated training requirement.
ADMJ 92. Instructor Development (2)
Lec-40 P/NP available
Prereq: ADMJ 51 or ADMJ 52 or ADMJ 64
Recommended Prep: ADMJ 51 or ADMJ 52 or ADMJ 64
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 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
Students may petition to repeat this course to meet a legally mandated training requirement.
Offered on occasion
ADMJ 100. Emergency Vehicle Operation (.5)
Lec-5, Lab-13 P/NP available
Prereq: ADMJ 51 or ADMJ 52 or ADMJ 64
Recommended Prep: BOSS 5500; PE 29A; ENGL 88 or ESL 188 or readiness for college-level English
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 peace officer in California (1280 in-class hours). CSU
Offered on occasion
ADMJ 101. Basic Police Academy (38)
Lec-360, Lab-920
Prereq: ADMJ 51 or ADMJ 52 or ADMJ 64
Recommended Prep: BOSS 5500; PE 29A; ENGL 88 or ESL 188 or readiness for college-level English
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 peace officer in California (1280 in-class hours). CSU
ADMJ 109. Booking and Detention (.5)
Lec-9 P/NP only
Prereq: ADMJ 51 or ADMJ 52 or ADMJ 64
This course of Advanced Officer training is designed to instruct and reinforce the participant’s knowledge of the requirements of operating an emergency vehicle during code three and pursuit conditions. CSU
Offered on occasion

detention of prisoners at police holding facilities. CSU

**Students may petition to repeat this course to meet a legally mandated training requirement.**

**Offered on occasion**

## Fire Science

### Credit, Degree Applicable Courses:

**F SC 17. Public Safety: Emergency Medical Response (3)**
Lec-52.5

Basic knowledge and skills necessary to provide lifesaving interventions and assist higher level Emergency Medical Services (EMS) personnel at the scene and during transport and perform basic interventions with minimal equipment. Meets national EMS education standards for Emergency Medical Responder (EMR) level training. CSU

**Offered Fall and Spring semesters**

**F SC 50. Introduction to Fire Science (3)**
Lec-52.5, field trips P/NP available

**Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English**

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 (NFPA150) Standard 1001. CSU

**Offered Spring semesters**

**F SC 51A. Fire Tactics and Strategy (3)**
Lec-52.5, field trips

**Prereq: F SC 50**

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

**F SC 50 Introduction to Fire Science is a prerequisite for F SC 51A.**

**Offered Fall semesters**

**F SC 52A. Fire Protection Equipment & Systems (3)**
Lec-52.5, field trips

**Prereq: F SC 50**

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

**Offered Fall semesters**

Lec-52.5, field trips P/NP available

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

**Offered Spring semesters**

**F SC 55. Wildland Fire Control (3)**
Lec-52.5, field trips P/NP available

**Prereq: F SC 50**

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. The course is also a pre-requisite for F SC 111 Firefighter Academy. CSU

**Offered Fall and Spring semesters**

**F SC 57. Principles of Fire and Emergency Services: Safety and Survival (3)**
Lec-52.5, field trips P/NP available

**Prereq: F SC 50**

**Recommended Prep: F SC 52A or F SC 53 or F SC 55 or F SC 61A or F SC 64; ENGL 88 or ESL 188 or readiness for college-level English**

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

**Offered Spring semesters**

**F SC 60. Fireground Safety (3)**
Lec-52.5, field trips P/NP available

Technical rescue practices of the fire service-vehicle extrication, confined space, trench rescue, high & low angle rescue, building collapse scenarios, fire ground rescue operations, and aquatic response emergencies. Examines current tools and technologies, role of fire service heavy rescue, operational issues confronting basic level rescue providers. CSU

**Offered Fall semesters**

**F SC 61A. Introduction to Fire Prevention (3)**
Lec-52.5, field trips P/NP available

**Prereq: F SC 50**

**Recommended Prep: F SC 52A or F SC 53 or F SC 64**

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

**Offered Fall semesters**

**F SC 62. Rescue Practices (3)**
Lec-52.5, field trips P/NP available

**Prereq: F SC 50**

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

**F SC 51A. Fire Tactics and Strategy (3)**
Lec-52.5, field trips

**Prereq: F SC 50**

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

**F SC 63. Vehicle Extrication (.5)**
Lec-9.5, Lab-14.5, field trips P/NP only

**Prereq: Completion of or concurrent enrollment in: F SC 111 or other Firefighter One training (certification not required)**

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

**Offered on occasion**

**F SC 64. Fire Behavior and Combustion (3)**
Lec-52.5

Theory and fundamentals of how and why fires start, spread and are controlled. An in-depth study of fire chemistry and physics, fire characteristic of materials, extinguishing agents and fire control techniques. CSU

**Offered Fall semesters**

**F SC 75A. Company Officer 2A: Human Relations Management (2)**
Lec-35 P/NP available

**Recommended Prep: F SC 50**

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

**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 75B. Company Officer 2B: General Administrative Functions (2)**

Lec-35 P/NP available

**Recommended Prep:** 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**

*Offered on occasion*

**F SC 75C. Company Officer 2C: Fire Inspections and Investigations (2)**

Lec-40, field trips P/NP available

**Recommended Prep:** 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”.**

*Offered on occasion*

**F SC 75D. Company Officer 2D: All-Risk Command Operations (2)**

Lec-35, field trips P/NP available

**Recommended Prep:** 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**

*Offered on occasion*

**F SC 75E. Company Officer 2E: Wildland Incident Operations (2)**

Lec-35, field trips P/NP available

**Recommended Prep:** 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**

*Offered on occasion*

**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 106. Fire Safety Director (1.5)**

Lec-27 P/NP available

**Recommended Prep:** ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English

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 San Francisco Fire Department, California State Fire Marshal’s Office, and Fire Protection Division of California Health and Safety Code. CSU

**F SC 106=JRNY 106**

*Offered Fall and Spring semesters*

**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

*Offered Fall and Spring semesters*

**F SC 107B. Fire Training Work Experience (2)**

Work-120-150 P/NP available

**Prereq:** F SC 107A; F SC 11 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

*Offered Fall and Spring semesters*

**F SC 108. Fire Service Work Experience (1-8)**

Work-60.0-600.0 P/NP available

**Prereq:** Approval of Administration of Justice/Fire Science Department; F SC 110

*Repeat: max. 16.00 units*

Field application of principles taught in F SC 110 Basic Fire Academy. This course is used with other fire service agency training such as in the San Francisco Fire Department. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU

*Offered Fall and Spring semesters*
F SC 110. Basic Fire Academy (21)
Lec-232, Lab-412, field trips P/NP available
Prereq: EMT 100; AHA BLS Healthcare Provider or Red Cross CPR for Professional Rescuer; Pass the Candidate Physical Agility Test (CPAT); Live Scan; Possession of a valid California Driver’s License
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 Fall and Spring semesters

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
Recommended Prep: F SC 52A or 53 or 55 or 57 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
Offered Fall and Spring semesters

F SC 115. Incident Command System 200 (.5)
Lec-6, Lab-10 P/NP available
Prereq: Completion of or concurrent enrollment in: FEMA ICS 100-b, available at the FEMA.gov website
This course is designed to enable personnel to operate efficiently during an incident or event within the Incident Command System (ICS). This course focuses on the management of single resources in initial and developing incidents. CSU
Offered only in Summer semesters

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
F SC 145 = ADMJ 145
Offered Fall semesters

F SC 150. Fire Service Career Preparation (2)
Lec-35 P/NP available
Prereq: F SC 50
Fire Service 150 includes the principles, procedures, and best practices for obtaining a job in the fire service. Students develop strategies for success, career track planning, setting career goals, resume writing, test taking, and interview skills will be emphasized and put into practice during this course. CSU
Offered on occasion

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 40. The Black Experience in California: 1500 to the Present (3)
Lec-52.5, field trips
AFAM 40, The Black Experience in California, reviews and comparatively analyzes African heritage people and African Americans in California. The emphasis is on the African/African American heritage in the establishment, development, and evolution of California from the 1500’s through the Gold Rush Era to the present. UC/CSU
Offered Spring semesters

AFAM 42. The Origins and History of Race Theory and Modern Racism (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 consciousness and reflected through, and influenced by, Black music forms. UC/CSU

AFAM 60. African American Women in the United States (3)
Lec-52.5 P/NP available
Examines and comparatively analyzes African American women in the U.S. with particular emphasis on the struggle for rights as African people. Explores the contributions, strategies for success and political activism of African American women from 1619 to the present. UC/CSU
Offered Fall semesters

ART 107. African-American Art History (3)
Lec-52.5, field trips
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 formal visual elements of style and the societies, values and ideas that gave birth to African-American art. UC/CSU
Offered Spring semesters
BCST 104. Race and Media (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Offered on occasion

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
Recommended Prep: DANC 129A or demo of 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
Formerly DANC 130B

DANC 129C. Intermediate Jazz Dance (1)
Lab-35 P/NP available
Recommended Prep: DANC 129B
Intermediate Jazz Dance 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 130C

DANC 129D. Advanced Jazz Dance (1)
Lab-35 P/NP available
Recommended Prep: 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

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 musicality. 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
Prerequisite: 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

DANC 133C. Intermediate African-Haitian Dance (1)
Lab-35 P/NP available
Recommended Prep: 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 137A

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 137B

DANC 138B. Advanced Beginning Hip Hop Dance (1)
Lab-35 P/NP available
Recommended Prep: 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
Recommended Prep: 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
Formerly DANC 137B

DANC 138D. Advanced Hip Hop Dance (1)
Lab-35 P/NP available
Recommended Prep: 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 economic development. The empirical link between race, class and income distribution 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
HUM 48. African-American Music, Art and Literature (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

IDST 14. American Cultures in Literature and Film (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
An interdisciplinary survey of literary and cinematic works of fiction, drama, non-fiction and poetry that investigates unity in diversity in the shifting trajectories of American identities and interrelationships. Groups featured to assess their interactive contributions to American cultures include Native-, European-, African-, Latin-, Asian-Americans, and Pacific Islanders. UC/CSU
Offered Fall semesters

IDST 29. Islam: Identity & Culture (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ESL 186 or ENGL 88 or placement in ESL 188 or readiness for college-level English
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 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 80A. Diversity and Social Justice: Racism (.5)
Lec-9 P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: 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
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

Lec-52.5, field trips  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
A survey of the music of America's diverse populations such as Native American, Anglo-American, African-American, Cajun, Creole, Hawaiian and other styles and genres such as country, Tex-Mex, Klezmer and polka. UC/CSU

**MUS 41. African Drumming Ensemble (3)**
Lec-52.5, field trips  P/NP available
Repeat: 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

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**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 the 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**

The Degree Curriculum in Aircraft Maintenance Technology offers three majors: Aircraft Powerplant Maintenance Technology, Airframe-Maintenance Technology, and Avionics-Maintenance Technology. Students who complete all courses required for the major and satisfy general College graduation requirements will receive the Associate in Science Degree.

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 188 or ENGL 88 or 88B with a C or higher, or place in ENGL 88; and
2. complete MATH 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 FAA 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 Aviation Airframe 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 Aircraft Powerplant 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 FAA Certified Powerplant 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.
- Inspect and repair sheet metal structures.

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>
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<tbody>
<tr>
<td>AIRC 101 Introduction To Aircraft Maintenance</td>
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<td>AIRC 102 Basic Electricity and Electrical Circuits</td>
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<tr>
<td>AIRC 103 Powerplant Theory &amp; Maintenance</td>
<td>8.0</td>
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<tr>
<td>AIRC 104 Propulsion PowerPlant Systems</td>
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<tr>
<td>AIRC 105 Powerplant Systems and Components</td>
<td>8.0</td>
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<td><strong>Total:</strong>*</td>
<td><strong>40.0</strong>*</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 FAA Certified Airframe Technician.

**Learning Outcomes**

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

- Inspect and repair sheet metal structures.
- 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.
- Inspect and repair sheet metal structures.

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 Airframe-Maintenance Technology**

<table>
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<tr>
<td>AIRC 104 Propulsion PowerPlant Systems</td>
<td>8.0</td>
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</tbody>
</table>
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 avionics 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, 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.

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 Avionics-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
Total: ..................................................... 32.0

Aircraft Powerplant Maintenance Technology Certificate
The Aircraft Powerplant Maintenance Technology Certificate prepares students for entry positions in aircraft powerplant maintenance including accessory mechanic, general powerplant mechanic, maintenance crew member, ramp service crew member and hangar crew member. 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. Students may obtain the Certificate of Achievement in Aircraft Powerplant Maintenance Technology by successfully completing and passing (with at least a 70% score) all required subject areas associated with the Powerplant Maintenance training, the student will then qualify to receive the Aircraft Powerplant Maintenance Technology Certificate of Achievement and qualify to take their Federal Aviation Administration exams. Once the graduating student passes all 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:
- Describe and analyze the various aircraft parts, components, and troubleshoot the related systems.
- Use shop safety practices related to aircraft maintenance.
- Perform inspections that will determine the airworthiness of aircraft systems and components.
- Demonstrate proper aircraft maintenance procedures as per specified authorized references.
- Apply the techniques utilized in overhauling an aircraft reciprocating engine.

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 Aircraft Powerplant Maintenance Technology
Course ....................................................... Units
Required courses:
AIRC 101 Introduction To Aircraft Maintenance .... 8.0
AIRC 102 Basic Electricity and Electrical Circuits .... 8.0
AIRC 103 Powerplant Theory & Maintenance ....... 8.0
AIRC 104 Propulsion PowerPlant Systems .......... 8.0
AIRC 105 Powerplant Systems and Components ..... 8.0
Total: ..................................................... 40.0

Airframe-Maintenance Technology Certificate
The Airframe Maintenance Technology Certificate prepares students for entry positions in airframe maintenance including general aircraft overhaul mechanic, accessory mechanic, electric shop mechanic, general cabin equipment mechanic, maintenance crew member, ramp service crew member and hangar crew member. 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. Students may obtain the Certificate of Achievement in Airframe Maintenance Technology by successfully completing and passing (with at least a 70% score) all required subject areas associated with the Airframe Maintenance training, the student will then qualify to receive the Airframe Maintenance Technology Certificate of Achievement and qualify to take their Federal Aviation Administration exams. Once the graduating student passes all 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 demonstrate proper aircraft maintenance procedures as per specified authorized references.
- 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 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 Airframe-Maintenance Technology

<table>
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<td><strong>Total:</strong></td>
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</tr>
</tbody>
</table>

Announcement of Courses

Credit, Degree Applicable Courses:

AIRC 101. Introduction to Aircraft Maintenance (8)
Lec-87.5, Lab-175, field trips
This course is 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
Recommended Prep: 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 Spring 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
This 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 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

American Sign Language

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

Announcement of Courses

Credit, Degree Applicable Courses:

AMSL 1A. Elementary American Sign Language (3)
Lec-52.5
P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English 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
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 P/NP available
Introduction to the social sciences using comic books, graphic novels, and related media illustrating central social science concepts. Examination of power, powerlessness, and superpower. The past and present impact on a diverse American society of comic books, graphic novels, cartoons, and animation as artistic expressions and representations 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 Major (AA-T)
Associate in Arts in Anthropology for Transfer. The program is designed to prepare students who wish to transfer to pursue studies in anthropology. It is 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
Course .................................................. Units
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
SOC 1 Introduction to Sociology ............................ 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 11L. 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. UC/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, exca-  
vation, 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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for col-  
geg-level English  
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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for col-  
geg-level English  
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, field trips  
P/NP available  
A cross-cultural exploration of supernatural belief systems focusing  
on small scale cultures; the history, theory, and methods of the anthropo-  
logy of religion; the dynamics of myth, superstition, possession, altered  
states of consciousness, magic, rituals, taboos, cults, and sects. UC/CSU

ANTH 11. Latin American Cultures and Societies (3)  
Lec-52.5, field trips  
P/NP available  
Recommended Prep: ENGL 88 or ESL 188 or readiness for col-  
geg-level English  
Comprehensive and critical analysis of the cultures and traditions of  
the peoples in Latin America. Critical in-depth study of contempo-  
rary 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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for col-  
geg-level English  
The course introduces students to the peoples and cultures of the  
Philippines and the impact of Eastern and Western civilizations on the  
development of its peoples; emphasis on the ways of life in Philippine  
rural and urban areas and the cultures of its diverse ethnolinguistic  
communities. UC/CSU

**ANTH 15 Studies the development of Philippine peoples  
culture using the perspective of anthropology and its  
sub-disciplines in archeology, linguistics, and geography, and  
the influence of colonialism on the science of anthropology  
and on country’s cultural development**

**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,  
mariage, 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 relations  
ship 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; (415) 452-7117

**Web Site:** https://www.ccsf.edu/en/educational-programs/cte/earn_  
_and_learn/apprenticeship_and_preparation.html

**Announcement of Curricula**

**General Information**

Apprenticeship is designed to prepare individuals, often a high school  
graduate, and produce highly qualified and well-trained workers who  
have solid knowledge as well as specific, technical job skills for occupations  
including but not limited to the skilled trades and crafts. CCSF
offers several Apprenticeship programs across multiple sectors including pre-apprenticeship.

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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Occupation</th>
<th>Prog. Yrs.</th>
<th>Class Hrs.</th>
</tr>
</thead>
<tbody>
<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>
</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.

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 apprentice program established by the local joint apprenticeship committee and approved by the Division of Apprenticeship Standards Department of Industrial Relations, State of California. Related instruction includes: safety, mathematics, hand tools, equipment, materials, mixing, applying plaster, blueprint reading, bases, fireproofing, problems, and repairs, exterior insulation finish systems (EIFS) and finishes. Seventy-two (72) hours per semester, 576 Hours of related and supplemental instruction for this four (4) year apprenticeship.

APPR 9714. Plumbing Apprentice (108-162 hrs)
The practice and study of skills and knowledge required for entry level employment as a journeyman 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 Apprentice (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.

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.

Architecture
Office: Batmale 244
Phone Numbe: (415) 452-5293
Web Site: www.ccsf.edu/arch

Announcement of Curricula

Learning Outcomes

Architecture and Interior Architecture students will develop an understanding of design as a model for creative inquiry, using necessary resources from history, technology, the humanities and contemporary culture issues in response to the fundamental principle that design’s relevance is based on its ability to engage society’s concerns.

Construction Management students will learn the basic effective management techniques related to the planning, design, and construction of a project from inception to completion for the purpose of controlling time, cost and quality.

The requirements for an Associates degree from CCSF and requirements for transferring to a baccalaureate program in another college or university are different. Students who are seeking to attain an Associates of Science in Architecture, Interior Design or Construction Management should follow the major requirements listed below. Students who are seeking to transfer to another university 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

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

Interior Design Major (AS)

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

Students who wish to transfer to a 4 year degree program should understand that each transfer institution has its own set of transfer requirements. Those different requirements can be found on the individual transfer institution’s websites.

The A.S. degree in Interior Design has strong emphasis on both Architecture and Art. The program will prepare them in areas of design, technology, digital skills, drawing, delineation and rendering, structures, history, professional practice, art history, and graphic design. Entry positions for which graduates who have received the degree of Associate in Science in Interior Design may qualify for employment positions that may include those of 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

Course ................................................. Units
First Semester (fall):
ARCH 100 Introduction to Architecture and Design .... 2.0
ARCH 20 Architectural Graphics I .......................... 3.0
ARCH 29A Freehand Drawing I .......................... 1.0
Second Semester (spring):
ARCH 29B Freehand Drawing II .......................... 1.0
ARCH 22A Delineation and Rendering .................. 3.0
Second semester (spring) -- choose one of these color courses:
DSGN 150/VMD 118 Color in Design .................. 3.0
ART 126 Color ................................ 3.0
Third Semester (fall):
ARCH 101 Architecture Design Studio I ................. 3.0
ART 170A Beginning Sculpture ......................... 3.0
INTD 124 Interior Building Materials & Systems .......... 3.0
Third Semester (fall) -- choose one of the following courses:
ARCH 214 AutoCAD I ................................ 3.0
BIM 120 Revit Architecture I .......................... 3.0
Fourth Semester (spring):
INTD 138 Global History of Interior Design ........... 3.0
INTD 102 Interior Design Studio I .................. 3.0
ARCH 160 Professional Practice ........................ 3.0
Total: ............................................. 34.0

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:

- Manage and control construction work activities utilizing project control methodologies and quality control and assurance techniques.
- Estimate, organize and manage construction project resources through the use of cost estimates and schedules.
• 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 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 four 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>CM 100 Fundamentals of Construction Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CM 120 Fundamentals of Building Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**First semester required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM 100 Fundamentals of Construction Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CM 120 Fundamentals of Building Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Second semester required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

**Second semester choose one of the following courses:**

- MGT 234 Communication for Business Management | 3.0
- BSEN 74 Written Business Communication | 3.0
- CMST 6 Workplace Communication | 3.0

**Third semester required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

**Fourth semester required courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM 244 Construction Scheduling</td>
<td>3.0</td>
</tr>
<tr>
<td>CM 160 Professional Practice</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Total:** 36.0

**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.

**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>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 127 Fundamentals of Building Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>BIM 120 Revit Architecture I</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Choose 12 units from the following electives:**

- ARCH 127 Fundamentals of Building Structures
- ARCH 160 Professional Practice
- ARCH 240 Fundamentals of the International Building Code
- MABS 60 Introduction to Computer Applications for Business
- BIM 120 Revit Architecture I

**Total:** 30.0

**Construction Management: Core Skills Certificate**

The Certificate of Achievement in Construction Management: Core Skills is a course of study focused on the core technical and management skills required in the field of Construction Management. This certificate is designed to meet the needs of students who want to
obtain entry-level positions within the Construction Management profession. It also provides students who are currently employed in the construction industry in trades positions the opportunity for entry and/or advancement in management positions.

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

- Use project management methodologies to plan and control construction work activities.
- Analyze and interpret construction documents.
- Assess the contractual and regulatory considerations and restraints associated with the administration of a construction project.
- Communicate effectively in a professional construction management work environment.

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 Construction Management: Core Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required 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>CM 110 Construction Graphics</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>BIM 120 Revit Architecture I</td>
<td>3.0</td>
</tr>
<tr>
<td>BSEN 74 Written Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td>19.0</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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
<td></td>
</tr>
<tr>
<td>INTD 100 Introduction to Residential Interior Design</td>
<td>3.0</td>
</tr>
<tr>
<td>BIM 120 Revit Architecture I</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose 3 units from the following graphics courses</td>
<td></td>
</tr>
<tr>
<td>ARCH 20 Architectural Graphics I</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 214 AutoCAD I</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 218 Fundamentals of Rhino 3D</td>
<td>3.0</td>
</tr>
<tr>
<td>BIM 121 Revit Architecture II</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose 3 units from the following technology courses</td>
<td></td>
</tr>
<tr>
<td>INTD 124 Interior Building Materials &amp; Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>ARCH 120 Fundamentals of Building Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 22 Textile Analysis</td>
<td>3.0</td>
</tr>
<tr>
<td>SUST 31/BIO 31/GEOG 31 Introduction to Environmental Science</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose 3 units from the following business skills courses</td>
<td></td>
</tr>
<tr>
<td>ARCH 160 Professional Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>BSEN 74 Written Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 122 Professional Selling</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td>15.0</td>
</tr>
</tbody>
</table>

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

Credit, Degree Applicable Courses:

ARCH 20. Architectural Graphics I (3)
Lec-35, Lab-70, field trips P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
Introduction to techniques, conventions, meanings, and purposes related to drawing and drafting conventions as used in architecture and interior design. Fundamental graphic principles, concepts, and strategies are examined through hand and digital production. CSU

ARCH 22A. Delineation and Rendering (3)
Lec-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, field trips P/NP available
Introduction 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, field trips  P/NP available  
**Prereq:** ARCH 29A  
A continuing development of skills in freehand drawing methods, with more complex subject matters and the use of color media. Focus is on the drawing from observation of buildings and architectural space. UC/CSU  
**Offered Spring Semesters**

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  
**Offered Fall Semesters**

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  
**Offered Spring Semesters**

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  P/NP available  
**Prereq:** ARCH 101  
A second design studio course in a sequence that expands upon fundamental architectural principles and concepts within Architecture and Design. Students explore topics related to design process, site, program, place, order, space within simple architectural problems. 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  
**Offered Spring Semesters**

ARCH 120. Fundamentals of Building Construction (3)  
Lec-52.5, field trips  P/NP available  
**Recommended Prep:** ENGL 88 or ESL 188 or Readiness for College-Level English  
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 Fall 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  
**Recommended Prep:** Completion of or concurrent enrollment in: ENGL 88  
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  
**Recommended Prep:** 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  
**Offered Fall Semesters**

ARCH 218. Fundamentals of Rhino 3D (3)  
Lec-35, Lab-70  P/NP available  
An introduction to Rhinoceros three dimensional surface modeling software. Rhino's NURB based geometry enables the construction of free-form organic surfaces that can be applied to architectural and
other design fields such as jewelry, marine, transportation and industrial designs. Focus will be on creating, editing, and transforming three dimensional surface models. UC/CSU

ARCH 240. Fundamentals of the International Building Code (3) (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 Fall semesters

Building Information Modeling

Credit, Degree Applicable Courses:
BIM 120. Revit Architecture I (3)
Lec-35, Lab-61.25, field trips P/NP available
Recommended Prep: 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
Prerequisite: BIM 120 or demonstration of exit skills
Recommended Prep: 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 documentation 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 P/NP available
Introduction to the basic concepts of construction project management including: the building design and construction process; project participants, their roles and responsibilities. Areas of focus to include the application of the principles of contracts in relation to construction projects, estimating, scheduling and project control. CSU

CM 110. Construction Graphics (3)
Lec-35, Lab-70 P/NP available
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 P/NP available
Prerequisite: 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 P/NP available
Prerequisite: 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 P/NP available
Recommended Prep: 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 P/NP available
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 P/NP available
Recommended Prep: 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
Offered Spring semesters

INTD 124. Interior Building Materials and Systems (3)
Lec-52.5, field trips P/NP available
A comprehensive examination of Interior Materials and Construction Systems with a focus on their interface with building systems such as electrical, mechanical, plumbing, and structural systems. CSU
Offered Fall semesters

INTD 125. Fundamentals of Architectural Lighting (3)
Lec-52.5, field trips P/NP available
Recommended Prep: 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
Offered Fall semesters
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 Offered Spring semesters

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**
- ART 126 Color | 3.0

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

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

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

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

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

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

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

**Area 9: Photography**
- PHOT 51 Beginning Photography | 3.0

**Area 10: Second Level Courses**
- ART 140B Intermediate Painting | 3.0
- ART 150B Intermediate Intaglio and Relief Printmaking | 3.0
- ART 170B Intermediate Sculpture | 3.0
- ART 160B Intermediate Ceramics | 3.0

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
Announcement of Courses

The majority of advanced classes in the Art Department require that prerequisites be completed before taking those classes. Students who have not completed those prerequisites must demonstrate the exit skills required upon completion of the prerequisite(s). (See specific courses for prerequisite requirements.)

Most Art Studio courses listed will require a laboratory fee.

Art History Courses

The Art History Curriculum offers a wide selection of courses which apply critical thinking and analytical skills to an understanding of visual arts from around the world. The course selection includes: Art 101 through 118, of which several are offered online, and Selected Topics Courses (Art 122 and 123 series) that offer a more in-depth study of art at the Legion of Honor and the De Young Fine Arts Museums of San Francisco. All Art History courses may be taken in any sequence. College-level reading and writing skills are advised.

Credit, Degree Applicable Courses:
ART 101. Western Art History (3)
Lec-52.5, field trips
Survey of Western Art from 35,000 B.C.E. to 500 C.E.: Paleolithic art through the Early Medieval period. Art will be discussed from critical and historical perspectives, with regard to formal visual elements of style and the social context of the societies, values, and ideas that gave birth to Western art. UC/CSU

ART 102. Western Art History (3)
Lec-52.5, field trips
Survey of Western Art from the sixth to the early Nineteenth centuries: Byzantine and Medieval to the Romantic periods. Art will be discussed from critical and historical perspectives, with regard to formal visual elements of style and social context of the societies, values, and ideas that determined the course of Western Art. UC/CSU

ART 103. History of Modern Art (3)
Lec-52.5, field trips
Survey of modern and contemporary art in Europe and America from the mid-19th century through the early 21st century: Art will be discussed and analyzed from critical and historical perspectives, formal visual elements of style, and social/cultural contexts. Students will learn to identify pivotal artists, styles, and techniques and to critically analyze art within its cultural framework. UC/CSU

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 C-ID ARTH 130

ART 105. Ancient Art and Architecture of Latin America (3)
Lec-52.5, field trips
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

ART 107. African-American Art History (3)
Lec-52.5, field trips
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 formal visual elements of style and the societies, values...
and ideas that gave birth to African-American art. UC/CSU

**Offered Spring semesters**

**ART 108. Women Through Art History (3)**
Lec-52.5, field trips

Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English

Investigation of women's role in European and non-European society as artists, patrons and subjects in art from pre-history to the present. Artworks are examined through formal and thematic characteristics and from a historical, social and gender-based perspective. UC/CSU

**ART 109. History of Contemporary Art (3)**
Lec-52.5, field trips

Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English

Survey of late modern and contemporary art from 1945 to the present day. Art will be discussed and analyzed from critical and historical perspectives, formal visual elements of style, social/cultural contexts, and changing scholarship. Students will learn to identify pivotal artists, styles, and techniques and to critically analyze art within its cultural framework. UC/CSU

**ART 118. American Art (3)**
Lec-52.5  P/NP available

The history of American art from colonial times to the present. Painting, sculpture, architecture, and crafts will be examined within their historical, political, and sociocultural background. Students learn to identify works by pivotal artists, recognize techniques and formal visual elements, and critically analyze artwork within its contextual framework. UC/CSU

**ART 122A. Russian Art at the Legion (3)**
Lec-52.5  P/NP available

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

**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

**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 – Advanced Design: 3D and Basic Drawing - ART 130A serves as the prerequisite for ART 130B - Intermediate Drawing, ART 132A - Beginning Figure Drawing, and ART 139 - Live Model Character Illustration. All studio classes, several of which are offered in hybrid format, 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

Recommended Prep: Completion/concurrent enrollment in ART 130A

An introduction to the basic components of two-dimensional design: subject, form, content, with a focus on their dynamic interrelation. Through observation, analysis, discussion of traditional and contemporary approaches in fine and applied arts, students learn to apply the elements and principles of visual organization to creative projects using various media. UC/CSU

**ART 125B. Advanced Design: 3D (3)**
Lec-35, Lab-70, field trips

Prereq: ART 125A

Recommended Prep: 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

**Offered Spring semesters**
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, harmonies, contrasts, 
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  
Recommended Prep: 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  
Recommended Prep: 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  
Recommended Prep: 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  
C-ID ARTS 206  

ART 132A. Beginning Figure Drawing (3)  
Lec-35, Lab-70, field trips  
Prereq: ART 130A  
Recommended Prep: 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 percep-
tual 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  
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  
Recommended Prep: ART 132B  
Building on a rigorous study of drawing the nude figure from life, stu-
dents 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  
Recommended Prep: ART 132C  
Students will integrate advanced figure drawing skills with a focus on 
special topics such as portraiture, narrative art, mixed media or figu-
res. Gallery and field trips are a part of this course. UC/CSU  

Illustration  
ART 136A. Introduction to Illustration (3)  
Lec-35, Lab-70, field trips  
Recommended Prep: 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 develop-
ment 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  
Recommended Prep: 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 presenta-
tional skills for effective visual communication. CSU  

ART 139. Live Model Character Illustration (3)  
Lec-35, Lab-70, field trips  
Recommended Prep: ART 130A  
Recommended Prep: ART 132A  
Recommended Prep: ART 136B  
Development of unique character designs, engage in figurative storytelling, 
and work from live models as well as photographic resources. Focus 
on portraiture and facial expressions, dynamic gesture, and prolonged 
studies of models in costumes and theatrical settings with props using 
a variety of painting and drawing techniques in color media. CSU 
ALL SECTIONS WILL CHARGE A MATERIAL FEE OF $20.00.  

Painting  
ART 140A. Beginning Painting (3)  
Lec-35, Lab-70, field trips  
Recommended Prep: ART 125A and 130A  
Studio course in the technical and conceptual basics of painting in 
oils or acrylics. Lectures, hands-on studio practice and critiques cover
historical and contemporary methods, techniques, concepts, and perceptual skills of painting. UC/CSU

**C-ID ARTS 210**

**ART 140B. Intermediate Painting (3)**
Lec-35, Lab-70, field trips
Recommended Prep: ART 140A. Widens and deepens the skills, techniques, methods, and processes learned in ART 140A. Emphasis on personally expressive themes and content. Expanded materials, and complexity of techniques, and processes. UC/CSU

**ART 140C. Advanced Painting (3)**
Lec-35, Lab-70, field trips
Recommended Prep: 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
Recommended Prep: 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

**Chinese Brush Painting**

**ART 146A. Beginning Chinese Brush Painting (3)**
Lec-35, Lab-70, field trips
Recommended Prep: ART 146C. 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 146B. Advanced Chinese Brush Painting (3)**
Lec-35, Lab-70, field trips
Recommended Prep: ART 146A. An advanced brush painting course focusing on the 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 146C. Advanced Chinese Brush Painting Mastery (3)**
Lec-35, Lab-70, field trips
Recommended Prep: ART 146B. 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 watercolor family. UC/CSU

**Mural Art**

**ART 142A. Mural Ideation to Creation I (3)**
Lec-35, Lab-70, field trips
Prereq: ART 140A. Introduction to the history and techniques of mural painting. Traditional and contemporary mural techniques and themes will be explored through the creation of a mural project installed in a school or public space and collectively designed by the class. Students will develop the confidence and ability to work on a large scale, explore new avenues for your painting practice, build collaborative skills, and gain a global perspective on the art of mural painting. UC/CSU

**Watercolor**

**AART 145A. Beginning Watercolor Painting (3)**
Lec-35, Lab-70, field trips
Recommended Prep: ART 125A and ART 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
Recommended Prep: 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
Recommended Prep: 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 image style in which materials and techniques play an essential role. UC/CSU

**ART 145D. Watercolor Special Topics (3)**
Lec-35, Lab-70, field trips
Recommended Prep: 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

**Fine Arts Printmaking**

**ART 150A. Beginning Intaglio & Relief Printmaking (3)**
Lec-35, Lab-70, field trips
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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

Offered on occasion

ART 151B. Intermediate Monoprinting (3)
Lec-35, Lab-70, field trips
Recommended Prep: 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

Offered on occasion

ART 151C. Advanced Monoprinting (3)
Lec-35, Lab-70, field trips
Recommended Prep: 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

Offered on occasion

Screen Printing
ART 152A. Beginning Screen Printing (3)
Lec-35, Lab-70, field trips
Recommended Prep: 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 multi-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.

ART 152C. Advanced Screen Printing (3)
Lec-35, Lab-70, field trips
Recommended Prep: ART 152B
In the context of contemporary and traditional printmaking approaches, students develop their aesthetic, critical, and creative thinking skills that expand upon photographic stencil and digital techniques introduced in ART 152A and 152B. Using various autographic, photographic and digital stencil creation techniques and multi-color printing with single and multiple screens for limited-edition and one-of-a-kind fine art print UC/CSU

Mixed Media
ART 156A. Beginning Mixed Media (3)
Lec-35, Lab-70, field trips
Recommended Prep: ART 125A
Focuses on the contemporary practice and conceptual basis of selecting and combining various media and techniques into two and three-dimensional works of art. Contemporary issues and approaches are explored through lecture and demonstration. CSU

Formerly ART 156

Offered on occasion

ART 156B. Intermediate Mixed Media (3)
Lec-35, Lab-70, field trips
Prereq: ART 156A
Building on the previously acquired knowledge of 156A, intermediate students will further develop their understanding and abilities to combine various media and techniques with the goal of creating two and three-dimensional works of art. Contemporary issues and approaches are explored through lecture and demonstration. CSU

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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: ART 160A
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
Recommended Prep: 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, wheelthrowing, 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
Recommended Prep: 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
Recommended Prep: ART 170B
Focuses on advanced techniques, practices and concepts specific to sculpture. Course is designed to cultivate individual conceptual development. Students produce artworks in a variety of materials, advanced fabrication techniques, and make aesthetic choices based on individual interest informed by research. Emphasis is placed on interplay between concept, material and context. UC/CSU

ART 170D. Sculpture Studio (3)
Lec-35, Lab-70, field trips
Recommended Prep: 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 prepara
Asian American Studies

Offered on occasion

Offered Fall semesters

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, field trips
Prereq: ART 181A
Building on beginning casting knowledge and skills, ART 181B students will incorporate traditional and nontraditional techniques to further develop the student's casting competency, including large scale casting, bi-metal casting, mold making and casting multiples. Emphasis is placed on creative risk taking, refining technical skill, knowledge of safe practices, developing 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
Recommended Prep: 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
Recommended Prep: 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 Certificate

Credit, Degree Applicable Courses:

ASAM 6. Asian American Issues through Literature (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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, class, and sexuality will be considered. UC/CSU
Offered only in summer semesters

ASAM 8. Filipino American Community (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
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 Since 1820 (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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, and political and social history. Local field trip may be required. UC/CSU

ASAM 22. Community Issues and Leadership (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Exploration of race relations between Asian Americans, African Americans, and European Americans. Utilizing 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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. Chinese American Community (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Description and analysis of the Chinese American community. 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 (2-4)
Work-120.0-300.0 P/NP available
Prereq: Approval of the Asian American Studies Department Repeat: Max. 16.0 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. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU
Offered on occasion

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, field trips P/NP available
Recommended Prep: Successful completion of a course in Asian American Studies
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
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

This certificate introduces students to the diversities and commonalities of Asian cultures and society, focusing primarily on art, 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ASIA 11 East Asian Calligraphy: An Introduction</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 104 Asian Art History</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following Arts courses:

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<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ASIA 15 Asian Societies and Cultures through Film</td>
<td>3.0</td>
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</table>

Choose two of the following Humanities courses:

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ASIA 30 Manga and Anime</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 27A Asian Humanities: Classical Period</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 27B Asian Humanities: Contemporary</td>
<td>3.0</td>
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</tbody>
</table>

Choose one of the following Social and Behavioral Science courses:

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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>IDST 30 Demystifying the Middle East</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 31 Women and Gender in the Middle East</td>
<td>3.0</td>
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</tbody>
</table>

Choose one of the following elective courses, if not used above:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART 104 Asian Art History</td>
<td>3.0</td>
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</tbody>
</table>

Total: 15.0

Announcement of Courses

Credit, Degree Applicable Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASIA 11. East Asian Calligraphy: An Introduction (3) Lec-52.5, field trips</td>
<td>P/NP available</td>
</tr>
<tr>
<td>Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level ENGLISH</td>
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</tbody>
</table>

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

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<tr>
<th>Course</th>
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<tr>
<td>ASIA 15. Asian Societies and Cultures through Film (3) Lec-52.5</td>
<td>P/NP available</td>
</tr>
<tr>
<td>Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level ENGLISH</td>
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</tbody>
</table>

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

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<tr>
<th>Course</th>
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<tr>
<td>ASIA 30. Manga and Anime (3) Lec-52.5</td>
<td>P/NP available</td>
</tr>
<tr>
<td>Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level ENGLISH</td>
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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

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<tr>
<th>Course</th>
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<tr>
<td>ART 104. Asian Art History (3) Lec-52.5, field trips</td>
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</table>

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

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<th>Course</th>
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<td>C-ID ARTH 130</td>
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</table>

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
Recommended Prep: 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Offered on occasion

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

CHIN 39. Major Achievements of Chinese Thought and Culture (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 35A is not prerequisite to 35B Intellectual, social, political, and economic development of China from ancient times to 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
An interdisciplinary survey of literary and cinematic works of fiction, drama, non-fiction and poetry that investigates unity in diversity in the shifting trajectories of American identities and interrelationships. Groups featured to assess their interactive contributions to American cultures include Native-, European-, African-, Latin-, Asian-Americans, and Pacific Islanders. UC/CSU

IDST 27A. Asian Humanities (3)
Lec-52.5, field trips
P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ESL 186 or ENGL 88 or placement in ESL 188 or readiness for college-level English
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 and Gender in the Middle East (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
An interdisciplinary examination of differences/similarities in women's lives in the Muslim/Arab world, including the diaspora, and among minorities in the Middle East/Southwest Asia and North Africa (SWANA). Analysis includes diversity, colonization, nationalism, religion, gender, sexuality, family, law, literature, music, art and film. UC/CSU Offered Spring semesters

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 U.S. (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
This course examines Pacific Islander migrations to the United States mainland including the history, culture, and politics of Hawai'i and U.S. Pacific territories. It explores indigenous cultures and American experiences of Pacific Islanders from Guam, American Samoa, Palau, Marshall Islands, Fiji, Samoa, Tonga, Tahiti, New Zealand, and Australia. UC/CSU

IDST 46. Fa'a Pasefika: Interdisciplinary Cultural Expressions of Oceania (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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 Offered Spring semesters
IDST 81B. Diversity and Social Justice: Anti-Semitism/Anti-Arabism (1)
Lec-18  P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
A consciousness-raising analysis and evaluation of anti-Semitism and anti-Arabism on individual, institutional, and cultural levels in the U.S. Emphasis on 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. CSU
Offered Fall semesters

IDST 80G. Diversity and Social Justice: Transphobia (.5)
Lec-9  P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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

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

JAPA 39. Japanese Culture and Civilization (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

LGBT 50. Lesbian/Gay/Bisexual/Transgender/Communities of Color in the U.S. (3)
Lec-52.5  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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)
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

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

Astronomy
Office: Science 400
Phone Number: (415) 239-3242
Web Site: www.ccsf.edu/astro

Announcement of Courses
Credit, Degree Applicable Courses

ASTR 1. Cosmic Evolution (3)
Lec-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)
Lec-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 6. Observational Astronomy (1)
Lab-52.5
Prereq: 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 become familiar with modern observational tools and techniques. UC/CSU

ASTR 7. Planets (3)
Lec-52.5
Recommended Prep: MATH 30 and ENGL 88 or ESL 188
Methods and practice of planetary science and its impact on humanity. Fundamental physical sciences for understanding the origin and evolution of planetary systems. Comparative examination of planetary attributes including atmospheres, geospheres, magnetospheres, and hydrospheres. Solar System and extra-solar planetary systems and life-bearing possibilities. Detailed planetary information revealed by space missions. UC/CSU

ASTR 8. Stars (3)
Lec-52.5
Introduction to stars and stellar systems, including their apparent motions and their use in navigation. Observations and theories regarding stars as the primary producers of energy in the universe and of the chemical elements necessary for life. Evolution of stars and their impact within galaxies and on planets. UC/CSU

ASTR 9. Galaxies and the Universe (3)
Lec-52.5
Introduction to cosmology, galactic and extragalactic astronomy, with a focus on basic questions of existence: Where do we come from and what is our fate? Covers the universe’s origin, evolution, fate, expansion and acceleration, cosmological models explaining these, large scale
structure, dark matter and dark energy, properties and phenomena of
galaxies, including the Milky Way and active galactic nuclei. UC/CSU

Automotive/Motorcycle, Construction, and Building Maintenance
Office: 1400 Evans
Phone Number: (415) 550-4409
Web Site: www.ccsf.edu/autotech

Announcement of Curricula
City College offers credit for two years of pre-apprentice training for
students seeking employment in the automotive industry. Students
may apply the earned credit toward the Associate in Science degree.
Employment. Successful completion of training in this program
prepares students for entry employment in the areas of automotive-
mechanic and body person apprenticeship. Training will be considered
in determining level of entry into apprenticeship.
Admission. Applicants for admission must complete an application
form which may be obtained from the automotive-technology adviser
at 1400 Evans Avenue training center. All applications are reviewed
and evaluated, and the results are forwarded to each applicant. To be
accepted into the program, it is recommended that students complete
the following advisories:
1. ESL 186 or ENGL 88 or readiness for college-level English
2. Math 30 or placement in Math 40
Recommended High School Preparation. Preparation is recom-
manded in auto shop, electricity, machine shop, mechanical drawing,
and welding.
Counseling. The automotive-technology advisor consults individu-
ally with students in order to help each student select a program best suited
to the student’s interests and abilities.
General Education. Instruction in general education is included so
that students may satisfy the College graduation requirements in this
area.
Associate in Science Degree. Students who wish to earn an Associate
in Science degree must complete the general-education requirements
for graduation from the College and additional electives. Students who
satisfy these requirements and complete either of the options in the
Curriculum receive the degree of Associate in Science in Automotive
Technology. Such students are advised to consult with a College
Counselor.

Automotive Technology

Automotive Technician Major (AS)
This Automotive Technician Associate in Science Degree prepares stu-
dents to enter the automotive maintenance field with all the necessary
skills to perform entry level work, as well as have a thorough under-
standing of theory so they will be qualified to participate in advanced
training at the dealer level. This program complies with national
Automotive Service Excellence (ASE) certification through the accredit-
ation body National Automotive Teachers Education Foundation
(NATEF), through which the Automotive department is required to
maintain certification every five years.
The AS Degree may be obtained by completion of the required pro-
gram 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:
• Classify and summarize automotive systems, functions, and
their interrelation.
• Identify and use basic hand, power, lifting tools and equipment.
• Perform scheduled automotive maintenance and repairs, and
utilize service repair information.
• Analyze automotive wiring diagrams and troubleshoot com-
puter circuits and systems.
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 Automotive Technician
Course ................................................. Units
First Semester required courses:
AUTO 50 Intro to Automotive Mechanics ............... 3.0
AUTO 51 Automotive Electrical ............................ 8.0
Choose two 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
AUTO 56 Introduction to Hybrid and EV Auto
Maintenance and Repair .................................. 4.0
AUTO 58 Automotive Heating and Air-Conditioning .... 3.0
AUTO 59 Automotive Suspension and Steering ........ 4.0
AUTO 63 Automotive Braking Systems ................ 4.0
AUTO 115 Service Consultant ............................. 3.0
Total: ................................................... 18.0 – 27.0

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 au-
tomotive 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:
• Distinguish, classify and summarize automotive systems, func-
tions, and their interrelation.
• Demonstrate safe shop practices and operate diagnostic
equipment.
• 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses</td>
<td></td>
</tr>
<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>AUTO 56 Introduction to Hybrid and EV Auto</td>
<td>4.0</td>
</tr>
<tr>
<td>Maintenance and Repair</td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td>15.0</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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses</td>
<td></td>
</tr>
<tr>
<td>AUTO 49 Auto Body Maintenance and Detailing</td>
<td>2.0</td>
</tr>
<tr>
<td>AUTO 50 Intro to Automotive Mechanics</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Motorcycle Technology**

**Motorcycle Technician Major (AS)**

This Motorcycle Technician Associate in Science Degree prepares students to enter the motorcycle maintenance field with all the necessary skills to perform entry-level work as well as to have a thorough understanding of theory so they will be qualified to participate in advanced training at the dealer or manufacturer. Degree holders are expected to be qualified 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:
- Practice safe shop and personal safety procedures.
- Describe the history, culture, and aesthetics of the motorcycle.
- Perform basic tune-up and service operations and interpret maintenance schedules.
- Evaluate, service, and troubleshoot cooling, lubrication, and fuel systems.

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 Motorcycle Technician**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First semester required courses</td>
<td></td>
</tr>
<tr>
<td>MOTO 90 Introduction to Motorcycle Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>Choose at least 14 units from the following elective courses</td>
<td></td>
</tr>
<tr>
<td>MOTO 500 Bicycle Maintenance</td>
<td>3.0</td>
</tr>
<tr>
<td>MOTO 61 Custom Metal Fabrication</td>
<td>3.0</td>
</tr>
<tr>
<td>MOTO 63 Auto-Moto Custom Painting</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>
<tr>
<td>MOTO 93 Engine &amp; Power Train Repair</td>
<td>4.0</td>
</tr>
<tr>
<td>Total:</td>
<td>18.0</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. 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 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 107 Blueprint Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 111 Carpentry Rough Framing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose 3 units from the following elective courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST 112 Carpentry-Advanced Framing</td>
<td>3.0</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>CNST 108 Contractor License Preparation</td>
<td>3.0</td>
</tr>
<tr>
<td>or CNST 112 Concrete Applications</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 13.0

**Building Maintenance/Custodial**

**Custodian for Health Care Industry Certificate of Completion**

Students who have successfully earned a Custodial Health Care Certificate are qualified to work in the healthcare industry as a custodian. Training includes biohazard and blood-borne pathogen safety procedures in a variety of environments. These can include hospitals, emergency rooms, labs, and doctors’ offices. The program was created in cooperation with local hospitals and agencies.

**Learning Outcomes**

Upon completion of this program, students will be able to:
- Select and safely handle appropriate equipment and materials.
- Apply custodial terminology and instructions when engaging in custodial tasks.
- Interpret and explain workplace instructions.
- Apply industry-standard techniques and approved procedures while cleaning healthcare sites and disposing of waste.

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

**Courses Required for the Certificate of Completion in Custodian for Health Care Industry**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one of the following language courses</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 4816 ESL for Janitors</td>
<td>30.0-90.0</td>
</tr>
<tr>
<td>TRST 4600 Vocational Foundation Skills--Reading and Writing</td>
<td>30.0-90.0</td>
</tr>
</tbody>
</table>

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TICU 9550 Custodial Training</td>
<td>108.0</td>
</tr>
<tr>
<td>TICU 9551 Custodial Training for Healthcare Workers</td>
<td>105.0</td>
</tr>
</tbody>
</table>

Total: 243.0 – 303.0

**Custodial Training Certificate of Completion**

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. Completion time will vary based on student preparation and number of classes completed per semester.

**Courses Required for the Certificate of Completion in Custodial Training**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one of the following language courses</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 4816 ESL for Janitors</td>
<td>30.0-90.0</td>
</tr>
<tr>
<td>TRST 4600 Vocational Foundation Skills--Reading and Writing</td>
<td>30.0-90.0</td>
</tr>
</tbody>
</table>

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TICU 9550 Custodial Training</td>
<td>108.0</td>
</tr>
</tbody>
</table>

Total: 138.0 – 198.0
Announcement of Courses

Automotive Technology

Credit, Degree Applicable Courses:
AUTO 49. Auto Body Maintenance and Detailing (2)
Lec-17.5, Lab-52.5, field trips P/NP available
Recommended Prep: ESL 188 or readiness for college-level English
Introductory course on general vehicle body maintenance, minor body part replacement and adjustment, glass replacement, and exterior and interior detailing. CSU

AUTO 50. Intro to Automotive Mechanics (3)
Lec-35, Lab-70
Recommended Prep: MATH 30; ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
Introduction to automotive systems, industry best practices, basic vehicle fluid and wheel services, and safety practices. Orientation to the automobile: technical vocabulary, systems, components, safety procedures, proper use of appropriate tools and equipment, and development of hands-on skills. Basic maintenance and repair of the automobile in accord with Automotive Service Excellence (ASE) certification. CSU

AUTO 51. Automotive Electrical (8)
Lec-105, Lab-105, field trips
Prereq: AUTO 50 or pass Challenge Test
This course focuses on automotive electrical systems including basic electrical theory, wiring diagrams, battery technology, starting, charging, lighting, instrumentation and wiring systems, electrical/electronic troubleshooting, digital volt ohm meters, and storage oscilloscopes, in the diagnosis and repair of automotive electronics. Preparation for the ASE-A6, examination. CSU

AUTO 52. Brakes, Suspension, Alignment (8)
Lec-105, Lab-105, field trips
Prereq: AUTO 50 or pass Challenge Test
This ASE (Automotive Service Excellence) certification course (A-5 and A-4 tests) prepares future technicians for a career in brake and suspension repair with an understanding of operation, troubleshooting, and preventive maintenance, including computerized wheel alignment, anti-lock, and stability control systems. CSU

AUTO 53. Automatic and Manual Transmissions (8)
Lec-105, Lab-105, field trips
Prereq: AUTO 50 or pass Challenge Test
This ASE (Automotive Service Excellence) course prepares for the national exams in automatic transmissions and transaxles (A-2), and manual drivetrains and axles (A-3); diagnosis, service, and repair. CSU

AUTO 54. Engine Repair (8)
Lec-105, Lab-105, field trips
Prereq: AUTO 50 or pass Challenge Test

AUTO 55. Engine Performance/Drivability (8)
Lec-105, Lab-105, field trips
Prereq: AUTO 50 or pass Challenge Test
Focus on troubleshooting of fuel and ignition systems with the use of scan tools, multi-meters, vacuum and pressure gauges, and oscilloscope. Prepare for ASE (Automotive Service Excellence) A-8 and L1 certification. This course along with AUTO 50, 51, qualifies for the Performance and Driveability Specialist certificate. CSU

AUTO 56. Introduction to Hybrid and EV Auto Maintenance and Repair (4)
Lec-52.5, Lab-52.5, field trips P/NP available
Prereq: AUTO 50 and AUTO 51
Principles and functions of hybrid automobiles, and procedures for their maintenance, problem diagnosis and repair. Function of individual system components examined. Critical importance of safety and hybrid-unique equipment and procedures. Maintenance procedures and diagnostic and repair processes for common hybrids (Toyota and Ford) taught in detail. CSU

AUTO 57. Performance and Driveability Specialist (4)
Lec-105, Lab-105, field trips
Prereq: AUTO 50
Focus on performance optimization and reflash of engine computer. CSU

AUTO 58. Automotive Heating and Air-Conditioning (3)
Lec-35, Lab-70, field trips
Prereq: AUTO 50
Learners will study the history, principles of operation, environmental concerns, scientific principles, mechanical components, diagnosis, servicing and testing, system controls, retrofit of old systems, and future trends of automotive HVAC systems. Preparation for Automotive Service Excellence (ASE) A-7 Test. CSU

AUTO 59. Automotive Suspension and Steering (4)
Lec-52.5, Lab-52.5, field trips
Prereq: AUTO 50
This course prepares students to diagnose and repair automotive tire, wheel, suspension and steering systems. Includes specialized training in the use of Hunter alignment, tire mounting and tire balancing equipment. Preparation for the Automotive Service Excellence (ASE) A-4 test. CSU

AUTO 60. Independent Study (Auto Technology) (1-3)
Lab-52.5 to 157.5 P/NP available
Prereq: AUTO 50 or demonstration of exit skills
Research and application of advanced skills within the topic of Automotive/Trade Skills. Allows student to investigate subjects of special interest and develop skills toward those interests, such as frame design and fabrication, suspension design and fabrication, engine performance modification and reflash of engine computer. CSU

AUTO 63. Automotive Braking Systems (4)
Lec-52.5, Lab-52.5
Prereq: AUTO 50
This course prepares future technicians to perform automotive brake system repair with an understanding of operation, troubleshooting, and preventive maintenance, including disk brakes, drum brakes, anti-lock, and stability control systems. Preparation for the ASE Brakes test (A-5 test) CSU
AUTO 108. Automotive Work Experience (1-6)
Work: 75-450 (total hrs) P/NP available
Prereq: AUTO 50
Repeat: max. 6 units
Offered on occasion
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

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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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

AUTO 206. Plastic Repair & Refinishing (2)
Lec-17.5, Lab-52.5 P/NP available
Recommended Prep: 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

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
Recommended Prep: 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 P/NP available
Recommended Prep: 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
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 77. OSHA 30 (2)
Lec-35
CAL-OSHA 30-hour training: Industry Standards for regulations covered by the Occupational Safety and Health Administration (OSHA) Standards for the Construction Industry. CSU
Upon successful completion of this course, “C” or better, students will also have the options to obtain an OSHA 30 card for a small filing fee.

CNST 88. Practical Mathematics for Construction Trades (3)
Lec-52.5 P/NP available
Recommended Prep: ESLV 3832 or ESLV 3831
Concepts, techniques and applications of measuring, estimating, and mathematics emphasizing practical problems in construction trades. Use of traditional problem solving methods and interactive group activities. CSU

CNST 100. Introduction to Construction Applications (3)
Lec-35, Lab-70, field trips P/NP available
Recommended Prep: 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 102. Concrete Applications (3)
Lec-35, Lab-70 P/NP available
Recommended Prep: CNST 69 or previous or current experience working in the plumbing field.
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 103. Residential Plumbing (3)
Lec-35, Lab-70, field trips P/NP available
Recommended Prep: 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 106. Fundamentals of the Uniform Plumbing Code (3)
Lec-52.5 P/NP available
Recommended Prep: Completion of or concurrent enrollment in: CNST 103 or previous or current experience working in the plumbing field.
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

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, stu
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
<th>Preparation</th>
<th>Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST 107</td>
<td>Blueprint Reading</td>
<td>3</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
<td>Offered Fall semesters</td>
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<tr>
<td>CNST 107A</td>
<td>Practical Blueprint Reading</td>
<td>1</td>
<td>Lec-9, Lab-26</td>
<td>P/NP available</td>
<td>Offered Spring semesters</td>
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<tr>
<td>CNST 108</td>
<td>Contractor License Preparation</td>
<td>3</td>
<td>Lec-52.5, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 109</td>
<td>Residential Wiring</td>
<td>4</td>
<td>Lec-52.5, Lab-52.5</td>
<td>P/NP available</td>
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<tr>
<td>CNST 110</td>
<td>Carpentry - Rough Framing</td>
<td>3</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 111</td>
<td>Carpentry - Advanced Framing</td>
<td>3</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 112</td>
<td>Finish Carpentry</td>
<td>3</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 113</td>
<td>Furniture Making &amp; Woodworking</td>
<td>3</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 114</td>
<td>Custom Cabinetmaking</td>
<td>3</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 115</td>
<td>Blueprint Reading</td>
<td>1.5</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 116</td>
<td>Furniture Making &amp; Woodworking</td>
<td>3</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 117</td>
<td>Introduction to Photovoltaics</td>
<td>1.5</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 118</td>
<td>Advanced Project Furniture Making I</td>
<td>3</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 119</td>
<td>Advanced Project Furniture Making II</td>
<td>3</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 120</td>
<td>Introduction to Photovoltaics</td>
<td>1.5</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 121</td>
<td>Introduction to Photo Voltaic Installation</td>
<td>1</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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<tr>
<td>CNST 122</td>
<td>Drywall Hanging and Finishing</td>
<td>1.5</td>
<td>Lec-35, Lab-70</td>
<td>P/NP available</td>
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</tbody>
</table>

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

**Recommended Prep:** CNST 100; ET 108A

An introductory 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.

**Offered Fall semesters**

**CNST 123.** Custom Cabinetmaking (3)
Lec-35, Lab-70 P/NP available

**Recommended Prep:** CNST 100; CNST 1009

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.

**Offered Fall semesters**

**CNST 124.** 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, materials knowledge) acquired in the basic CNST 116 course.

**Offered Fall semesters**

**CNST 125.** Drywall Hanging and Finishing (1.5)
Lec-35, Lab-70 P/NP available

**Recommended Prep:** CNST 100; CNST 1009

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
CNST 128. Introduction to the National Electrical Code (2)
Lec-36 P/NP available
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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

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

CNST 130B. 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

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

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

CNST 134. Electrical-Mechanical Fundamentals (4)
Lec-52.5, Lab-52 P/NP available
Fundamentals of electricity and magnetism as they apply to the training of refrigeration technicians. Hands on work with transformers, solenoids, relays, motor starters, and single and three phase hermetic motors and motor control circuits. CSU

CNST 136. Electrical Circuits (4)
Lec-52.5, Lab-52.5 P/NP available
Introduction to basic electrical terms and principles. Includes the design, construction and testing of basic alternating currents (AC) and direct currents (DC) in series, parallel and combination circuits. CSU

Noncredit Courses:

CNST 1025. Drywall Hanging and Finishing (36 hrs)
Recommended Prep: 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)
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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)
Recommended Prep: 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)
RECOMMENDED PREP: 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.

**Biological Sciences**
Office: Science 304
Phone Number: (415) 239-3645
Web Site: www.ccsf.edu/biology

**Announcement of Curricula**
(For courses and programs in Biotechnology, see Engineering and Technology.)

**Biology Major (AS-T)**

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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<tbody>
<tr>
<td>Required courses:</td>
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<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>
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<tr>
<td>CHEM 101B General College Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>Choose one of the following Calculus courses:</td>
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<tr>
<td>MATH 10A Calculus I</td>
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</tr>
<tr>
<td>MATH 100A Short Calculus I</td>
<td>3.0</td>
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</table>

**Complete one of the following Physics Series:**

**OPTION 1:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<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>
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</table>

**OPTION 2:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHYC 4A Classical Mechanics for Scientists and Engineers</td>
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<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>
</tbody>
</table>
Courses Required for the Major in Biological Sciences

Course ........................................ Units
Required Courses:
BIO 100A General Biology ................... 5.0
BIO 100B General Biology ................... 5.0
CHEM 101A General College Chemistry .... 6.0
CHEM 101B General College Chemistry .... 5.0
CHEM 208A Organic Chemistry ............. 4.0
CHEM 208B Organic Chemistry ............. 4.0
MATH 100B Calculus I ....................... 5.0
MATH 100B Calculus II ...................... 5.0
PHYC 2A Introductory Physics ............... 3.0

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 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 Certificate of Achievement in Biological Sciences

Course ........................................ Units
Required Courses:
BIO 100A General Biology ................... 5.0
BIO 100B General Biology ................... 5.0
CHEM 101A General College Chemistry .... 6.0
CHEM 101B General College Chemistry .... 5.0
CHEM 208A Organic Chemistry ............. 4.0
CHEM 208B Organic Chemistry ............. 4.0
MATH 100B Calculus I ....................... 5.0
MATH 100B Calculus II ...................... 5.0
PHYC 2A Introductory Physics ............... 3.0

Total: ........................................ 47.0

Additional course requirements for students:

Particular upper division institutions and programs might require additional lower-division course work. Therefore, it is strongly recommended that students contact a transfer counselor at CCSF and the appropriate department at the upper division institution in order to obtain the most accurate transfer information.

Biological Sciences Certificate

CCSF's Biological Sciences Certificate offers basic courses in chemistry and biology to serve students with diverse goals, including transfer to biology programs at U.C., C.S.U. or other four-year institutions. Biological Sciences Certificates will be able to take most or all of their lower division courses at CCSF before 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 pre-medical, 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

Course ........................................ Units
Required Courses:
BIO 100A General Biology ................... 5.0
BIO 100B General Biology ................... 5.0
CHEM 101A General College Chemistry .... 6.0
CHEM 101B General College Chemistry .... 5.0
CHEM 208A Organic Chemistry ............. 4.0
CHEM 208B Organic Chemistry ............. 4.0
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.
- Analyze, interpret, and evaluate quantitative and qualitative evidence regarding the causes and consequences of human impacts on the environment.
- Apply tools, practices, and quantitative reasoning to collect, analyze, and interpret environmentally relevant data both in laboratory and field settings.
- 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
</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>
<tr>
<td>Total</td>
<td>47.0</td>
</tr>
</tbody>
</table>

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 110A Calculus I | 5.0
- MATH 100A 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 110B 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
- 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 Microeconomics | 3.0
- ECON 3 Principles of Microeconomics | 3.0
- ENRG 3 Introduction to Alternative Energy | 3.0
- ENRG 3L Introduction to 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 | 5.0
- 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:

Biology

- BIO 9, Human Biology (4)
- Lec-52.5, Lab-52.5, field trips
- Recommended Prep: MATH 30; ENGL 88 or ESL 184 or placement in ESL 186 or readiness for college-level English

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
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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, 11, or PHYS 1.

BIO 11. Science of Living Organisms (4)
Lec-52.5, Lab-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 orientation on campus.

BIO 21F. Ecology of the San Francisco Bay Delta (1)
Lec-17.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 80E. 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 31L= BIO 31= GEOG 31

BIO 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 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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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. Introduction to Genetics (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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 53. Human Genetics (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or ESL 1A; High school biology course or BIO 9 or BIO 11
BIO 61. The Biology of Cancer (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 186 or readiness for college-level English
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 110. Introduction to Human Physiology (5)
Lec-52.5, Lab-105, field trips
Prereq: CHEM 32 or CHEM 101A
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
C-ID BIOL 120B
Formerly PHYS 1
Offered on occasion

BIO 111. Human Physiology (5)
Lec-52.5, Lab-105, field trips
Prereq: CHEM 32 or CHEM 101A
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
C-ID BIOL 120B
Formerly PHYS 12

BIO 114. Exploring Neuroscience: An introduction to the Brain (3)
Lec-52.5, field trips
Prereq: CHEM 32 or CHEM 101A
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: BIO 100A or BIO 100B or BIO 11 or BIO 9 or ZOOL 10 or a high school biology course; MATH 40 or placement in MATH 60; ENGL 88 or ESL 188 or readiness for college-level English
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. UC/CSU

BIO 119. Emerging Diseases (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 184 or readiness for college-level English
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 M B 12
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 MB 51

BIO 121. Sanitation Principles and Practices (2)
Lec-35 P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
Principles of food-borne illness etiology and transmission; food-borne agents resulting in food spoilage, infections and poisonings; sanitary, 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
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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

Genetics
GEN 11. Genetics Laboratory (1)
Lab-52.5, field trips P/NP available
Prereq: Completion/concurrent enrollment in GEN 10 or 15
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

Broadcast Electronic Media Arts
Office: Art X 160
Phone Number: (415) 239-3351
Web Site: www.ccsf.edu/bema

Announcement of Curricula
General Information
The BEMA department is perfectly located within a top-ten media market, and is adjacent to Silicon Valley, which is home to many tech media giants. Our in-depth programs include video production, editing, finishing and motion graphics; Sound recording arts, including multi-track recording, sound design and live sound reinforcement; and digital media content creation, journalism; as well as audiovisual technology. BEMA courses, certificates, and degrees are designed to serve equally – new college students intending to transfer, returning students who wish to pivot to a new industry, and industry professionals needing to update their skill set. Located in the dynamic and diverse city of San Francisco, BEMA is a rewarding and engaging place to study.

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 transfer to a broadcasting department at a four-year university should emphasize the BCST courses in the degree program. Please consult the Department Chair for more information at (415) 239-3527.

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 140 Studio Video Production .......................... 3.0
BCST 141 Field Video Production .......................... 3.0
CINE 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 Expression ........................................ 3.0
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

AV Technologist Certificate Program Certificate

The AV Technologist Certificate of Achievement was created to assist students' entry in the AV industry. Students will be proficient in video/audio production systems and signal flow; basic IP theory and connectivity; and AV business management. This is a joint regional program between City College of San Francisco and Laney College in Oakland.

Learning Outcomes

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

- Analyze and apply components of sound and hearing, vision and light, as they pertain to human perception and venue audiovisual systems integration.
- Assemble, test, maintain and troubleshoot an audio, video, and audiovisual network according to AV principles and industry standards.
- Manage the business side of AV and communicate effectively both with clientele and team members.

This Regional Certificate is offered by Laney College, Oakland and City College of San Francisco. Some courses are offered at City College, and some at Laney, and others can be taken at either one.

The minimum time for completion of this certificate is three semesters. Completion time will vary based on student preparation and number of classes completed per semester.
Courses Required for the Certificate of Achievement in AV Technologist Certificate Program

Course ................................. Units
Required courses which are available at City College
BCST 120 Audio Production* .................... 4.0
BCST 127B Interconnected Audio Systems ........ 1.0
BCST 128 Sound Reinforcement .................. 3.0
BCST 140 Studio Video Production** .............. 3.0
BCST 141 Field Video Production** ............... 3.0
BCST 165 Industry Internship .................... 2.0
* Students may substitute Media 111-Basic Audio Production (3-Units), at Laney College for BCST 120.
** Students may substitute Media 108-Studio Production (3-Units), at Laney College for BCST 140
*** Students may substitute Media 104-Beginning Digital Video Production (3-Units) at Laney College for BCST 141.

The following REQUIRED courses are available at Laney College
Laney College Course: Media 165 AV Essentials I for AV installation technicians Signal flow, rack installation of audio, video, and IT components, cable construction, basic low voltage electrical systems and requirements. ......................... 3.0
Laney College Course: Media 166 AV Essentials II Essentials for AV installation technicians Continuation of signal flow, rack installation of audio, video, and IT components, cable construction, basic low voltage electrical systems and requirements; troubleshooting, IP connectivity and customer relations. ......................... 3.0

Recommended additional coursework:
CNIT 106 Introduction to Networks .................. 3.0
MABS 202 PowerPoint Presentations .................. 3.0
Total: ................................... 22.0

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.

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 AV Technologist Certificate Program

Course ................................. Units
Required courses which are available at City College
BCST 120 Audio Production* .................... 4.0
BCST 127B Interconnected Audio Systems ........ 1.0
BCST 128 Sound Reinforcement .................. 3.0
BCST 140 Studio Video Production** .............. 3.0
BCST 141 Field Video Production** ............... 3.0
BCST 165 Industry Internship .................... 2.0
BCST 165 Industry Internship .................... 2.0

Choose two of the following internship courses:
BCST 140 Video Motion Graphics .................. 4.0
BCST 147 Advanced Video Editing .................. 4.0

Choose one of the following advanced video production courses:
BCST 146 HDTV Studio Production .................. 4.0
BCST 149 HDTV Field Production .................. 4.0

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
Choose two of the following video editing courses:
BCST 140 Avid Video Editing Beginning .................. 4.0
BCST 140 Avid Video Editing Intermediate .............. 4.0
BCST 140 Avid Video Editing Premiere Intro ............... 4.0
BCST 140 Avid Video Editing Premiere Intermediate ........ 4.0

Choose one of the following advanced video production courses:
BCST 146 HDTV Studio Production .................. 4.0
BCST 149 HDTV Field Production .................. 4.0

Choose two units from the following internship courses:
BCST 140 Video Motion Graphics .................. 4.0
BCST 147 Advanced Video Editing .................. 4.0

Total: ................................... 20.0
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 Avid Video Editing Beginning ........................................ 4.0
BCST 144 Digital Video Editing: FCP & Premiere .................. 4.0

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: ............................................ 51.0 – 53.0

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BCST 110 Introduction to Writing for Electronic Media</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 120 Audio Production</td>
<td>4.0</td>
</tr>
<tr>
<td>BCST 159 Digital Media Portfolio</td>
<td>1.0</td>
</tr>
<tr>
<td>BCST 100 Introduction to Electronic Media</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 103 Mass Media and Society</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 128 Sound Reinforcement</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 125A Beginning Sound Recording Studio</td>
<td>5.0</td>
</tr>
<tr>
<td>BCST 124B Pro Tools Mixing with Plugins</td>
<td>2.0</td>
</tr>
<tr>
<td>BCST 125A Beginning Sound Recording Studio</td>
<td>5.0</td>
</tr>
<tr>
<td>BCST 127B Interconnected Audio Systems</td>
<td>1.0</td>
</tr>
<tr>
<td>BCST 138 Sound Reinforcement</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 159 Digital Media Portfolio</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Choose 2 units from the following internship courses:
BCST 160 College Internship ........................................ 1.0 – 2.0
BCST 165 Industry Internship ........................................ 1.0 – 2.0
Total: ............................................ 18.0

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 multimedia 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BCST 115 Announcing and Performance</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 141 Field Video Production</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 159 Digital Media Portfolio</td>
<td>1.0</td>
</tr>
<tr>
<td>JOUR 21 News Reporting and Writing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

These courses are more advanced and should be taken the second semester if possible:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 110 Introduction to Writing for Electronic Media</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>BCST 158 Social Media for Professionals</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 35 Internet Journalism</td>
<td>3.0</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>1.0-2.0</td>
</tr>
<tr>
<td>BCST 165 Industry Internship</td>
<td>1.0-2.0</td>
</tr>
</tbody>
</table>

Total: 26.0

**Multimedia Content Creation for the Internet Certificate**

Students will utilize common tools and techniques to create effective and engaging internet content. They will be able to conceptualize, produce, and deliver meaningful multimedia material. Those who complete this program can apply for entry level social media positions or media content creator positions, or use these skills to improve their creative portfolio and express opinions effectively in online campaigns.

**Learning Outcomes**

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

- Plan, organize, and create effective online content that conveys an intended message.

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 Multimedia Content Creation for the Internet**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BCST 119 Digital Media Skills</td>
<td>3.0</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>BCST 158 Social Media for Professionals</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 159 Digital Media Portfolio</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Total: 9.0

**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 location sound. 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.

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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BCST 125A Pro Tools Editing Essentials</td>
<td>2.0</td>
</tr>
<tr>
<td>BCST 124B Pro Tools Mixing with Plugins</td>
<td>2.0</td>
</tr>
<tr>
<td>BCST 125A Beginning Sound Recording Studio</td>
<td>5.0</td>
</tr>
<tr>
<td>BCST 126 Sound For Visual Media</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 127A Surround Sound Mixing</td>
<td>1.0</td>
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</tbody>
</table>

Choose two units from the following internship courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>BCST 160 College Internship</td>
<td>1.0-2.0</td>
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</tbody>
</table>
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:
- 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.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BCST 124A Pro Tools Editing Essentials</td>
<td>2.0</td>
</tr>
<tr>
<td>BCST 124B Pro Tools Mixing with Plugins</td>
<td>2.0</td>
</tr>
<tr>
<td>BCST 125A Beginning Sound Recording Studio</td>
<td>5.0</td>
</tr>
<tr>
<td>BCST 125B Intermediate Sound Recording Studio</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Choose two 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

Video Editing and Post Production Certificate
The Video Editing and Post Production certificate builds on the Foundations in Broadcasting Electronic Media 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, 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 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.

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>
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</tbody>
</table>

Choose one of the following video editing courses:
- BCST 143A Avid Video Editing Beginning | 4.0 |
- BCST 144A Video Editing Premiere Intro | 4.0 |

Choose one of the following television production courses:
- BCST 148 HDTV Studio Production | 4.0 |
- BCST 149 HDTV Field Production | 4.0 |

Choose two units from the following internship options:
- BCST 160 College Internship | 2.0 |
- BCST 165 Industry Internship | 2.0 |

Total: 18.0
- 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.

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>
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</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 Avid Video Editing Beginning</td>
<td>4.0</td>
</tr>
<tr>
<td>BCST 144B Video Editing Premiere Intermediate</td>
<td>4.0</td>
</tr>
<tr>
<td>BCST 144A Video Editing Premiere Intro</td>
<td>4.0</td>
</tr>
<tr>
<td>BCST 144B Video Editing Premiere Intermediate</td>
<td>4.0</td>
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</tbody>
</table>

Choose one of the following advanced courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</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>
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</tbody>
</table>

Choose 2 units from the following internship courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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. UC/CSU

BCST 101. Media Literacy (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Critical analysis of aesthetic and thematic aspects of television, cable, streaming audio, video, and mobile device programming. Methods of interpreting visual and oral messages present in news, entertainment, sports and advertising. Impact of emerging technologies on program content and form. CSU

BCST 103. Mass Media and Society (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

BCST 105. Gender & Mass Media (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

BCST 110. Introduction to Writing for Electronic Media (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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, field trips
Recommended Prep: BCST 120; ENGL 88 or ESL 188 or readiness for college-level English
Introduction to basic theory and practice in interpretation of copy, pronunciation, and announcer’s duties for radio, television, podcast and web video. Study and practice of oral skills for effective communication of meaning in scripts, newscasts, voiceovers 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...
sound production, dialog recording, sound editorial, sound design, and editing used to apply sound to picture. Examines the stages of location sound recording. Hands-on overview and theory of the processes, craft skills, and equipment used in the development of workflow and etiquette required in a professional recording studio. The processes of acquiring basic tracks, overdubbing, editing, and mixing will be examined using tech-enhanced audio software and hardware. CSU

BCST 124A. Pro Tools Editing Essentials (2)
Lec-35
Prereq: BCST 119 or demonstration of BCST 119 exit skills
Recommended Prep: Completion of or concurrent enrollment in: BCST 120
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 124B. Pro Tools Mixing with Plugins (2)
Lec-35
Prereq: Completion of or concurrent enrollment in: BCST 120
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 recording studio environment. The processes of acquiring basic tracks, overdubbing, editing, and mixing will be examined using tech-enhanced materials.

BCST 125A. Beginning Sound Recording Studio (5)
Lec-52.5, Lab-105, field trips
Prereq: BCST 120 or demonstration of exit skills
Recommended Prep: BCST 119 and BCST 124A
This course introduces students to the analog and digital multi-track recording techniques used in various stages of professional sound recording as well as the workflow and etiquette required in a professional recording studio environment. The processes of acquiring basic tracks, overdubbing, editing, and mixing will be examined using tech-enhanced materials.

BCST 125B. Intermediate Sound Recording Studio (5)
Lec-52.5, Lab-105
Prereq: BCST 125A
Recommended Prep: 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.

BCST 126. Sound For Visual Media (3)
Lec-35, Lab-52.5, field trips
Prereq: BCST 120; BCST 119
Recommended Prep: 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.

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
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.

Offered Fall semesters

BCST 127B. Interconnected Audio Systems (1)
Lec-17.5, Lab-17.5, field trips
Prereq: BCST 128 or demonstration of exit skills
Recommended Prep: CNIT 106
Project-oriented, hands-on introduction to building and maintaining interconnected audio systems using WiFi, Bluetooth, Audio over Ethernet (AoE) and AoIP standards.

This course will be offered in Spring semesters only.

Offered Spring semesters

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.

Offered Spring semesters

BCST 129. Sound For Games and Interactive Media (3)
Lec-52.5, Lab-17.5, field trips
Recommended Prep: Completion of or concurrent enrollment in BCST 119
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.

Offered on occasion

BCST 135. Audio for the Web (1)
Lec-15, Lab-9
Prereq: Completion of or concurrent enrollment in: BCST 119
Recommended Prep: 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.

BCST 136. Video for the Web (1)
Lec-15, Lab-9
Prereq: Completion of or concurrent enrollment in BCST 119
Recommended Prep: 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.

BCST 140. Studio Video Production (3)
Lec-35, Lab-70, field trips
Recommended Prep: 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*

**Offered Fall semesters**

BCST 141. Field Video Production (3)
Lec-35, Lab-70, field trips
Recommended Prep: 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

*C-ID FTVE 130*

**Formerly BCST 145**

**Offered Spring semesters**

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. Avid Video Editing - Beginning (4)
Lec-52.5, Lab-52.5, field trips
Prereq: BCST 119 or demonstration of exit skills
Recommended Prep: 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

**Offered Fall semesters**

BCST 143B. Avid Video Editing - Intermediate (4)
Lec-52.5, Lab-52.5, field trips
Prereq: BCST 143A or demonstration of exit skills
Recommended Prep: 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 deepening the expertise and skill of the operation, technology, techniques, and aesthetic process of editing video content with related title and visual effects components. CSU

**Offered Fall semesters**

BCST 144A. Video Editing Premiere Intro (4)
Lec-52.5, Lab-52.5, field trips
Prereq: BCST 119 or demonstration of exit skills
Recommended Prep: 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

**Offered Fall semesters**

BCST 144B. Video Editing Premiere Intermediate (4)
Lec-52.5, Lab-52.5, field trips
Prereq: BCST 144A or demonstration of exit skills
Recommended Prep: 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 deepening the expertise and skill of the operation, technology, techniques, and aesthetic process of editing video content with related title and visual effects components. CSU

**Offered Fall semesters**

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 Fall 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
Recommended Prep: 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
Recommended Prep: BCST 110; BCST 126; BCST 140 and BCST 143 or BCST 144
Advanced aesthetic and technical elements of digital video 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 broadcast 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
Prereq: BCST 119 or demonstration of BCST 119 exit skill
Recommended Prep: 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-60-600
P/NP available
Prereq: Approval of the Broadcast Electronic Media Arts Department; Completion of or concurrent enrollment in: BCST 163
Recommended Prep: BCST 119 and BCST 120 and (BCST 140 or BCST 141)
Repeat: max. 8 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. One unit of credit is earned for 60 hours of unpaid, or 75 hours of paid work.
CSU
Formerly BCST 160A

BCST 163. Media Internship Preparation (1)
Lec-17.5
P/NP available
This course prepares the student to find and successfully complete a college based or industry based media internship. Students prepare a media resume, learn networking, time management, and interview skills. Students improve work based skills, research media jobs and prepare for media industry employment.
CSU

BCST 165. Industry Internship (1-8)
Work-60-600
P/NP available
Prereq: Approval of the Broadcast Electronic Media Arts Department; Completion of or concurrent enrollment in: BCST 163
Recommended Prep: BCST 125A or BCST 126 or BCST 128 or BCST 146 or BCST 147 or BCST 148 or BCST 149
Repeat: max. 8 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. One unit of credit is earned for 60 hours of unpaid, or 75 hours of paid work.
CSU
Formerly BCST 165A

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 and Core Skills
  - Bookkeeping
  - 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
  - Business Information Worker (BIW)
  - Business Office Support Skills
  - Business Website Builders
  - Digital Literacy & Core Skills
  - Electronic Publishing
  - Excel Professional I Microsoft Office Specialist (MOS)
  - Excel Professional II Microsoft Office Specialist (MOS)
  - Medisoft for Business
  - Website Development for E-Business

Finance
- Finance Major
- Finance Credit Certificate

General Business
- Business Administration Major for Transfer
- General Business Major

International Business
- International Business Credit Certificate

Management
- Supervision and Management 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

Accounting

Accounting Major (AS)

Students who satisfactorily complete the Curriculum in Accounting, a two-year course of study, are qualified for employment as junior accountants in private, public, and civil-service accounting and as junior auditors in private and civil-service accounting. Positions to which graduates have advanced after gaining experience and undertaking further study include those of accounting supervisor, senior accountant, and senior auditor.

The course of study includes instruction in principles of accounting, intermediate accounting, auditing, cost accounting, microcomputer accounting, and income-tax procedure.

Students who complete each of the following courses, and complete the Graduation requirements for the AS degree, or the CCSF transfer Associate Degree General Education requirements, will satisfy the requirements for the Accounting Major.

Learning Outcomes

Upon completion of 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester:</td>
<td></td>
</tr>
<tr>
<td>ACCT 1 Financial Accounting</td>
<td>5.0</td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BSMA 68 Mathematics of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester:</td>
<td></td>
</tr>
<tr>
<td>ACCT 2 Managerial Accounting</td>
<td>5.0</td>
</tr>
<tr>
<td>BSEN 74 Written Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT 59 Federal Income Tax</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Business/Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
</tr>
<tr>
<td>BSL 1 Business Law I</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT 51 Intermediate Accounting</td>
<td>5.0</td>
</tr>
</tbody>
</table>
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 .......................................................... Hours
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 & Core Skills Certificate of Completion

This Noncredit Certificate of Completion prepares the student for entry-level assistant positions in A/P, A/R, billing, payroll, or in the financial services industry. Students learn to keep financial records, prepare reports, update financial information, develop accounting office skills, and develop core soft skills for business communication.

Microsoft Excel and Intuit QuickBooks skills are advanced such that students are prepared to take both Certiport and employment testing.

Learning Outcomes

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

- Explain accounting principles and concepts.
- Prepare for Microsoft Excel examinations by solving real-world business problems.
- Apply standard business English to write employment and business documents.

Recommended: ESLN 3500 or placement in ESLN 3600

Exit Requirements: 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 Certificate of Completion in Accounting Assistant & Core Skills

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

Required Excel courses:
COMP 9900 Microsoft Excel for Business I ..................... 45.0
COMP 9904 Microsoft Excel for Business II ..................... 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 I .......................... 45.0
and ACBO 9209 QuickBooks: Level 2 .................. 45.0

Required core skills courses:
BOSS 5500 Keyboarding for Computers ......................... 45.0
BOSS 4510 Business Communications .......................... 45.0
BOSS 4520 Customer Service Principles & Soft Skills ........ 45.0
COMP 9921 The Internet and Social Customer Service ......................................................... 45.0

Total: .................................................................. 615.0 – 630.0

Bookkeeping Certificate of Completion

Preparation for bookkeeping employment. Students will acquire manual and computerized accounts receivable, accounts payable, payroll, general accounting and end-of-period procedures skills.

This certificate will allow the student to progress into other accounting certification programs.

Learning Outcomes

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

- Perform manual and electronic record keeping and general accounting skills.
• Perform computerized bookkeeping and accounting procedures.

Recommended: ESLN 3500 or placement in ESLN 3600

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

Courses Required for the Certificate of Completion in Bookkeeping

Course: ................................. Hours

Required Courses
ACBO 9216 Recordkeeping for the Business Office .................. 45.0
ACBO 9206 Basic Accounting Concepts I ................................. 45.0

Choose one of the following QuickBooks options:
OPTION ONE:
ACBO 9205 Quickbooks Complete ................................. 90.0

OPTION TWO:
ACBO 9208 Quickbooks: Level 1 ................................. 45.0
ACBO 9209 Quickbooks: Level 2 ................................. 45.0

Total: ................................. 180.0

QuickBooks & Spreadsheets for Accounting

Certificate of Completion

This Noncredit Certificate of Completion prepares students for entry-level and mid-level clerical 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. Spreadsheet and QuickBooks skills are developed and practiced so that students gain a solid competency in Excel and are prepared for both Certiport and employment testing.

Learning Outcomes

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

• Identify the steps in the accounting cycle and use spreadsheets as they relate to worksheet manipulation and accounting principles.
• Use technology as a tool to complete essential business office tasks and competency for employment testing.
• Prepare and interpret simple financial statements for businesses.

Advisory Entrance Requirements. Completion of ESLN 3700, COMP 9905 or COMP 9245, BOSS 5500 and BOSS 5506

Exit Requirements. Minimum attendance of 80% in all classes is required.

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 Completion in QuickBooks & Spreadsheets for Accounting

Course: ................................. Hours

Required courses:
COMP 9900 Microsoft Excel for Business I .................. 45.0
COMP 9904 Microsoft Excel for Business II .................. 45.0
ACBO 9206 Basic Accounting Concepts I ................................. 45.0
ACBO 9207 Basic Accounting Concepts II ................................. 45.0
COMP 9941 Computer Applications Self Paced .................. 45.0

Choose one of the following Quickbooks courses or course combination options:
OPTION ONE:
ACBO 9205 Quickbooks Complete ................................. 90.0

OPTION TWO:
ACBO 9208 QuickBooks: Level 1 ................................. 45.0
ACBO 9209 QuickBooks: Level 2 ................................. 45.0
Total: ................................. 315.0

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
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 Administrative Support

Course: ................................. Units

First Semester required course:
BSEN 70 Grammar and Writing Essentials for Business .................. 5.0

First Semester choose one of the following keyboard courses:
MABS 30 Computer Keyboarding .................. 3.0
MABS 35 Speedbuilding I: Keyboarding .................. 1.5

Second Semester required courses:
MABS 38 Document Production Using Microsoft Word .................. 3.0
BSEN 74 Written Business Communication .................. 3.0
BSMA 68 Mathematics of Business .................. 3.0

Third Semester required courses:
MABS 391 Word Processing/Microsoft Word .................. 3.0
MABS 101 Spreadsheets for Business/Excel .................. 3.0

Third Semester choose one of these courses:
CMST 6 Workplace Communication .................. 3.0
PSYC 26 Applied Psychology .................. 3.0

Fourth Semester required courses:
MABS 67 Database for Business/Microsoft Access .................. 3.0
BSEN 76 Business and Technical Report Writing .................. 3.0
CRER 62 Successful Job Search Techniques .................. 1.0
Fourth Semester choose one of the following courses:
MABS 202 PowerPoint Presentations ................. 3.0  
MABS 406 Developing Websites Dreamweaver ...... 3.0  
CNIT 101 Operating Systems I Windows ........... 3.0  
MRKT 145 Computer Marketing Applications ...... 3.0  
Total: ............................................ 34.5 – 36.0

**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.

**Learning Outcomes**

Upon completion of this program, students will be able to:
- Create clear, concise, courteous, well-organized business messages.
- Evaluate appropriate methods of scheduling for different phases of the construction process.
- Create professional documents, spreadsheets, presentations, emails, and calendars.
- Apply appropriate spreadsheet functions to solve everyday business problems.

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 Construction Office Administration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester: required courses:</td>
<td></td>
</tr>
<tr>
<td>BS 70 Grammar and Writing Essentials</td>
<td>5.0</td>
</tr>
<tr>
<td>CRER 62 Successful Job Search Techniques</td>
<td>1.0</td>
</tr>
<tr>
<td>First Semester: choose one of these keyboarding 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 74 Written Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Business/Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester: choose one of these Microsoft Word options:</td>
<td></td>
</tr>
<tr>
<td>MABS 38 Document Production Using Microsoft Word</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 39i Word Processing/Microsoft Word</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester: choose one of these two options:</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>
<tr>
<td>Total: ........................................ 19.5 – 21.0</td>
<td></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:
- 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 1 semester. Completion time will vary based on student preparation and number of units completed per semester.

**Courses Required for the Certificate of Achievement in Office Technology**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester: required courses:</td>
<td></td>
</tr>
<tr>
<td>BS 70 Grammar and Writing Essentials</td>
<td>5.0</td>
</tr>
<tr>
<td>CRER 62 Successful Job Search Techniques</td>
<td>1.0</td>
</tr>
<tr>
<td>First Semester: choose one of these keyboarding 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 74 Written Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Business/Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester: choose one of these Microsoft Word options:</td>
<td></td>
</tr>
<tr>
<td>MABS 38 Document Production Using Microsoft Word</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 39i Word Processing/Microsoft Word</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester: choose one of these two options:</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>
<tr>
<td>Total: ........................................ 19.5 – 21.0</td>
<td></td>
</tr>
</tbody>
</table>
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 effective ways to service and maintain customers or clients in private and non-profit business in person, by telephone, email, and/or through social media. Please consult top 10 skills, top 10 knowledge requirements, top 10 work activities for administrative support, Occupational Outlook Handbook, Guides, and labor market projections for customer service at www.ccsf.edu/bus.

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 to 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 4509 Office Procedures for the 21st Century ...................................... 45.0
BOSS 5500 Keyboarding for Computers ..................................................... 45.0
BOSS 3500 Job Preparation ................................................................. 45.0
Total: .................................................. 315.0

Business Information Worker (BIW) Noncredit Certificate

This Noncredit Certificate of Completion prepares students for MOS core certifications. The student learns and develops the competencies for passing a MS Word, Excel, Outlook and PowerPoint employment exams while progressing through the various levels of each application. Students develop grammar, writing, customer service skills, business communication, and identify common core skills desired for the workplace.

Learning Outcomes

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

- Perform a variety of communication tasks using business software.
- Analyze real-world business problems to prepare for Microsoft Office (MOS) examinations.
- Demonstrate common soft skills desired for the workplace.

Recommended. Completion of noncredit ESLN 3700 or higher; typing 25 net wpm.

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. Successful completion of all courses with a passing grade of C or higher. Minimum attendance of 80% in all courses.

Courses Required for the Certificate of Completion in Business Information Worker (BIW)

Course ........................................ Hours
Required core skills courses:
BOSS 5500 Keyboarding for Computers ....................................................... 45.0
COMP 9905 Intro to Windows for MS Office Applications .......................... 45.0
COMP 9903 Software Update ................................................................. 15.0
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

Required Office software courses:
WOPR 9995 Microsoft Word for Business I .............................................. 45.0
WOPR 9996 Microsoft Word for Business II ............................................ 45.0
COMP 9928 PowerPoint for Business ....................................................... 45.0
COMP 9900 Microsoft Excel for Business I .............................................. 45.0
COMP 9904 Microsoft Excel for Business II ............................................. 45.0
COMP 9936 Outlook for Office Support .................................................... 45.0
COMP 9941 Computer Applications Self Paced ........................................ 45.0

Choose one of the following electives:
BOSS 3500 Job Preparation ................................................................. 45.0
COMP 9909 Microsoft Excel for Business III ............................................ 45.0
COMP 9857 MS Office Business Applications w/Simulated Projects ............ 90.0
COMP 9899 Electronic Publishing for Business I ...................................... 45.0
Total: .................................................. 645.0 – 690.0

Business Office Support Skills

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

• Use Microsoft Office applications such as Word, Excel, Access, PowerPoint, Outlook and OneNote to produce simple to complex documents.

• Apply basic office procedures to routine office tasks.

• Demonstrate basic knowledge and skills to be successful in an entry-level office position.

Advisory Entrance Requirements. Eligibility for noncredit ESL levels 5/6

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

Course .................................................. Hours

Required courses:
AAPS 1111 Orientation to Noncredit
Certificate Programs .................................................. 10.0

BOSS 5509 Office Procedures for the 21st Century .................. 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

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

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Business Website Builders Noncredit Certificate

This certificate is designed to help students develop website 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 Essentials .................................. 45.0

COMP 9967 Google Apps for Business I ................................. 45.0

COMP 9968 Google Apps for Business II .................................. 45.0

COMP 9908 Computer & Web-based Applications .................. 45.0

COMP 9917 Building Individual Websites .................................. 45.0

COMP 9918 Building Business Web Sites ................................. 45.0

Total: .................................................. 450.0

Digital Literacy & Core Skills Certificate of Completion

This Noncredit Certificate of Completion prepares students for digital literacy skills and soft skills through writing and other forms of communication on computers and various social media sites. Students are introduced to computer literacy, keyboarding techniques, review grammar, writing, customer service skills, and identify common core skills desired for the workplace.

Learning Outcomes

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

• Use technology as a tool to complete essential business writing and communication tasks.

• Use standard Internet and emailing practices and establish social media accounts.

• Identify common core skills desired for the workplace.

Program Advisory: Completion of ESLN 3800

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 Completion in Digital Literacy & Core Skills

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 3502 Customer Service Principles & Soft Skills .......... 45.0

BOSS 4500 Business English I ....................................... 45.0

BOSS 4501 Business English II ....................................... 45.0

BOSS 4510 Business Communications ................................ 45.0

BOSS 3500 Job Preparation ........................................... 45.0

Total: .................................................. 360.0

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 Essentials</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</td>
<td></td>
</tr>
<tr>
<td>Desktop Publishing</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9935 Business Web Graphics</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9908 Computer &amp; Web-based Applications</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9899 Electronic Publishing for Business</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9907 Electronic Publishing for Business II</td>
<td>45.0</td>
</tr>
<tr>
<td>Total:</td>
<td>315.0</td>
</tr>
</tbody>
</table>

Excel Professional I Microsoft Office Specialist (MOS) Certificate of Completion

In this program, students develop and practice Microsoft Excel skills in order to gain solid competency and prepare for both Certiport and employment testing.

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

- Perform simple to complex operations using Microsoft Excel.
- Evaluate real-world business problems in preparation for the Excel MOS Core examination.

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 Certificate of Completion in Excel Professional I Microsoft Office Specialist (MOS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<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 9941 Computer Applications Self Paced</td>
<td>45.0</td>
</tr>
<tr>
<td>Note: Students must complete the Excel MOS Core module of COMP 9941.</td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td>135.0</td>
</tr>
</tbody>
</table>

Excel Professional II Microsoft Office Specialist (MOS) Certificate of Completion

In this program, students gain expert capability in Microsoft Excel and prepare to take both Certiport and employment testing.

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

- Perform manual and spreadsheet business calculations.
- Complete advanced spreadsheet formulas and formatting techniques.
- Practice solving real-world business problems in preparation for the Excel MOS Expert examination.

Students must complete the Excel Professional I (MOS) program or demonstrate competency in Excel Levels 1 and 2.

Recommended: ESLN 3600 or placement in ESLN 3700.

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

Courses Required for the Certificate of Completion in Excel Professional II Microsoft Office Specialist (MOS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9941.1 Computer Applications Self Paced</td>
<td>45.0</td>
</tr>
<tr>
<td>Note: Students must complete the Excel MOS Expert module of COMP 9941.</td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td>135.0</td>
</tr>
</tbody>
</table>

Medisoft for Business Certificate of Completion

Program Goal: Prepare students for entry-level medical office positions, such as a receptionist or an admitting clerk. Students will learn Medisoft an office management software system that streamlines scheduling and business procedures. Topics include Medisoft terminology and basic skills in Microsoft Office Word and Excel.

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

- Perform tasks typical of an entry-level position in a medical office.
- Apply Microsoft and Medisoft technology to complete essential business office tasks.
- Interpret and prepare simple business statements for the medical office.

Program Advisories: Completion of noncredit ESLN 3600, COMP 9905 or COMP 9245

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 Completion in Medisoft for Business

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSS 6500 Business Data Entry w/ Introduction to Medisoft</td>
<td>45.0</td>
</tr>
<tr>
<td>BOSS 6501 Business Medical Office Applications using Medisoft Level I</td>
<td>90.0</td>
</tr>
</tbody>
</table>
BOSS 6502 Business Office Skills using Medisoft Level 2 \( \text{90.0} \)
BOSS 6503 Medisoft Simulated Office Practice Level 3 \( \text{45.0} \)
COMP 9900 Microsoft Excel for Business I \( \text{45.0} \)
WOPR 9995 Microsoft Word for Business I \( \text{45.0} \)
Total: \( \text{360.0} \)

**Website Development for E-Business Certificate of Completion**

This certificate is designed to develop students skills covering website development, website customization, addition of e-business functions to a website, and preparation and integration of digital media, images, and interactive media content in a website. These skills can be applied to jobs requiring website development, website maintenance, website content creation, digital advertising, digital marketing, and e-business.

**Learning Outcomes**

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

- Select and organize content for an e-business website.
- Enhance visual images or interactive media for inclusion in a web page to improve the users’ experience.
- Use appropriate software applications to develop or customize an e-business website.
- Implement specific e-business functions for website enhancement, productivity, or marketing impact.
- Customize an e-business website for mobile devices.

**Recommended Preparation:** ESLN 3700 or TRST 2321; COMP 9905

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

**Courses Required for the Certificate of Completion in Website Development for E-Business**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP 9917 Building Individual Websites</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9918 Building Business Web Sites</td>
<td>45.0</td>
</tr>
<tr>
<td>COMP 9922 Flash for Bus/Office Presentations</td>
<td>45.0</td>
</tr>
<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 9959 Photoshop Essentials</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>Total:</td>
<td>( \text{360.0} )</td>
</tr>
</tbody>
</table>

**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:

- Assess the financial condition of individuals and companies.
- Communicate business concepts effectively in oral and written formats.
- Categorize the relationships between and components of financial markets, institutions and instruments.
- Interpret multiple aspects of financial risk management.
- Calculate the value of real and financial assets to make investment decisions.
- Examine debt and equity as sources of capital.

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**

<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>FIN 110 Principles of Risk Management</td>
<td>3.0</td>
</tr>
<tr>
<td>First semester: choose one of the following math courses:</td>
<td></td>
</tr>
<tr>
<td>BSMA 68 Mathematics of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 75 Mathematical Analysis for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 90 Precalculus Algebra</td>
<td>5.0</td>
</tr>
<tr>
<td>Second semester required courses:</td>
<td></td>
</tr>
<tr>
<td>FIN 133 Money and Banking</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 1 Principles of Macroeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>Third semester required course:</td>
<td></td>
</tr>
<tr>
<td>MABS 101 Spreadsheets for Business/Excel</td>
<td>3.0</td>
</tr>
<tr>
<td>Fourth semester required course:</td>
<td></td>
</tr>
<tr>
<td>FIN 138 Principles of Investment</td>
<td>3.0</td>
</tr>
<tr>
<td>Fourth 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>Fourth 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>Choose 2 of the following course electives (recommended to complete one in third semester and another in fourth semester):</td>
<td></td>
</tr>
<tr>
<td>BSEN 74 Written Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>SMBS 135 Ownership and Operation of a Small Business</td>
<td>3.0</td>
</tr>
<tr>
<td>MGT 231 Introduction to Supervision and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT 2 Managerial Accounting</td>
<td>5.0</td>
</tr>
<tr>
<td>ECON 3 Principles of Microeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>INTR 170 International Business Finance</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>( \text{44.0 - 48.0} )</td>
</tr>
</tbody>
</table>
**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.

**Learning Outcomes**

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

- Prepare financial analysis using core quantitative skills.
- Communicate business concepts effectively in oral and written formats.
- Outline the relationships between and components of financial markets, institutions and instruments.
- Explain multiple aspects of financial risk management.
- Calculate the value of real and financial assets to make investment decisions.
- Define debt and equity as sources of capital.

**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><strong>First semester required courses:</strong></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><strong>Second semester required courses:</strong></td>
<td></td>
</tr>
<tr>
<td>ECON 1 Principles of Macroeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>FIN 138 Principles of Investment</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Second semester: choose one of the following courses:</strong></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><strong>Second semester: choose one of the following courses:</strong></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><strong>Total:</strong></td>
<td>27.0</td>
</tr>
</tbody>
</table>

**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 multi-cultural, team-oriented, rapidly-changing environment.

**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><strong>Required courses:</strong></td>
<td></td>
</tr>
<tr>
<td>CS 101 Introduction to Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 100 Intro to Computers Using PC’s</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 One of the following computer courses:</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>5.0</td>
</tr>
<tr>
<td><strong>Choose one of these statistics options:</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><strong>Select TWO of the following courses:</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 100A Short Calculus</td>
<td>3.0</td>
</tr>
<tr>
<td>or GNBS 119 Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>or One of the following computer courses:</strong></td>
<td></td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>CNT 100 Intro to Computers Using PCs</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 101 Introduction to Information Systems</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>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 199 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 | 5.0

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 110A Calculus I | 5.0

Total: 30.0

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 Introduction to International Business</td>
<td>3.0</td>
</tr>
<tr>
<td>INTR 167 International Business Law</td>
<td>3.0</td>
</tr>
<tr>
<td>INTR 170 International Business Finance</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following courses:
- INTR 172 International E-Business: Resources and Tools | 3.0
- INTR 173 Export-Import | 3.0

Choose one of the following courses:
- INTR 163 International Marketing | 3.0
- MRKT 140 Introduction to Marketing | 3.0

Total: 15.0

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 theory 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>MGT 231 Introduction to Supervision and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MGT 232 Organizational Behavior for Supervisors</td>
<td>3.0</td>
</tr>
<tr>
<td>MGT 233 Human Resources Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MGT 234 Communication for Business Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>MGT 235 Organizational Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>MGT 236 Women Leaders at Work</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Marketing

Marketing Major (AS)

The curriculum in Marketing, a two-year course of study, offers students interested in careers in marketing, advertising, social media marketing, professional selling, consumer behavior 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>Required courses:</td>
<td></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 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>Choose from the following courses:</td>
<td></td>
</tr>
<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>
<tr>
<td>Choose from the following courses:</td>
<td></td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 145 Computer Marketing Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>27.0</td>
</tr>
</tbody>
</table>

Marketing Certificate

A certificate in Marketing prepares students for an entry level job in marketing, sales, advertising, social media marketing and consumer behavior.

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>Required 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>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>MGT 231 Introduction to Supervision and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>INTR 163 International Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 180 Social Media Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following Business options:</td>
<td></td>
</tr>
<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>
<tr>
<td>Choose one of the following Computer options:</td>
<td></td>
</tr>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 145 Computer Marketing Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>27.0</td>
</tr>
</tbody>
</table>

Paralegal/Legal Studies

Paralegal/Legal Studies Major (AS)

The program of study for the Associate in Science degree in Paralegal/Legal Studies is ABA-approved and complies with the requirements established under current California law to become a paralegal. NOTE: Paralegals may not provide legal services directly to the public except as permitted by law. Our program is designed so that students may satisfy the general education requirements and paralegal course requirements simultaneously to earn both the degree and the Certificate of Achievement. The paralegal certificate is ONLY awarded upon completion of the general education requirements for the Associate’s degree.

General Education Requirements by the ABA: The ABA has general requirements that are different than those required by CCSF. If you have questions on the general education requirements, 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:

- Locate and analyze the law.
- Prepare and file pleadings in both the federal and California court systems.
- Use law office software efficiently.

Admission Requirements:

Enrollment is open to all interested students who completed ENGL 1A or its equivalent with a final grade of C or higher. Students transferring general education coursework completed at another school must furnish an official transcript. Students may transfer up to 12 units of paralegal courses completed at another ABA-approved paralegal program provided that the student submit an official transcript verifying the following: (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 a law school are not acceptable for transfer as these courses do not emphasize or teach paralegal skills. The Program reserves the right to determine the transferability of any coursework completed outside City College of San Francisco.

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>Paralegal/Legal Studies Certificate</td>
<td></td>
</tr>
<tr>
<td>Require 45 units of coursework for the Certificate of Achievement in</td>
<td></td>
</tr>
<tr>
<td>Paralegal/Legal Studies program. In addition, all students entering</td>
<td></td>
</tr>
<tr>
<td>the Certificate of Achievement in Paralegal/Legal Studies program</td>
<td></td>
</tr>
<tr>
<td>must have completed ENGL 1A or its equivalent with a final grade of</td>
<td></td>
</tr>
<tr>
<td>C or higher. Students transferring general education coursework</td>
<td></td>
</tr>
<tr>
<td>completed at another school must furnish an official transcript.</td>
<td></td>
</tr>
<tr>
<td>Students may transfer up to 12 units of paralegal courses completed</td>
<td></td>
</tr>
<tr>
<td>at another ABA-approved paralegal program provided that the student</td>
<td></td>
</tr>
<tr>
<td>submit an official transcript verifying the following: (1) the courses</td>
<td></td>
</tr>
<tr>
<td>are similar in content and contact hours to our existing courses and</td>
<td></td>
</tr>
<tr>
<td>(2) the letter grade earned in such courses was a C or higher.</td>
<td></td>
</tr>
<tr>
<td>Courses completed in a law school are not acceptable for transfer as</td>
<td></td>
</tr>
<tr>
<td>these courses do not emphasize or teach paralegal skills. The Program</td>
<td></td>
</tr>
<tr>
<td>reserves the right to determine the transferability of any coursework</td>
<td></td>
</tr>
<tr>
<td>completed outside City College of San Francisco.</td>
<td></td>
</tr>
<tr>
<td>The minimum time for completion of this certificate is 3 semesters.</td>
<td></td>
</tr>
<tr>
<td>Completion time will vary based on student preparation and number of</td>
<td></td>
</tr>
<tr>
<td>units completed per semester.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paralegal/Legal Studies Certificate</td>
<td></td>
</tr>
<tr>
<td>Require 45 units of coursework for the Certificate of Achievement in</td>
<td></td>
</tr>
<tr>
<td>Paralegal/Legal Studies program. In addition, all students entering</td>
<td></td>
</tr>
<tr>
<td>the Certificate of Achievement in Paralegal/Legal Studies program</td>
<td></td>
</tr>
<tr>
<td>must have completed ENGL 1A or its equivalent with a final grade of</td>
<td></td>
</tr>
<tr>
<td>C or higher. Students transferring general education coursework</td>
<td></td>
</tr>
<tr>
<td>completed at another school must furnish an official transcript.</td>
<td></td>
</tr>
<tr>
<td>Students may transfer up to 12 units of paralegal courses completed</td>
<td></td>
</tr>
<tr>
<td>at another ABA-approved paralegal program provided that the student</td>
<td></td>
</tr>
<tr>
<td>submit an official transcript verifying the following: (1) the courses</td>
<td></td>
</tr>
<tr>
<td>are similar in content and contact hours to our existing courses and</td>
<td></td>
</tr>
<tr>
<td>(2) the letter grade earned in such courses was a C or higher.</td>
<td></td>
</tr>
<tr>
<td>Courses completed in a law school are not acceptable for transfer as</td>
<td></td>
</tr>
<tr>
<td>these courses do not emphasize or teach paralegal skills. The Program</td>
<td></td>
</tr>
<tr>
<td>reserves the right to determine the transferability of any coursework</td>
<td></td>
</tr>
<tr>
<td>completed outside City College of San Francisco.</td>
<td></td>
</tr>
<tr>
<td>The minimum time for completion of this certificate is 3 semesters.</td>
<td></td>
</tr>
<tr>
<td>Completion time will vary based on student preparation and number of</td>
<td></td>
</tr>
<tr>
<td>classes completed per semester.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Require courses:</td>
<td></td>
</tr>
<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>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>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>
<tr>
<td>Choose 18 units from the following elective courses:</td>
<td></td>
</tr>
<tr>
<td>BSL 1 Business Law I</td>
<td>3.0</td>
</tr>
<tr>
<td>BSL 2 Business Law 2</td>
<td>3.0</td>
</tr>
<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 14 Immigration Law</td>
<td>3.0</td>
</tr>
<tr>
<td>PLS 16 Paralegal Work Experience</td>
<td>1.0-3.0</td>
</tr>
<tr>
<td>Total: 36.0</td>
<td></td>
</tr>
</tbody>
</table>
PLS 14 Immigration Law ........................................ 3.0
PLS 16 Paralegal Work Experience .......................... 1.0-3.0
Total: .................................................. 30.0

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 approved 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 visiting the the State of California Department of Real Estate website at www.dre.ca.gov

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.
• Explain California real estate contracts, disclosures and procedures.
• Apply real estate ethics as outlined in business and professional code of conduct.
• Analyze and evaluate the financial suitability of real estate opportunities.

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 185 Legal Aspects of Real Estate ....................... 3.0
R E 186 Principles of Real Estate Finance .................. 3.0
R E 191 Principles of Real Estate Appraisal .............. 3.0
R E 184 Real Estate Practice .............................. 3.0
R E 189 Real Estate Economics ........................... 3.0
Total: .................................................. 18.0

California Real Estate Certificate
The California Real Estate Certificate is currently awarded by 70 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 have completed the requirements for, and may be awarded, the California Real Estate Certificate.

The Certificate of achievement 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.
• Apply knowledge of agency and fiduciary responsibility.
• Explain real estate opportunities and risk.
• Identify and understand key real estate terms.
• Qualify to take the California Department of Real Estate State Exam.

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 185 Legal Aspects of Real Estate .................... 3.0
R E 186 Principles of Real Estate Finance ............... 3.0
R E 191 Principles of Real Estate Appraisal ............ 3.0
R E 184 Real Estate Practice ............................ 3.0
R E 189 Real Estate Economics .......................... 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 (WAFG) 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MABS 60 Introduction to Computer Applications for Business</td>
<td>3.0</td>
</tr>
<tr>
<td>MGT 231 Introduction to Supervision and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MGT 232 Organizational Behavior for Supervisors</td>
<td>3.0</td>
</tr>
<tr>
<td>MGT 233 Human Resources Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MRKT 140 Introduction to Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>SMBU 9479 Ownership and Operation of a Small Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following Accounting or Business Math options:

- ACCT 1 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
- MGT 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 effective- ness and operation of their business in 5 areas: 1) Starting Out, 2) Management, 3) Finance, 4) Marketing, and 5) Export/Import and International Business.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMBU 9419 Developing a Business Plan</td>
<td>18.0</td>
</tr>
<tr>
<td>SMBU 9467 Getting Started in Business</td>
<td>18.0</td>
</tr>
</tbody>
</table>

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

Announcement of Courses

Accounting

Credit, Degree Applicable Courses:

ACCT 1. Financial Accounting (5)
Lec-87.5
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English; 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
Recommended Prep: BSMA G OR BSMA H OR BSMA J OR MATH 35; ESL 184 OR PLACEMENT IN 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
Recommended Prep: 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
Prereq: ACCT 51
Designed for students who pursue accounting beyond introductory study. Course topics include investments, revenue recognition, income taxes, accounting changes, and error analysis. This course may help meet the educational requirement for the Certified Public Accountant (CPA) exam as determined by the California State Board of Accountancy. CSU

Offered Spring semesters

ACCT 53. Accounting with Sage 50 (3)
Lec-52.5
Prereq: ACCT 10 or ACCT 1
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
P/NP available
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
P/NP available
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. Helps to prepare students to meet requirements for the Certified Public Accountant (CPA) exam. CSU

ACCT 59B. California Income Tax (1)
Lec-18
P/NP available
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)
Recommended Prep: ESLN 3700 or TRST 2322 or placement in ESLN 3800 or TRST 3331
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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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 payables, cash payments and payroll using a manual accounting system; students learn about banking procedures, bank reconciliations, accruals and deferrals and preparing classified financial statements.
Business English

Credit, Degree Applicable Courses:
BSEN 70. Grammar and Writing Essentials for Business (5)
Lec-87.5  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
An intensive review of grammar and punctuation usage. Practice in writing effective business documents such as letters, memorandums, and e-mail messages using well-constructed sentences and paragraphs. Practice in applying editing and proofreading skills. CSU

BSEN 74. Written Business Communication (3)
Lec-52.5  P/NP available
Recommended Prep: BSEN 70 or ENGL 88 or ESL 188 or readiness for college-level English
Extensive practice in writing and editing business letters, memorandums, e-mail messages, and other business documents. Class discussions on style, structure, goals of written business communication, and cultural diversity in business. Practice in using appropriate English in business documents. CSU

BSEN 76. Business and Technical Report Writing (3)
Lec-52.5  P/NP available
Recommended Prep: BSEN 70 or ENGL 88 or ESL 188 or readiness for college-level English
Writing routine and non-routine reports that present ideas clearly and persuasively, solve problems, and evaluate alternatives. Practice in techniques of primary and secondary research. CSU

Noncredit Courses:
BUSG 9901. Business Vocabulary (45 hrs)
Recommended Prep: ESLN 3800
This course is an introduction to the proper usage of business terminology in an office environment. Students will apply business terms to real office settings.

BOSS 4500. Business English I (45 hrs)
Recommended Prep: 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)
Recommended Prep: BOSS 4500 or equivalent, ESL 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.

Business Mathematics

Credit, Degree Applicable Course:
BSMA 68. Mathematics of Business (3)
Lec-52.5
Recommended Prep: 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.

Noncredit Course:
BOSS 2500. Business Math with Spreadsheets I (45 hrs)
Recommended Prep: completion of or concurrent enrollment in: ENGL 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
Recommended Prep: ESL 184 or placement in ESL 186
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
Recommended Prep: MABS 30; MABS 35; ENGL 88 or ESL 188 or readiness for college-level English
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’s 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
Recommended Prep: 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
Recommended Prep: MABS 30; ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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
Recommended Prep: 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 (3)
Lec-52.5 P/NP available
Recommended Prep: 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 202. PowerPoint Presentations (3)
Lec-52.5 P/NP available
Recommended Prep: 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 203. Word Processing/Microsoft Word (3)
Lec-52.5 P/NP available
Recommended Prep: MABS 30 or 35 or ability to type at least 35 words per minute with no more than one error per minute
Recommended Prep: ESL 186 or placement in ESL 188
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 391. Word Processing/Microsoft Word (3)
Lec-52.5 P/NP available
Recommended Prep: MABS 30 or 35 or ability to type at least 35 words per minute with no more than one error per minute
Recommended Prep: ESL 186 or placement in ESL 188
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
Recommended Prep: 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
Recommended Prep: MABS 60 and BSEN 70
This course will provide students with an overview of webpage development using drag and drop website builders. Assignments will focus on 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
Recommended Prep: 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
Recommended Prep: 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)**
Recommended Prep: 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 customer service.

**BOSS 3501. Customer Service Skills (15 hrs)**
Recommended Prep: 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.

Recommended Prep: 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 5500. Keyboarding for Computers (45 hrs)**
Recommended Prep: 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. Keyboarding: Skill Development (90 hrs)**
Keyboarding skill development on computer keyboard with associated software, emphasizing proper technique. Keyboarding drills target individual student deficiencies. The student will develop touch control of the keyboard and proper typing techniques to build basic speed.

**BOSS 5502. Clerical Keyboarding (90 hrs)**
Recommended Prep: 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. Keyboarding: 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)**
Recommended Prep: 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.

**Offered Spring semesters**

**BOSS 6500. Business Data Entry w/ Introduction to Medisoft (45 hrs)**
Recommended Prep: ESLN 3600 or Placement in ESLN 3700
Project-based data entry course to provide fundamental skills needed for Medisoft courses and noncredit certificate. Data entry activities into Medisoft with emphasis on the importance of data accuracy, consistency, and completeness. Formerly COMP 9908

**BOSS 6501. Business Medical Office Applications using Medisoft Level 1 (90 hrs)**
Recommended Prep: BOSS 6500; ESLN 3600 or Placement in ESLN 3700
This course introduces the Medisoft business software application, an industry-standard database used in most medical business offices. This hands-on course provides students the opportunity to learn the procedures of recordkeeping and billing in Medisoft to appropriately enter and retrieve confidential medical records and information.

**BOSS 6502. Business Office Skills using Medisoft Level 2 (90 hrs)**
Recommended Prep: ESLN 3600 or Placement in ESLN 3700
This course covers administrative duties and skills in the Medisoft business software application needed for successful completion of the Medisoft for Business Certificate. Topics include appointment scheduling, preparing reports, maintaining patient information, generating bills, maintaining inventory, and preparing assignments.

**BOSS 6503. Medisoft Simulated Office Practice Level 3 (45 hrs)**
Recommended Prep: ESLN 3600 or Placement in ESLN 3700; BOSS 6502
This course expands on the administrative duties and skills in the Medisoft business software application needed to apply and/or
integrate them to produce real-world business medical simulation projects. This is the last required course for completion for the Medisoft for Business Certificate. Topics includes printing customized Medisoft reports, processing patient payments, and submitting insurance claims.

COMP 9000. Supervised Training of Computer Applications for Business (90 hrs)
Coreq: Concurrent enrollment in a Business course
Academic support for currently enrolled Business Department students in an instructor-supervised computer lab. Students work on assignments given in other Business Department credit and noncredit classes. Instructors assist students with computer skills and assignment content to achieve academic course learning outcomes.

COMP 9245. Windows Essentials for MS Office Applications (30 hrs)
Recommended Prep: 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)
Recommended Prep: COMP 9905 or equivalent, ESL Levels 5/6
Microsoft Access Essentials I is an introduction to using database software and terminology. Students learn to create the structure of the database, create tables, queries, forms, and reports. Additionally, students learn to create relationships between tables, modify tables, design and establish query criteria, and customize forms and reports.

COMP 9895. Microsoft Access Essentials II (15 hrs)
Recommended Prep: COMP 9905 or equivalent, ESL Levels 5/6
Microsoft Access Essentials II 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 9896. Microsoft Access Essentials III (15 hrs)
Recommended Prep: COMP 9905 or equivalent, ESL Levels 5/6
Microsoft Access Essentials III 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 9897. Microsoft Access Essentials IV (15 hrs)
Recommended Prep: COMP 9905 or equivalent, ESL Levels 5/6
Microsoft Access Essentials IV 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)
Recommended Prep: ESLN 3700 and COMP 9245 or COMP 9905
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 bitmaps, correct simple spelling, punctuation, and grammar errors in the development of business documents.

COMP 9900. Microsoft Excel for Business I (45 hrs)
Recommended Prep: 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
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: ESLN 5/6
An introduction to computer concepts and techniques for beginning computer users. 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)
Recommended Prep: ESLN 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)
Recommended Prep: 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
Recommended Prep: Completion of or concurrent enrollment in ESLN 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
Recommended Prep: ESLN 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)**
Recommended Prep: 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)**
Recommended Prep: ESLN 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)**
Recommended Prep: ESLN 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)**
Recommended Prep: ESLN 3600 and 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)**
Recommended Prep: 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)**
Recommended Prep: 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 Business/Office Presentations (45 hrs)**
Recommended Prep: COMP 9925, 9245, 9905 or equivalent, ESL Level 6+
Introduces business office students to the basic concepts of business presentations using Flash. Business students learn introductory techniques in creating storyboards, animated slide shows, ad banners, and Web pages. Students are also introduced to basic publishing concepts for viewing their work in the Flash Player on multiple computer applications.
*Offered Spring semesters*

**COMP 9928. PowerPoint for Business (45 hrs)**
Recommended Prep: 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)**
Recommended Prep: 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)**
Recommended Prep: 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.

Prereq: COMP 9933 or COMP 9919 or COMP 9918
Recommended Prep: 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)**
Recommended Prep: 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)**
Recommended Prep: 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)**
Recommended Prep: 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)
Recommended Prep: ESLN 3600 or placement in ESLN 3700, or TRST 2322 or placement in TRST 3331; 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 (QBCU). 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, 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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: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)
Recommended Prep: 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. Offered Fall semesters

COMP 9958. Photoshop Elements II (15 hrs)
Recommended Prep: 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. Offered Fall semesters

COMP 9959. Photoshop Essentials (45 hrs)
Recommended Prep: TRST 2322 or ESLN 3700 or placement in ESLN 3800; COMP 9245 or COMP 9905
Fundamental digital image software course. Students learn to organize and digitally edit business office images for web page development, and electronic publishing. Students repair exposure problems, create selections, auto correct, reframe, retouch, recompose, and share and export image files in various file formats. This course is not intended for students interested in graphic design and web design. Please see programs/courses in Visual Media Design Department.

COMP 9964. Microsoft Outlook Essentials (15 hrs)
Recommended Prep: 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)
Recommended Prep: ESLN 3700; COMP 9905 or COMP 9245; COMP 9921
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 to Google Docs, Sheets, and Presentations, and archive them in the Google Drive.

COMP 9968. Google Apps for Business II (45 hrs)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: TRST 2322 or ESLN 3600 or Placement in ESLN 3700 (Intermediate High 7)
Beginning to advanced 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, newsletters, and forms.

WOPR 9995. Microsoft Word for Business I (45 hrs)
Recommended Prep: 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.
Formerly WOPR 9486

WOPR 9996. Microsoft Word for Business II (45 hrs)
Prereq: WOPR 9995
Recommended Prep: 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.

Entrepreneurship

ENTR 101. Introduction to Entrepreneurship (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
This course provides a practical and experience-centric approach to entrepreneurship. This practice-based method focuses on nurturing an entrepreneurial mindset and skill set, and equips students with tools to bring one’s idea from concept to launch. The course promotes active learning and engagement with the realities of entrepreneurship, encouraging entrepreneurial thinking beyond just learning the concepts of planning, funding, pitching and marketing their creative ideas. CSU

ENTR 102. Applied Design Thinking for Entrepreneurship (1.5)
Lec-26.25, field trips P/NP available
Prereq: DSGN 105; Completion of or concurrent enrollment in: ENTR 101
Preparation for collaborative forms of interaction and idea generation that allow for innovative solutions using design thinking, a major driver for strategic differentiation and competitive advantage among firms. Explore technology and radical innovation as forces behind the transformation of leading industries and their entrepreneurial value. CSU

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

FIN 130. Principles of Bank Operations (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

FIN 133. Money and Banking (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
The nature and significance of money in both a historical and contemporary sense. Emphasis on the commercial banking process and the Federal Reserve. Financial institutions other than commercial banks; international payment problems. CSU

FIN 136. Introduction to Financial Planning (3)
Lec-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
Recommended Prep: BSMA 68, ESL 186 or ENGL 88 or placement in ESL 188 or readiness for college-level English
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 Course:

GNBS 119. Introduction to Business (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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/GSUC-ID BUS 110

GNBS 125. Green & Sustainable Business (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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. Introduction to International Business (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 Formerly titled International Law Offered Fall semesters

INTR 163. International Marketing (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 Business Law (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 Formerly titled International Law Offered Fall semesters

INTR 170. International Business Finance (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 affecting international finance. CSU Offered Spring semesters

INTR 172. International E-Business: Resources and Tools (3)
Lec-52.5
Recommended Prep: MABS 30 or equivalent keyboarding and computer skills; ENGL 88 or ESL 188 or readiness for college-level English
A practical exploration of conducting successful international business using the tools and resources of today's Internet, including E-commerce marketing, product and trade data access, search engines, web site alternatives, transportation tracking, governmental resources and assistance, electronic submission of customs documentation, electronic payments, internet software tools and business related hardware options. CSU Offered Spring semesters

INTR 173. Export-Import (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 U.S. Customs and freight forwarders, and evaluating payment methods including letters of credit and currency exchange. CSU Offered on occasion

Management

Credit, Degree Applicable Courses:

MGT 231. Introduction to Supervision and 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 Formerly SUPV 231

MGT 232. Organizational Behavior for Supervisors (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Concepts and principles of human relations in organizations, including application of motivational theory, group dynamics, managing change, leadership styles, training, and organizational development. CSU Formerly SUPV 232

MGT 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
Formerly SUPV 233

MGT 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
Formerly SUPV 234

MGT 235. Organizational Leadership (3)
Lec-52.5 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
Formerly SUPV 235

MGT 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
Formerly SUPV 236

Marketing
Credit, Degree Applicable Courses:
MRKT 122. Professional Selling (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 Required for all Marketing majors.

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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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, agency organizations and operations, media strategies, use of television, radio, outdoor advertising, online and social media, print media, sales promotions, and alternative advertising. CSU Required for all Marketing and Fashion Merchandising majors.

MRKT 180. Social Media Marketing (3)
Lec-52.5 P/NP available
This course is designed to build students' social media marketing skills by working on projects that give students hands on experience implementing social media marketing campaigns and strategies. Topics include integrating targeted social media platforms into a marketing plan, creating social media marketing campaigns, and measuring the success of campaign efforts. Upon completion, students will be able leverage and integrate social media to promote products, services and brands. CSU

Paralegal/Legal Studies
Credit, Degree Applicable Courses:
PLS 1. Introduction to Paralegal Studies (3)
Lec-52.5
Prereq: 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. CSU Offered Fall and Spring semesters

PLS 2. Legal Research and Writing I (3)
Lec-52.5
Prereq: 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 Offered Fall and Spring semesters

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 Offered Fall semesters
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
Offered Spring semesters

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
Offered Spring semesters

PLS 6. Law Office Management and Procedures (3)
Lec-52.5
Prereq: PLS 3 and PLS 4
Recommended Prep: MABS 60
This course covers law office management systems, personnel management, accounting, and operations. CSU
Offered Spring semesters

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
Offered on occasion

PLS 9. Wills, Trusts, and Probate Administration (3)
Lec-52.5
Recommended Prep: PLS 3
This course covers 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
Offered on occasion

PLS 12. Family Law (3)
Lec-52.5
Prereq: PLS 3
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 14. Immigration Law (3)
Lec-52.5
Recommended Prep: PLS 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 on occasion

PLS 16. Paralegal Work Experience (1-3)
Work: 60 to 225, field trips
Prereq: PLS 1 and PLS 2 and PLS 3 and PLS 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 PLS 16, PLS 18, and PLS 19
Offered Fall and Spring semesters

Real Estate
Credit, Degree Applicable Courses:
RE 181. Principles of Real Estate (3)
Lec-52.5
Fundamental real estate course covering the basic laws and principles of California real estate; provides background and terminology necessary for advanced study in specialized courses. Designed to assist those preparing for the California state real estate salesperson licensing examination. CSU

RE 182. Escrow Fundamentals (3)
Lec-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

RE 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

RE 184. Real Estate Practice (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 184 or placement in ESL 186 or readiness for college-level English
Day-to-day functions and operations of the real estate broker and salesperson. The duties and responsibilities of real estate brokerage including listing, prospecting, advertising, marketing, financing, sales techniques, escrow, ethics, and compliance of state and federal regulations. CSU

RE 185. Legal Aspects of Real Estate (3)
Lec-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

RE 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

RE 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
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.

Travel and Tourism

Credit, Degree Applicable Courses:
TRTV 155. Meeting and Event Planning (1)
Lec-17.5
Learn to plan a meeting, seminar, training session, convention, trade show or product launch. CSU

TRTV 157. Principles of Travel and Tourism (3)
Lec-52.5, field trips
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
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

TRTV 159. Careers in Travel and Tourism (3)
Lec-52.5
Recommended Prep: TRTV 157; ENGL 88 or ESL 188 or readiness for college-level English
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

TRTV 160. Travel and Tourism Internship (1-3)
Work-60.00-225.00 P/NP only
Prereq: TRTV 157 or TRTV 159
Repeat: Students can repeat twice (total 3 enrollments)
On the job training in customer service with airlines, travel agencies, and other passenger service companies. Placement of students is determined according to cooperating firm’s requirements. CSU

TRTV 172. Destinations: Natural Wonders (3)
Lec-52.5
One of the oldest and fastest growing segments of the travel and tourism industry are trips to the natural wonders of the world. The students will learn what types of natural wonders exist, where they are located, steps in preserving them, and how to plan trips to visit them. CSU

TRTV 173. Destinations: Historical and Archaeological (3)
Lec-52.5
An analysis of the historical and archaeological travel destinations of the world. Travelers want to find a connection to their heritage.
Students learn all the “must see” places for the well-traveled. More people travel to historical and archaeological sites than any other segment of the travel industry. CSU

**Ooffered on occasion**

**TRTV 174. Destinations: Cruises (3)**

Lec-52.5

An in-depth analysis and evaluation of all types of cruises, including large and small cruise ships, boats, barges, ferries, freighters, and sailing vessels with particular emphasis on the cruise experience as a destination. Benefits of cruise travel and who offers the best itineraries will be examined. CSU

**Ooffered on occasion**

**TRTV 175. Destinations: Hotels, Resorts and Spas (3)**

Lec-52.5

In-depth analysis of the accommodation segment of the travel and tourism industry. What makes a great hotel, resort, or spa? How do hotel rating systems work? Where are the top properties located and how do you get the best rates for your clients? CSU

**Ooffered on occasion**

**TRTV 176. Destinations: Great Trips (3)**

Lec-52.5

An introduction to the world’s greatest trips, based on lists produced annually by the leading authorities in the travel and tourism industry. An overview of all the top trips offered by air, sea, and land worldwide. An essential course for anyone interested in traveling or planning a career in travel and tourism. CSU

**Ooffered on occasion**

**TRTV 180. Eco-Travel & Tourism (3)**

Lec-52.5

Ecological and green travel is the fastest growing segment of the travel industry. Learn what makes a destination green, the differences between green, sustainable, and ecological travel, and how destinations are developed with green objectives in mind. CSU

**Ooffered Fall semesters**

**TRTV 181. Business Travel (3)**

Lec-52.5

What does the business traveler need and how does it differ from the leisure traveler? Learn about special contract agreements and the role of the business traveler. An ideal class for administrative assistants and anyone working in the business world. CSU

**Ooffered Spring semesters**

**TRTV 182. Tour Management (3)**

Lec-52.5, field trips

Recommended Prep: 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

**Ooffered Fall semesters**

**Word Processing**

See curricula and course listings under Computer Applications for Business in this section of the catalog.

**Work Experience**

*See Work Experience section of the catalog*
in chemistry will be prepared to transfer to a Bachelor of Science in chemistry program at a four-year college and take upper division chemistry coursework in thermodynamics, quantum mechanics, as well as organic, inorganic, and nuclear chemistry, enter the chemistry workforce, or pursue opportunities where chemistry plays a role.

Future careers for students obtaining a Certificate of Achievement in chemistry, after further education, include:

- High school or middle school teacher
- Physician
- Patent attorney
- Chemical Engineer
- Criminologist
- Museum Curator
- Environmental Engineer

Learning Outcomes

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

- Assess scientific data and use those data to evaluate the quality of conclusions.
- Perform multi-step organic syntheses, planning through implementation and structural verification, with the aid of gas chromatography/mass spectrometry and infrared and nuclear magnetic resonance spectroscopy.
- Identify and quantify organic chemical compounds after obtaining and purifying them from their natural plant sources.
- Use multiple pieces of scientific laboratory instrumentation to analyze environmental samples and use this data to evaluate the risks of environmental exposure.
- Use current technology to assess, organize, and apply relevant chemical information.
- Apply mathematical representations and use the language of chemistry to communicate an understanding of chemistry in written and oral form.

The minimum time for completion of this certificate is 4 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 Chemistry

Course ........................................... Units

Required Courses:

CHEM 101A General College Chemistry .............. 6.0
CHEM 101B General College Chemistry .............. 5.0
CHEM 212A Organic Chemistry ........................ 6.0
CHEM 212B Organic Chemistry ........................ 6.0
MATH 110A Calculus I .................................. 5.0
MATH 110B Calculus II .................................. 5.0
MATH 110C Calculus III .................................. 5.0
MATH 130 Linear Algebra and Differential Equations . 5.0
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 .................................................. 1.0
PHYC 4BL Electromagnetism Laboratory for Scientists and Engineers .................................... 1.0

Students may substitute MATH 120 + 125 for MATH 130.

Elective Courses (choose one):

CHEM 85 Seminar in Chemistry ......................... 1.0

BTEC 5 Briefings in Biotechnology ........................ 1.0
Total: ............................................. 52.0

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. UC/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 equilibrium. 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
Designed for students majoring in all engineering programs except chemical engineering.
Offered Spring semesters

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

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.

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

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.

Announcement of Curricula

Child Development and Family Studies
Office: (New Building) Multi-Use Bldg. MUB 249
Phone Number: (415) 239-3172
Web Site: www.ccsf.edu/cdev

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.

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
Courses Required for the AA-T in Child and Adolescent Development

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1 General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following Statistics core courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 5 Introductory Statistics for Economics, Business and Social Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>PSYC 5 Statistics for Behavioral Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>LALS 5 Introduction to Statistical Methods in Latin American and Latino/a Studies</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 80 Probability and Statistics</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Choose 3 courses (minimum of 9 semester units) from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 4 Cultural Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 21 Lifespan Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 67 Child, Family, and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 73 Observing and Assessing Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 9 Human Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>or BIO 11 The Science of Living Organisms</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total: 20.0 – 21.0

Early Childhood Education Major (AS-T)

The Child Development Program is designed so that students may satisfy the requirements for graduation from the College with a major in Child Development and Family Studies. Students are prepared for a variety of careers including early childhood education, family support, recreation, after-school and school-based professions and after additional study, can enter a variety of careers including TK-12 classroom teaching, school administration, etc. The program is aligned with other ECE/CDEV majors throughout the state Curriculum Alignment Project to allow for statewide uniformity in the major and portability of coursework from other California Community Colleges.

Learning Outcomes

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

- Articulate 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.
- Explain developmentally appropriate practice and diverse philosophical approaches in early childhood settings.
- 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

<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 72 Supervised Field Experience in Early Childhood Education</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 Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 93 Cultural Diversity in Early Childhood Education</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 24.0
• 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.

Enrollment is open to all students interested in working with children in early childhood, after-school or community based programs or in gaining knowledge needed to become employed in related professions such as TK-12 teacher, recreation worker, paraprofessional, youth worker or to transfer for further study.

The Degree curriculum requires a total of 60 semester units. After completing units from the Child Development Department and the General Education Requirements, a student may enroll in any approved course (as electives) to total the 60 units for an A.S. Degree. Assuming students start this AS with graduation-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 Child Development and Family Studies

Course ........................................... Units

Required courses:
CDEV 53 Child Growth and Development ........... 3.0
CDEV 65 Orientation to ECE Principles and Practice .......... 3.0
CDEV 66 Introduction to Early Childhood Curriculum 3.0
CDEV 67 Child, Family, and Community ................. 3.0
CDEV 72 Supervised Field Experience 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 93 Cultural Diversity in Early Childhood Education ........................................... 3.0

Choose 6 units from the following elective courses:
CDEV 68 Interactions with Children .................... 3.0
CDEV 74 Children with Special Needs .................... 3.0
CDEV 96 Understanding Children with Challenging Behaviors ........................................... 3.0
CDEV 98 Sensory Motor Development and Activities .... 3.0
CDEV 108 Communicating with Families .................. 3.0
CDEV 120 Special Education TK-12 .................... 3.0

Total: ........................................... 30.0

Child Development: Administration Certificate

This certificate prepares students interested in assuming leadership and administrative positions in early childhood, school-age and other community-based settings. Competencies required to lead and administer a variety of programs are included as well as introductory business and management strategies appropriate for leading programs serving children, youth and their families.

This certificate satisfies the educational requirements and courses needed for the specialization component of the California Commission on Teacher Credentialing, 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.

• 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

Course ........................................... Units

Required courses:
CDEV 53 Child Growth and Development ........... 3.0
CDEV 65 Orientation to ECE Principles and Practice .......... 3.0
CDEV 66 Introduction to Early Childhood Curriculum 3.0
CDEV 67 Child, Family, and Community ................. 3.0

Required courses for area of specialization: Administration
CDEV 90 Early Childhood Administration I ............ 3.0
CDEV 91 Early Childhood Administration II .......... 3.0

Total: ........................................... 18.0

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

Course

SECTION I: Complete 3 units from the following courses:
- CDEV 41E Starting A Large Family Child Care or Center .................................................. 1.0
- CDEV 41I Advanced Business Practices in Family Child Care .................................................. 1.0
- CDEV 41J Development of Infancy in Family Child Care ........................................................... 1.0
- CDEV 41K 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 41C Issues in CDEV – Leadership Seminar ................................................................. 0.5-1.0
- CDEV 41F Serving Children with Special Needs in Family Child Care ..................................... 1.0
- CDEV 41G Communicating with Families in Family Child Care .............................................. 1.0
- CDEV 41H Family Child Care Environment ............................................................................. 1.0
- CDEV 41I Advanced Business Practices in Family Child Care .................................................. 1.0
- CDEV 41J Development of Infancy in Family Child Care ........................................................... 1.0
- CDEV 41K Infant/Toddler Curriculum in Family Child Care ...................................................... 1.0
- CDEV 41L Exploring Math in Family Child Care ....................................................................... 1.0
- CDEV 41M Exploring Science in Family Child Care ..................................................................... 1.0

Total: ............................................................................................................................. 6.0

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 of children and youth.
- Examine the role of families and communities in infant/toddler settings.
- 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 Accomplishment in Child Development: Pre-Teacher

Course

Required courses:
- CDEV 41L Exploring Math in Family Child Care ................................................................. 1.0
- CDEV 41M Exploring Science in Family Child Care ............................................................. 1.0

Choose 6 units from following elective courses:
- CDEV 61 Infant/Toddler Growth and Development ................................................................. 3.0
- CDEV 62 Infant/Toddler Care in Group Settings .................................................................... 3.0
- CDEV 85 Relationship-based Infant/Toddler Care ............................................................... 3.0

Total: ............................................................................................................................. 18.0

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: Infant/Toddler Care

Course

Required courses:
- CDEV 53 Child Growth and Development ............................................................................. 3.0
- CDEV 65 Orientation to ECE Principles and Practice ............................................................. 3.0

Choose 6 units from following elective courses:
- CDEV 66 Introduction to Early Childhood Curriculum ......................................................... 3.0
- CDEV 67 Child, Family, and Community .............................................................................. 3.0

Total: ............................................................................................................................. 15.0
Child Development: Professional Development and Advocacy Certificate

The Professional Development & Advocacy Certificate prepares students to better understand the decisions and beliefs that shape policies and programs for children and families and to advocate for improvements and changes. This certificate builds upon practitioner content in the field and extends to coursework that introduces advocacy and the importance of professional development to improve quality settings for children and youth.

Learning Outcomes

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

- Explain the stages of child growth and development across all domains including brain, sensory motor, language, cognitive, physical 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.
- Articulate 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

Course ................................................. Units
Required courses:
CDEV 53 Child Growth and Development ............... 3.0
CDEV 65 Orientation to ECE Principles and Practice . . 3.0
CDEV 66 Introduction to Early Childhood Curriculum ................................................. 3.0
CDEV 67 Child, Family, and Community .................. 3.0
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 ................................................. 3.0
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
CDEV 81 Early Literacy Development—Preschool ........ 1.0
CDEV 87 Promoting Social and Emotional Competence in Young Children .................... 3.0
CDEV 105 Adult Supervision and Mentoring in Early Care and Education ....................... 2.0
CDEV 114 Work Experience in Child Development . . . 1.0-3.0
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 core teaching competencies practiced in school-age 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: School-Age Care

Course ................................................. Units
Required courses:
CDEV 53 Child Growth and Development ............... 3.0
CDEV 65 Orientation to ECE Principles and Practice . . 3.0
CDEV 66 Introduction to Early Childhood Curriculum ................................................. 3.0
CDEV 67 Child, Family, and Community .................. 3.0
Required courses for area of specialization: School-Age Care
CDEV 95 School-Age Child Care Curriculum ............ 3.0
CDEV 97 School Age Growth & Development ........... 3.0
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.
- 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
Course ................................. Units
Required courses:
CDEV 53 Child Growth and Development ...................... 3.0
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
Course ................................. Units
Required courses:
CDEV 67 Child, Family, and Community ...................... 3.0
CDEV 78 Supervised Field Experience in Community
Youth Organizations ........................................ 3.0
CDEV 79 Youth Program Development ...................... 3.0
HLTH 65 Youth Development & Leadership ................ 3.0
Choose one of the following growth and development courses:
CDEV 53 Child Growth and Development ...................... 3.0
CDEV 97 School Age Growth & Development ................ 3.0
Choose 3 units from the following elective 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
CDEV 99 Sensory Processing Disorder in Children ........ 1.0
CDEV 121 Children with ADHD .......................... 1.0
CDEV 122 Social Emotional Differences K-12 ........... 1.0
CDEV 123 Learning Disabilities .......................... 1.0
CDEV 124 Individualized Education Programs ............ 1.0
CDEV 125 Children's Emotional Development ............ 1.0
Choose 6 units from the following elective courses:
ADMJ 51 Juvenile Procedures ................................ 3.0
ADMJ 59 Organized Crime .................................. 3.0
CDEV 71 Elementary Supervised Field Experience ....... 3.0
CDEV 95 School-Age Child Care Curriculum .............. 3.0
CDEV 97 School Age Growth & Development ............ 3.0
CDEV 100 Violence and Its Impact on Children and Their Families ........................................... 3.0
HLTH 38 Trauma Response and Recovery ................. 3.0
HLTH 67 HIV and Hepatitis Navigation Skills .......... 3.0
WGST 54 The Politics of Sexual Violence ................. 3.0
WGST 55 Ending Sexual Violence: Peer Education ..... 3.0
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
Course ................................. Units
Required Courses:
CDEV 53 Child Growth and Development ...................... 3.0
CDEV 65 Orientation to ECE Principles and Practice ..... 3.0
CDEV 66 Introduction to Early Childhood Curriculum .... 3.0
CDEV 67 Child, Family, and Community ...................... 3.0
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>
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<tbody>
<tr>
<td>Required courses:</td>
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<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>
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</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>
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<tr>
<td>CDEV 72 Supervised Field Experience in Early Childhood</td>
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</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>CDEV 73 Observing and Assessing Young Children</td>
<td>3.0</td>
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<tr>
<td>CDEV 92 Health, Safety and Nutrition in Early Childhood</td>
<td>3.0</td>
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<tr>
<td>Programs</td>
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<tr>
<td>CDEV 93 Cultural Diversity in Early Childhood Education</td>
<td>3.0</td>
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<tr>
<td>Choose 3 units required from following depth elective courses:</td>
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<tr>
<td>CDEV 64 Introduction to Stress Reduction and Coping in Early Childhood and Elementary School Programs</td>
<td>3.0</td>
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<tr>
<td>CDEV 68 Interactions with Children</td>
<td>3.0</td>
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<tr>
<td>CDEV 76 Supporting LGBT Families in Educational Settings</td>
<td>3.0</td>
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<tr>
<td>CDEV 98 Sensory Motor Development and Activities</td>
<td>3.0</td>
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<tr>
<td>CDEV 106 Exploring Science in Early Childhood</td>
<td>3.0</td>
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<tr>
<td>CDEV 107/117 Introduction to Child Nutrition</td>
<td>3.0</td>
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<tr>
<td>CDEV 108 Communicating with Families</td>
<td>3.0</td>
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</table>

Special Education TK-12 Certificate
This Certificate of Achievement in Special Education TK (transitional kindergarten) -12 builds on the Special Education Certificate of Accomplishment to build knowledge, skills and abilities related to inclusive and special education in TK-12 settings working with children 4-18 years old. This certificate completes additional educational requirements for Special Education teaching assistant positions and is part of a pathway towards earning a Special Education and/or Multiple Subjects Teaching Credential to teach in TK-5 classrooms.

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 and youth with special needs.
• Describe developmentally appropriate practices for the inclusion of children with special needs in TK-12 settings.
• Categorize sensory and learning challenges in TK-12 aged children and identify strategies to address them.

The minimum time for completion of the 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 TK-12

<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>CDEV 53 Child Growth and Development</td>
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</tr>
<tr>
<td>CDEV 67 Child, Family, and Community</td>
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</tbody>
</table>

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:
• Distinguish appropriate interventions for children with autism aged 0-5.
• Plan differentiated teaching strategies for creating developmentally appropriate inclusive classrooms.
• 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>
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</thead>
<tbody>
<tr>
<td>Required courses:</td>
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<tr>
<td>CDEV 41T Early Autism Spectrum Disorders</td>
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</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>
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<tr>
<td>Choose 1 unit from the following elective courses:</td>
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<tr>
<td>CDEV 121 Children with ADHD</td>
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<tr>
<td>CDEV 122 Social Emotional Differences</td>
<td>1.0</td>
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<tr>
<td>CDEV 123 Learning Disabilities</td>
<td>1.0</td>
</tr>
<tr>
<td>CDEV 124 Individualized Education Programs</td>
<td>1.0</td>
</tr>
<tr>
<td>Total:</td>
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</table>
CDEV 120 Special Education TK-12 .................. 3.0
CDEV 150 Orientation to TK-12 Education .................. 3.0

Choose one of the following courses:
CDEV 95 School-Age Child Care Curriculum .................. 3.0
CDEV 97 School Age Growth & Development .................. 3.0

Choose three of the following one-unit courses:
CDEV 121 Children with ADHD .................. 1.0
CDEV 122 Social Emotional Differences K-12 .................. 1.0
CDEV 123 Learning Disabilities .................. 1.0
CDEV 124 Individualized Education Programs .................. 1.0

Total: .................................................. 18.0

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 in groups, 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

Course ........................................ Units
Required Courses:
CDEV 74 Children with Special Needs .............. 3.0
CDEV 53 Child Growth and Development .............. 3.0
CDEV 65 Orientation to ECE Principles and Practice .... 3.0
CDEV 66 Introduction to Early Childhood Curriculum .... 3.0
CDEV 67 Child, Family, and Community .............. 3.0

Choose 3 units from the following course electives:
CDEV 96 Understanding Children with Challenging Behaviors .......... 3.0
CDEV 41T Early Autism Spectrum Disorders .......... 1.0
CDEV 99 Sensory Processing Disorder in Children .......... 1.0

CDEV 124 Individualized Education Programs .......... 1.0
CDEV 125 Children's Emotional Development .......... 1.0

Total: .................................................. 18.0

Announcement of Courses

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 California 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.

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 California Department of Social Services Community Care Providers.

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.

Offered on occasion

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.

Offered on occasion

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.

Offered on occasion

CDEV 41E. Starting A Large Family Child Care or Center (1)
Lec-17.5

Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English

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 Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English 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 Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English 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 Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English Overview of the operation of a family child care. Information on 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 41J. Development of Infancy in Family Child Care (1) Lec-17.5 Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English 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 Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English 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 41Q. 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 41R. 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 (3)
Lec-52.5
Emphasis is on the acquisition of second languages in Dual Language and Bilingual Early Care and Education programs. Current research on language acquisition, public policy implications, 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 41W. Exploring Science in Family Child Care (1)
Lec-17.5
An active exploration of the materials and strategies that can support young children's interest in how the world works. Emphasis on the natural and physical sciences and the promotion of inquiry-based experiences in family child care. CSU
Offered on occasion

CDEV 44. Family Child Care Environmental Rating Scale (1)
Lec-17.5
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
Major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception to adolescence, with an emphasis on interactions between matura
tional 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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
Appropriate curriculum and environments for children from birth to age 6. Teachers’ roles in supporting development and joy of learning for all children using observation and assessment and emphasizing the essential role of play through language, literacy, social/ emotional learning, physical/motor activity, sensory learning, art, creativity, math and science. CSU
C-ID ECE 130
CDEV 67. Child, Family, and Community (3)
Lec-52.5
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
An examination of the developing child in a societal context focusing on the interrelationship of family, school and community and emphasizing historical and socio-cultural factors. The processes of socialization and identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families. UC/CSU
C-ID CDEV 110

CDEV 68. Interactions with Children (3)
Lec-52.5
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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 child care settings; current trends in care. CSU
Offered on occasion

CDEV 71. Elementary Supervised Field Experience (3)
Lec-26.5, Work-90-112.5
Prerequisite: Approval of the Child Development Department
Recommended Prep: ESL 186 or ENGL 88 or placement in ESL 188 or readiness for college-level English
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 Education (3)
Lec-26.5, Work-90
Prerequisite: CDEV 53; CDEV 65; CDEV 66; CDEV 67; Approval of the Child Development Department
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 as students design, implement and evaluate experiences for development and learning for young children. One unit of work experience credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU
C-ID ECE 210

CDEV 73. Observing and Assessing Young Children (3)
Lec-52.5
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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-90-112.5
Prerequisite: Approval of the Child Development Department
Recommended Prep: ESL 186 or ENGL 88 or placement in ESL 188 or readiness for college-level English
Supervised fieldwork in diverse secondary schools (grades 6-12). Practical classroom experiences linking theory and practice, with a comprehensive understanding of the needs of secondary school youth and the various roles of adults. An introduction to the secondary environment and Common Core Standards under guided supervision. One unit of work experience credit is earned for each 60 hours of unpaid or 75 hours of paid work. UC/CSU
Offered on occasion

CDEV 76. Supporting LGBT Families in Educational Settings (3)
Lec-52.5
Recommended Prep: 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-90-112.5
Prerequisite: Approval of the Child Development Department
Recommended Prep: ESL 186 or ENGL 88 or placement in ESL 188 or readiness for college-level English
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. One unit of work experience credit is earned for each 60 hours of unpaid or 75 hours of paid work. CSU
Offered spring semesters

CDEV 79. Youth Program Development (3)
Lec-52.5
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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 Worker Certificate. CSU
Offered fall semesters
CDEV 81. Early Literacy Development--Preschool (1)
Lec-17.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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.
Offered on occasion

CDEV 89. Early Childhood Administration Practicum (3)
Lec-52.5
Prerequisite: 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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
Introduction to laws, regulations, standards, curriculum, policies and procedures related to health safety and nutrition for all children. Components that ensure physical health, mental health and safety for children and staff and the importance of collaboration with families and health professionals. Focus on integrating concepts into planning and program development. CSU
C-ID ECE 220

CDEV 93. Cultural Diversity in Early Childhood Education (3)
Lec-52.5
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Prerequisite: CDEV 53
P/NP available
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: CDEV 53; ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 182 or placement in ESL 184 or readiness for college-level English
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 and children 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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: 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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
The course provides an 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, the feeding relationship, breastfeeding & child nutrition, planning healthy meals & snacks, food safety, childhood obesity, physical activity, nutrition education, child nutrition programs & food assistance resources. CSU
Cross-listed with HLTH 177 (formerly HLTH 107)

CDEV 108. Communicating with Families (3)
Lec-52.5
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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-60-225 P/NP only
Prereq: Approval of the Child Development Department
Repeat: max. 6 units
This course will provide on or off-campus experience in early childhood/child development- ECE, 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. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU
Students must obtain required TB testing, and other clearances (criminal record, immunizations) depending on site requirements. Approval of Child Development Work Experience Coordinator. To be made at first meeting after course registration and enrollment.

CDEV 120. Special Education TK-12 (3)
Lec-52.5, field trips
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
Introduction to basic issues in special education TK-12 including legal rights of children with disabilities and their families, Individual Educational Plans (IEPs), disability 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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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 with SED and strategies for teacher self-awareness and reflection. CSU

CDEV 123. Learning Disabilities (1)
Lec-17.5
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: ESL 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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 are 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
Courses Required for the Major in Chinese (Mandarin)

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)

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<th>Course</th>
<th>Units</th>
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<tr>
<td>CHIN 2 Continuation of Elementary Chinese</td>
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<td>or CHIN 2A Continuation of Elementary Chinese</td>
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<td>and CHIN 4B Continuation of Intermediate Chinese</td>
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Choose 3 units from the following courses or any course not used from the list above:

- CHIN 1 Elementary Chinese                   | 5.0   |
- or CHIN 1A Elementary Chinese                | 3.0   |
- and 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 core 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 32 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

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.

Courses Required for the Certificate of Accomplishment in Chinese (Mandarin)

<table>
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<td>and CHIN 3B Intermediate Chinese</td>
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</table>

Choose 9 units from the following core courses:

- CHIN 1 Elementary Chinese                   | 5.0   |
- or CHIN 1A Elementary Chinese                | 3.0   |
- and CHIN 1B Elementary Chinese               | 3.0   |
- CHIN 2 Continuation of Elementary Chinese    | 5.0   |
- or CHIN 2A Continuation of Elementary Chinese| 3.0   |
- and CHIN 2B Continuation of Elementary Chinese| 3.0   |
- CHIN 3 Intermediate Chinese                 | 5.0   |
- or CHIN 3A Intermediate Chinese             | 3.0   |
- and CHIN 3B Intermediate Chinese             | 3.0   |
- CHIN 4 Continuation of Intermediate Chinese  | 5.0   |
- or CHIN 4A Continuation of Intermediate Chinese | 3.0   |
- and CHIN 4B Continuation of Intermediate Chinese | 3.0   |
- CHIN 3 Intermediate Chinese                 | 5.0   |
- or CHIN 3A Intermediate Chinese             | 3.0   |
- and CHIN 3B Intermediate Chinese             | 3.0   |
- CHIN 4 Continuation of Intermediate Chinese  | 5.0   |
- or CHIN 4A Continuation of Intermediate Chinese | 3.0   |
- and CHIN 4B Continuation of Intermediate Chinese | 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 6 units from the following elective courses:

- CHIN 14A Conversational Mandarin for Speakers of Other Chinese Dialects | 3.0   |
CHIN 1B. Elementary Chinese (3)
Lec-52.5 P/NP available
Prereq: CHIN 1A or demonstration of CHIN 1A exit skills.
Beginner’s course. (Especially recommended for students starting the
study of Chinese for the first time.) Grammar, composition, and reading.
Practice in speaking and understanding Mandarin. UC/CSU
CHIN 1A+1B = CHIN 1

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 the 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 the study of grammar, composition, and reading.
Practice in speaking and understanding Mandarin. UC/CSU
CHIN 2A+2B = CHIN 2
Offered on occasion

CHIN 2B. Continuation of Elementary Chinese (3)
Lec-52.5 P/NP available
Prereq: CHIN 2A or demonstration of CHIN 2A exit skills.
Continuation of the study of grammar, composition, and reading.
Practice in speaking and understanding Mandarin. UC/CSU
CHIN 2A+2B = CHIN 2

CHIN 3. Intermediate Chinese (5)
Lec-87.5 P/NP available
Prereq: CHIN 2 or CHIN 2B
Grammar, composition and reading. Practice in speaking and under-
standing Mandarin. Understanding of Chinese culture. Not for
speakers of Mandarin. UC/CSU
CHIN 3A+3B = CHIN 3
Offered on occasion

CHIN 3A. Intermediate Chinese (3)
Lec-52.5 P/NP available
Prereq: CHIN 3A or demonstration of CHIN 3A exit skills.
Intermediate grammar, composition and reading. Practice in speaking and under-
standing Mandarin. Understanding of Chinese culture. Not for
speakers of Mandarin. UC/CSU
CHIN 3A+3B = CHIN 3
Offered on occasion

CHIN 3B. 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 under-
standing Mandarin. Understanding of Chinese culture. UC/CSU
Offered on occasion

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.
Continuation of intermediate grammar, composition and reading.
Practice in speaking and understanding Mandarin. UC/CSU
Offered on occasion

CHIN 4A. Continuation of Intermediate Chinese (3)
Lec-52.5 P/NP available
Prereq: CHIN 3A or demonstration of CHIN 3A exit skills.
Continuation of intermediate grammar, composition and reading.
Practice in speaking and understanding Mandarin. UC/CSU
CHIN 4A+4B = CHIN 4
Offered on occasion

CHIN 4B. Continuation of Intermediate Chinese (3)
Lec-52.5 P/NP available
Prereq: CHIN 4A or demonstration of CHIN 4A exit skills.
Continuation of intermediate grammar, composition and reading.
Practice in speaking and understanding Mandarin. UC/CSU
CHIN 4A+4B = CHIN 4
Offered on occasion

CHIN 10A. Beginning Conversational Cantonese (3)
Lec-52.5 P/NP available
Beginner’s course in Cantonese. Extensive oral training in Cantonese.
Emphasis on practical vocabulary and idiom rather than on formal
CHIN 10B. Continuation of Beginning Conversational Cantonese (3)
Lec-52.5 P/NP available
Recommended Prep: CHIN 10A or demonstration of exit skills
Second semester course in Cantonese. Continuation of extensive oral training in Cantonese. Emphasis on practical vocabulary and idiomatic usage. Designed for students who wish to continue acquiring more advanced skills of the spoken language with a minimum of formal grammar. Students will learn tone and markings rather than Chinese characters. CSU Not recommended for native speakers of Cantonese.
Offered Fall semesters

CHIN 10C. Intermediate Conversational Cantonese (3)
Lec-52.5 P/NP available
Recommended Prep: CHIN 10B or demonstration of exit skills
Third semester course in Cantonese. Continuation of extensive oral training in Cantonese. Designed for students who wish to continue acquiring basic skills of spoken Mandarin rather than reading and writing in Chinese characters. CSU Not recommended for native speakers of Cantonese.
Offered Spring semesters

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 1.
Offered Fall semesters

CHIN 12B. Continuation of Beginning Conversational Mandarin (3)
Lec-52.5 P/NP available
Recommended Prep: 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
Recommended Prep: 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.
Offered Spring semesters

CHIN 14B. Conversational Mandarin for Other Dialect Speakers (3)
Lec-52.5 P/NP available
Recommended Prep: CHIN 14A or demonstration of 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 Requires an additional 1 hour.

CHIN 14C. Intermediate Conversational Mandarin for Chinese Speaking Students (3)
Lec-52.5 P/NP available
Recommended Prep: 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 30A. Advanced Intermediate Chinese (3)
Lec-52.5 P/NP available
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: CHIN 30B or demonstration of CHIN30B 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
Offered on occasion

CHIN 31A. Intermediate Mandarin Chinese for Bilingual Students (3)
Lec-52.5  P/NP available
Recommended Prep: 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
Recommended Prep: 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
Prereq: CHIN 4 or CHIN 14A or CHIN 14B or CHIN 14C or CHIN 31A or CHIN 31B or CHIN 32 or CHIN 33 or demonstration of exit skills
Recommended Prep: Oral fluency in a Chinese regional language including Mandarin and an intermediate-high reading and writing comprehension in Chinese
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 or CHIN 31B or demonstration of equivalent language skills
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

Cinema
Office: Cloud Hall 126
Phone Number: (415) 239-3651
Web Site: www.ccsf.edu/film

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.

**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>
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</thead>
<tbody>
<tr>
<td><strong>First Semester:</strong></td>
<td></td>
</tr>
<tr>
<td>CINE 21 Introduction to Film Studies</td>
<td>3.0</td>
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<tr>
<td>CINE 24 Basic Film Production</td>
<td>4.0</td>
</tr>
<tr>
<td>CINE 25 Narrative Filmmaking</td>
<td>3.0</td>
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<tr>
<td>CINE 60 Sound for Motion Pictures I</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Second Semester:</strong></td>
<td></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>
<td>3.0</td>
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</tbody>
</table>

**Pre-Production/Producing Certificate**

The Pre-Production/Producing certificate prepares students in the planning and the business of the production of motion pictures including inter-disciplinary instruction in Cinema production, pre-production and basic business offerings. The curriculum examines the narrative and provides real world skills such as evaluating cost, budgeting and marketing in order to complete a film or commercial project.

Students who complete this certificate are prepared for entry level positions in a producer's office in positions such as Assistant Production Office Coordinator, Travel Coordinator, or Transportation Dispatcher.

**Learning Outcomes**

Upon completion of this program, students will be able to:
- Manage technical aspects of motion picture and video production.
- Analyze data to make responsible business decisions relevant to motion picture and video production.
- Use motion picture and video terms and concepts when communicating with client and crew.
- Propose solutions to ethical and social conflicts in a multi-cultural, team-oriented, rapidly changing environment.
- Act professionally and employ workforce protocol in collaboration, communication, and behavior in a film production 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 Achievement in Pre-Production/Producing**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CINE 24 Basic Film Production</td>
<td>4.0</td>
</tr>
<tr>
<td>CINE 25 Narrative Filmmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>CINE 30 Production Planning</td>
<td>3.0</td>
</tr>
<tr>
<td>CINE 54 Cinematography &amp; Lighting</td>
<td>3.0</td>
</tr>
<tr>
<td>CINE 170 Film/Video Work Experience</td>
<td>2.0</td>
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</tbody>
</table>

**Choose one of the following course electives:**
- CINE 126 Documentary Filmmaking
- CINE 131 Directing Motion Pictures

**Units:**

<table>
<thead>
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<tr>
<td>CINE 24 Basic Film Production</td>
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<td>3.0</td>
</tr>
<tr>
<td>CINE 30 Production Planning</td>
<td>3.0</td>
</tr>
<tr>
<td>CINE 126 Documentary Filmmaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>
**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 20A. Film History: Evolution of Film Expression (3)**  
Lec-52.5  
P/NP available  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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 to newly represented people, places and ideas; cinema in the digital age. UC/CSU  
*Offered Spring semesters*

**CINE 21. Introduction to Film Studies (3)**  
Lec-52.5  
P/NP available  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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 vâ RitÃ©, 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  
Recommended Prep: CINE 18 or CINE 20A or CINE 20B or CINE 21; ESL 188 or ENGL 88 or readiness for college-level English  
An auteur study of the films of Alfred Hitchcock as both the “master of suspense” and an artist of anxiety. Explore Hitchcock's films in terms of their themes, stylistic tendencies and social/historical context. Hitchcock's influence and place in film history is explored in depth. UC/CSU  
*Offered on occasion*

**CINE 23B. Focus on Film Noir (3)**  
Lec-52.5  
P/NP available  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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
Offered on occasion

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

CINE 54. Cinematography & Lighting (3)
Lec-52.5, field trips
Prereq: completion of or concurrent enrollment in CINE 25
Development of the art and practice of cinematography and lighting in the execution of short, single-camera styled projects. Assignments focus on lens choice, motivated camera movement, color temperature & correction, 16mm and digital video camera operation, and lighting design. Students learn to work together as a crew as defined by industry standards. 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 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.
Building on CINE 54 Cinematography & Lighting, students will further develop their ability to translate theme, story, and emotion into motion picture imagery. Cinematography & lighting skills are refined via single-camera styled projects. Assignments focus on complex lighting design and camera movement as students employ advanced camera, lighting & grip equipment. CSU

CINE 75. Screenwriting (3)
Lec-52.5
Prereq: 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

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

CINE 124A. Film Production Workshop (3)
Lec-52.5
P/NP available
Prereq: CINE 54 AND CINE 56 AND CINE 60
Recommended Prep: 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
P/NP available
Prereq: CINE 124A
Recommended Prep: 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
Offered Spring semesters

CINE 126. Documentary Filmmaking (3)
Lec-52.5, field trips
Recommended Prep: 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 on occasion

CINE 131. Directing Motion Pictures (3)
Lec-52.5
Prereq: CINE 24 and CINE 25; Completion of or concurrent
enrollment in: CINE 54 ENGL 88 or ESL 188 or readiness for
college-level English
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
Offered on occasion

CINE 136. Special Effects (3)
Lec-52.5
Recommended Prep: 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 pro-
cesses 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

Communication Studies
Office: Cloud 208A
Phone Number: (415) 452-7126
Web Site: www.ccsf.edu/communicationstudies

Announcement of Curricula

Communication Studies Major (AA-T)

Communication Studies majors learn the theory and principles behind
the communication process and acquire skills needed to effectively
communicate with others—both within and across cultural bound-
daries—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 prac-
tices 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

Core courses:
CMST IA Elements of Public Speaking .................. 3.0
CMST 5 Intercultural Communication .................. 3.0
CMST 20 Interpersonal Communication .................. 3.0

Choose one of the following courses:
CMST 7 Oral Interpretation of Literature ................ 3.0
CMST 38 Forensics Competition .................. 3.0

Choose one of the following courses:
CMST 3 Argumentation and Debate .................. 3.0
CMST 4 Group Communication .................. 3.0

Choose one of the following courses:
CMST 2 Introduction to Rhetorical Criticism ................ 3.0
ENGL 1B Writing about Literature .................. 4.0
ENGL IC Writing about Nonfiction .................. 4.0

Total: .................................................. 18.0 – 19.0

Announcement of Courses

Credit, Degree Applicable Courses:
CMST 1A. Elements of Public Speaking (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for col-
lege-level English
Mastery of the research, organization, and delivery of extemporaneous
speches. Focus on rhetorical theory, listening, audience analysis, speech construction, language, evidence testing, and visual aids. UC/CSU
C-ID COMM 110
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
C-ID COMM 120
Formerly SPCH 3.

CMST 4. Group Communication (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
C-ID COMM 140
Formerly SPCH 4.

CMST 5. Intercultural Communication (3)
Lec-52.5, field trips
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
This course develops competence in managing conflict and interacting 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
C-ID COMM 150
Formerly SPCH 5.

CMST 6. Workplace Communication (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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. CSU
Formerly SPCH 6.

CMST 7. Oral Interpretation of Literature (3)
Lec-52.5, field trips
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
C-ID COMM 170
Formerly SPCH 7.

CMST 8. Rhetoric of Popular Culture (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
C-ID COMM 130
Formerly SPCH 20

CMST 30. Individual Project in Oral Communication (1)
Lec-11, Lab-20, field trips
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Skills development in researching, writing, and delivering scripted speeches or debates that publicly address a socially significant issue. CSU
Offered on occasion
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 website 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

Computer Networking and Information Technology

Office: Science 147
Phone Number: (415) 452-5323
Web Site: www.ccsf.edu/cnit

Announcement of Curricula

General Information

For students who wish to earn an Associate's degree, or who want computer training that will lead to employment, the Computer Networking and Information Technology Department offers certificate programs. Areas of study include computer technical support, networking, 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.

Courses Required for the Major in Computer Networking and Information Technology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 1001</td>
<td>20 hrs</td>
</tr>
<tr>
<td>Core courses:</td>
<td></td>
</tr>
<tr>
<td>CNIT 103 Computer Hardware</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 131 Internet Basics and Beginning HTML</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 120 Network Security</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following network 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>Choose one of the following options</td>
<td></td>
</tr>
<tr>
<td>OPTION 1: Computer Technical Support</td>
<td></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 401 Windows 10 Technical Support</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 103L Computer Hardware Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>or CNIT 105L Computer Technical Support</td>
<td>1.0</td>
</tr>
<tr>
<td>OPTION 2: Internet and Web Development Techniques</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 134 Server Side Technologies for the Web</td>
<td>3.0</td>
</tr>
<tr>
<td>OPTION 3: Network Security</td>
<td></td>
</tr>
<tr>
<td>CNIT 121 Computer Forensics</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>
Computer Networking and Information Technology

3.0

Development Techniques

Courses Required for the Certificate of Achievement in Advanced Web Development

The minimum time for completion of this certificate is 2 semesters.

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

- Apply techniques to enhance ranking of websites in search engines and enhance accessibility.

Choose one of the following work experience courses:

- CNIT 198 Internship and Work Experience
- CNIT 195/CS 195 Software Development Practicum

Total: 16.0 – 17.0

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 websites. Students completing this certificate program will be qualified for employment in entry-level or mid-level positions in front-end website development.

Learning Outcomes

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

- Develop and maintain websites according to industry standards
- Apply techniques to add interactivity to web pages via scripting programs and use of libraries/frameworks
- Apply techniques to enhance ranking of websites in search engines and enhance accessibility

Choose one of the following courses:

- CNIT 132 Intermediate HTML and CSS
- CNIT 133 JavaScript, jQuery, AJAX
- CNIT 133A JavaScript Libraries/Frameworks
- CNIT 133M Mobile Web w/HTML, CSS & JS
- CNIT 132A Advanced HTML and CSS
- CNIT 132S SEO & Analytics for Web Dev

Total: 21.0 – 22.0

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

Course.................................Units

Required courses:

- CNIT 105 Intro to Computers Using PC’s
- CNIT 101 Operating Systems I Windows
- CNIT 102 Operating Systems II Command Line
- CNIT 103 Computer Hardware
- CNIT 104 Operating Systems Technologies
- CNIT 105 IT Customer Support
- CNIT 106 Introduction to Networks

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.

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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 101</td>
<td>Operating Systems I Windows</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 102</td>
<td>Operating Systems II Command Line</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 103</td>
<td>Computer Hardware</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 103L</td>
<td>Computer Hardware Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>CNIT 104</td>
<td>Operating Systems Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 197</td>
<td>Internship and Work Experience</td>
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</tr>
<tr>
<td><strong>Total:</strong></td>
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<td>14.0</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 124</td>
<td>Advanced Ethical Hacking</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 125</td>
<td>Information Security Professional Practices</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 126</td>
<td>Practical Malware Analysis</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 127</td>
<td>Exploit Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 128</td>
<td>Hacking Mobile Devices</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
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</tr>
</tbody>
</table>

**Fundamentals of Networking Certificate**

This certificate provides a solid core of the concepts and terminology, and introduction and overview of all aspects of computer networking, including components and principles of local and wide area networking and the Internet. Students who complete this certificate will be ready to undertake further study and advance to more specific industry training in order to be qualified for entry-level positions in network administration.

**Learning Outcomes**

Upon completion of this 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.

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>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 100</td>
<td>Intro to Computers Using PC’s</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 103</td>
<td>Computer Hardware</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 104</td>
<td>Operating Systems Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 105</td>
<td>IT Customer Support</td>
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</tr>
<tr>
<td>CNIT 103L</td>
<td>Computer Hardware Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>or CNIT 197</td>
<td>Internship and Work Experience</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td>13.0</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 IT Project Management skills.

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>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 100</td>
<td>Intro to Computers Using PC’s</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 103</td>
<td>Computer Hardware</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 104</td>
<td>Operating Systems Technologies</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 103L</td>
<td>Computer Hardware Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>or CNIT 197</td>
<td>Internship and Work Experience</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></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>

Maker Studies Certificate*

*See Maker Studies section of the catalog.

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>Required courses:</td>
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</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>Choose one of the following courses:</td>
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</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>Total:</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Mobile Web App Development Certificate

The program of study for the Certificate of Achievement in Mobile Web App Development includes instruction and practice in the development of websites and web apps for mobile devices. This course of study prepares students for adapting and/or creating websites, 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 to develop web sites, or web apps, or hybrid applications for different platforms (desktop and mobile devices)
- Evaluate, select, and use appropriate tools to convert/adapt and test websites for mobile devices
- 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 Achievement in Mobile Web App Development

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CNIT 131H Introduction to HTML and CSS</td>
<td>1.0</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 133M Mobile Web w/HTML, CSS &amp; JS</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 134 Server Side Technologies for the Web</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>16.0</td>
</tr>
</tbody>
</table>

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 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>

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 201C Introduction to Cisco Networks</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>
<tr>
<td>CNIT 120 Network Security</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 411 Administering Windows Server</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 21.0

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 Networks</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>
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<tr>
<td>CNIT 120 Network Security</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 411 Administering Windows Server</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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>

Required Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 131A XML and JSON</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 150A Introduction to SQL Databases and NoSQL</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 15.0

Web Site Development Techniques Certificate

This certificate includes instruction and practice in the development, configuration and operation of web sites. Students completing this certificate program will be qualified for employment in entry-level positions in web site development and administration.

Learning Outcomes

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

• Develop and maintain web sites according to industry standards
• Recognize and use appropriate Web 2.0 technologies to promote or enhance the work environment
• Add interactivity to web pages via scripting programs and/or server-side technologies

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 Web Site Development Techniques

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT 131H Introduction to HTML and CSS</td>
<td>1.0</td>
</tr>
<tr>
<td>CNIT 131 Internet Basics and Beginning HTML</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Required courses:
CNIT 132 Intermediate HTML and CSS .................. 3.0
CNIT 133 JavaScript, jQuery, AJAX ................. 3.0
CNIT 134 Server Side Technologies for the Web .... 3.0
Choose one of the following courses:
CNIT 13A XML and JSON .......................... 3.0
CNIT 129 Web 2.0 Internet Technologies .............. 3.0
Total: ........................................... 13.0 – 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
- Configure mobile network technology

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

Course ................................................. Units

Required courses:
CNIT 106 Introduction to Networks .................. 3.0
CNIT 107 Wireless LANs ............................. 3.0
CNIT 108 Wireless Networks, Advanced .......... 3.0
CNIT 120 Network Security .......................... 3.0
CNIT 113 Technology of Smartphones & Mobile Devices .......... 3.0
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
Recommended Prep: 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

CNIT 20. DNS Security (1)
Lec-17.5 P/NP available
Recommended Prep: 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 projects using both Windows and Linux platforms. CSU
Offered on occasion

CNIT 30. Network Security Monitoring (1)
Lec-17.5 P/NP available
Recommended Prep: 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
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
Recommended Prep: 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
Recommended Prep: 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 servers, Cisco routers and switches and VMware virtual servers. CSU
CNIT 103. Computer Hardware (3)  
Lec-52.5 P/NP available  
Recommended Prep: 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  
Recommended Prep: CNIT 103.  
A project-oriented hands-on introduction to hardware identification, maintenance, upgrade, diagnosis, and troubleshooting. Designed to provide practice with concepts, techniques and procedures covered in CNIT 103. Teamwork will be emphasized. CSU

CNIT 104. Operating Systems Technologies (3)  
Lec-52.5 P/NP available  
Recommended Prep: CNIT 103.  
This course provides the knowledge and skills needed 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  
Recommended Prep: CNIT 103.  
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  
Recommended Prep: 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  
Recommended Prep: CNIT 100 or 101.  
Analysis of technologies for connecting computers and devices into networks. Terminology and the major components of networks: architecture, topologies, 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 106A. Introduction to Networking (1)  
Lec-17.5  
This is a course for students in related disciplines such as audiovisual technology, who need a basic understanding of networking to use equipment in the field. CSU

CNIT 107. Wireless LANs (3)  
Lec-52.5 P/NP available  
Recommended Prep: 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  
Recommended Prep: 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

CNIT 113. Technology of Smartphones & Mobile Devices (3)  
Lec-52.5 P/NP available  
Recommended Prep: 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

CNIT 120. Network Security (3)  
Lec-52.5 P/NP available  
Recommended Prep: 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  
Recommended Prep: 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  
**Recommended Prep:** 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  
**Recommended Prep:** 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  
**Recommended Prep:** 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 Fall semesters*

CNIT 125. Information Security Professional Practices (3)  
Lec-52.5 P/NP available  
**Recommended Prep:** 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  
**Recommended Prep:** CS 110B or equivalent familiarity with programming  
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  
**Recommended Prep:** 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  
**Recommended Prep:** 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  
**Recommended Prep:** 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  
*Offered Spring semesters*

CNIT 129S. Securing Web Applications (3)  
Lec-52.5 P/NP available  
**Recommended Prep:** 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 131. Internet Basics and Beginning HTML (3)  
Lec-52.5 P/NP available  
Covers how to use 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  
**Recommended Prep:** 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 Fall semesters*

CNIT 131H. Introduction to HTML and CSS (1)  
Lec-17.5 P/NP available  
**Recommended Prep:** 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  
**Recommended Prep:** 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 Offered Spring semesters

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 Fall 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 Fall semesters

**CNIT 133. JavaScript, jQuery, AJAX (3)**

Lec-52.5  P/NP available

Recommended Prep: 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

Recommended Prep: 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/Query

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

Recommended Prep: 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

Recommended Prep: CNIT 123

This course explores techniques used by hackers to access protected data. Students will learn about cybercrime 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 stealthy network recon, passive traffic identification, etc. CSU Offered on occasion

**CNIT 141. Cryptography for Computer Networks (3)**

Lec-52.5  P/NP available

Recommended Prep: 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 Virtualization (3)**

Lec-52.5

This course is an introduction to virtualization. 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: VMware, Oracle VBox and Azure. CSU Offered on occasion

**CNIT 152. Incident Response (3)**

Lec-52.5  P/NP available

Recommended Prep: 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 Offered on occasion

**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 Offered on occasion
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
Offered on occasion

CNIT 160. Cybersecurity Responsibilities (3)
Lec-52.5  P/NP available
Recommended Prep: CNIT 120
Explores security technology, risks, countermeasures, and consequences, to help cybersecurity analysts protect those who rely on them. Includes hands-on activities such as packet analysis, exploiting vulnerable systems, and password cracking, and also research, presentations, and debates about current controversies, laws, and policies. Addresses topics such as surveillance, cyberwar, and computer crime. CSU
Offered on occasion

CNIT 195. Software Development Practicum (3)
Lec-52.5, field trips  P/NP available
Recommended Prep: CS 197 or CS 210 or CS 213B or CS 290B or CS 295B or CS 211E or CS 212 or RN 221 or CS 211 or CS 220B or CS 220
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
CNIT 195 = CS 195
Offered on occasion

CNIT 197. Internship and Work Experience (1)
Work-60 to 75
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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 LAN, and inter-VLAN routing in IPv4 and IPv6 networks. Second course in Cisco Networking Academy towards CCENT and CCNA Certifications. CSU
Offered Fall semesters

CNIT 203C. Connecting Networks (3)
Lec-52.5
Prereq: CNIT 202C
Recommended Prep: CNIT 203C
Connecting networks using more complex network technologies and services. Includes configuration and troubleshooting of network devices with data link protocols. Conceptual and operational aspects of LANs, WANs, ISDN, and Frame Relay. Configuration and troubleshooting of network devices. CSU
Offered Spring semesters

CNIT 204C. Scaling Networks (3)
Lec-52.5
Prereq: CNIT 202C
Recommended Prep: CNIT 204C
Connecting networks using more complex network technologies and services. Includes configuration and troubleshooting of network devices with data link protocols. Conceptual and operational aspects of LANs, WANs, ISDN, and Frame Relay. Configuration and troubleshooting of network devices. 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 on occasion

CNIT 214. Internet of Things (3)
Lec-52.5  P/NP available
Prereq: CNIT 106 or CNIT 201C
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
Offered on occasion
CNIT 401. Windows 10 Technical Support (3)
Lec-52.5 P/NP available
Recommanded Prep: 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
Offered on occasion

CNIT 410. Installing and Configuring Windows (3)
Lec-52.5 P/NP available
Recommanded Prep: 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 is introduced to account for 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
Recommanded Prep: 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 in aligned with the Microsoft Certifications exams on configuring advanced server services. CSU
Offered Fall semesters

CNIT 415. SQL Server Administration (3)
Lec-52.5
Covers the SQL Server database management system. In this advanced course, students will gain the knowledge and skills to install, configure and maintain SQL Server and manage the day-to-day administration of a client/server database in an enterprise network environment. CSU
Offered on occasion

CNIT 416. Installing and Configuring Windows Server 2016 (3)
Lec-52.5 P/NP available
Recommanded Prep: CNIT 103; Completion of or concurrent enrollment in: CNIT 106
This course introduces the new line of servers 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
Offered Spring semesters

CNIT 417. Administering Windows Servers 2016 (3)
Lec-52.5 P/NP available
Recommanded Prep: 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
Offered Fall semesters

CNIT 418. Identity With Windows 2016 (3)
Lec-52.5 P/NP available
Recommanded Prep: 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 Certifications exams on configuring advanced server services. CSU
Offered on occasion

CNIT 420. Configuring and Administering Microsoft Azure (3)
Lec-52.5 P/NP available
Prereq: 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)
Lec-52.5 P/NP available
Prereq: 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
Offered on occasion

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 Associate Degree program in Computer Science will have the skills in computer programming required for transfer to California State University, University of California, and other universities for career paths in Computer Science, Software Engineering, Computer Engineering, and related fields. The curriculum includes instruction in the fundamentals of problem solving and analysis, programming, data structures, and computer architecture.

Students who complete the Associate in Computer Science degree program are encouraged to continue their education and earn a Bachelor’s degree. Students who are interested in transferring after completion of this 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 students try to satisfy the requirements of the transfer institution as well as those of City College. To substitute another class because of specific requirements of the transfer institution, consult with the Computer Science Department Chair.
Universities may have additional or different lower-division course requirements before transfer. Students need to check the particular institution for their requirements. Students should pay particular attention to which programming series they take (CS 110B-C or CS 111B-C), as different universities may take one or the other track. The web site www.assist.org can provide information about applicable courses for transfer to satisfy degree requirements. Some universities will require Math and/or Physics classes beyond those required here, and those additional classes can be taken at CCSF.

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

- Create and program algorithmic solutions to solve problems.
- Solve mathematical problems using discrete math and calculus.
- Design circuits and create assembly language programs to run on them.

Enrollment is recommended only to students who have a solid understanding of Algebra (at the level of Math 60 or higher). English language skills are also required. (ESL 188 or higher recommended.) Students who have never done any programming are advised to take CS 110A before beginning this program.

Assuming students start 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

<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>CS 110B Programming Fundamentals: C++</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 111B Programming Fundamentals: Java</td>
<td>4.0</td>
</tr>
<tr>
<td>Choose one of the following courses:</td>
<td></td>
</tr>
<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>

Required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</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>
</tbody>
</table>

Students who intend to transfer may need to take the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110A Intro to Programming</td>
<td>4.0</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>MATH 110C Calculus III</td>
<td>5.0</td>
</tr>
<tr>
<td>Total:</td>
<td>25.0</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 programming in Java, including the specifics of how to program for Android devices, as well as best practices regarding data structures and algorithms. 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.
- Evaluate and implement data structures and algorithms for given problems, considering appropriateness and efficiency.

Students who have never done any programming are advised to take CS 110A before beginning this program.

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 Android App Programming

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 110A Intro to Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 111C Data Structures and Algorithms: Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 211D Android Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 111B Programming Fundamentals: Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CS 211S Advanced Java: Standard Edition</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 111D Android Programming</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 111E Android Programming</td>
<td>3.0</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 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>
<tr>
<td>Total:</td>
<td>18.0 – 21.0</td>
</tr>
</tbody>
</table>

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. 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 classes completed per semester.

Courses Required for the Certificate of Accomplishment in Build Automation for DevOps & QA

<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 160B Unix/Linux Shell Scripting</td>
<td>2.0</td>
</tr>
<tr>
<td>CS 177 Software Engineering</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 178 Build Automation for DevOps &amp; QA</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following elective courses:

- CS 132A Ruby Programming                    | 3.0   |
- CS 131B Programming Fundamentals: Python    | 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:

- Write Unix/Linux commands utilizing redirection, pipes, and regular expressions, including manipulation of files, directories, their contents and their permissions.
- Analyze common text processing and system tasks and interpret technical specifications to create algorithmic solutions, including the use of control structures, subroutines, lists, classes, and objects.
- Implement and test software thoroughly and methodically in a team environment.
- Perform continuous integration tests on the contents of a repository.
- Implement, exercise, and manage QA and regression tests for known defects and issues.
- Manage version tags and branches to build specific software versions.

Students must complete each course with a grade of “C” or higher. Where applicable, grades of “Pass” may be used.

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:

- CS 280 Introduction to Parallel and Cloud Programming | 4.0   |
- CS 270 Computer Architecture with Assembly Language | 4.0   |
- CS 150A Introduction to SQL Databases and NoSQL | 3.0   |
- CS 160B Unix/Linux Shell Scripting | 2.0   |

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: ........................................ 13.0 – 18.0

Computer Programming: Java Certificate

The program of study for the certificate in Computer Programming: Java includes instruction and practice in the Java programming language including database interaction, as well as software engineering practices. This course of study prepares students for entry-level positions in quality assurance and computer programming in a variety of settings.

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

- Write Java code for array-based and linked data structures that work with generics.
- 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.
- Write multiple table database queries in SQL.
- 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 Achievement in Computer Programming: Java

Course ....................................... Units

Required courses:
- CS 11B Programming Fundamentals: Java ........ 4.0
- CS 11C Data Structures and Algorithms: Java ........ 4.0
- CS 160A Introduction to Unix/Linux .............. 2.0
- CS 21E Advanced Java: Standard Edition ........ 3.0

Choose one of the following database courses:
- CS 150A Introduction to SQL Databases and NoSQL ... 3.0
- CS 21E Advanced Java: Enterprise .................. 3.0

Data Science Fundamentals Certificate

This certificate will provide an introduction to data science and technical computing skills. Students will learn the basics of working in a Unix or Linux environment, basic programming techniques using Perl or Python, database fundamentals including SQL, data visualization techniques, and statistics.

Learning Outcomes

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

- Write Unix commands to manipulate directories, their contents, and permissions.
- Create regular expressions to perform pattern matching.
- Analyze common text processing tasks and interpret technical specifications to create and program algorithmic solutions.
- Write multiple table database queries in SQL.
- Access and analyze data to produce information visualizations and discover patterns.

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 Achievement in Data Science Fundamentals

Course ....................................... Units

Required courses:
- CS 160A Introduction to Unix/Linux .............. 2.0
- CS 256 Data Visualization .......................... 3.0

Choose one of these programming courses:
- CS 13B Programming Fundamentals: Python ....... 4.0
- CS 13A Introduction to Perl Programming ........ 4.0

Choose one of these statistics courses:
- MATH 80 Probability and Statistics ............... 5.0
- 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

Required database course:
- CS 150A Introduction to SQL Databases and NoSQL ... 3.0

Total: ........................................ 17.0

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#

Course ....................................... Units

Required courses:
- CS 150A Introduction to SQL Databases and NoSQL ... 3.0
- CS 14D C# with Databases .......................... 3.0
- CS 150P SQL Server Programming Using T-SQL .... 4.0
- CS 159A Database Design and Modeling ............ 3.0

Choose one:
- CS 11B Programming Fundamentals: Java ........ 4.0
- CS 11B Programming Fundamentals: Java ........ 4.0

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.
- Analyze a problem and interpret business requirements to create and program appropriate database solutions, utilizing the most appropriate features of MySQL.
- Design and create relations and other objects as a normalized database and implement that design.
- Develop software applications that interact with MySQL Database.
- Install and configure a MySQL Database Management System and use MySQL client and utility programs to administer such a 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

Course ......................................................... Units
Required introductory database course:
CS 150A Introduction to SQL Databases and NoSQL … 3.0
Required courses:
CS 155B MySQL Database Administration ………. 3.0
CS 155P MySQL Programming …………………… 3.0
CS 159A Database Design and Modeling ………. 3.0
Choose one of the following programming courses:
CS 130A PHP Programming …………………… 4.0
CS 113A Introduction to Perl Programming …… 4.0
CS 131B Programming Fundamentals: Python … 4.0
CS 132A Ruby Programming …………………… 3.0
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 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

Course ......................................................... Units
Required introductory database course:
CS 150A Introduction to SQL Databases and NoSQL … 3.0
Required courses:
CS 151B Oracle Database Administration ………. 3.0
CS 151P Oracle PL/SQL Programming …………………… 4.0
CS 159A Database Design and Modeling ………. 3.0
Total: ......................................................... 13.0

Game and Simulation Programming Certificate

The Game and Simulation Programming certificate prepares students for careers as video game developers and programmers of simulations, using some of the most popular gaming languages/platforms: C++, C#, and Unity. Students will learn about game design and the game industry, C++ programming including data structures and algorithms, and programming simulations and games in Unity using C#. Students will have a foundation of algebra and physics to better simulate real-world situations and behaviors.

Learning Outcomes

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

• Design and implement modular programs using modern features of C++ or C#.
• Evaluate and implement data structures and algorithms for given problems, considering appropriateness and efficiency.
• Utilize the Unity game engine and integrated development environment (IDE) to the creation of games.
• Simulate real-world situations and behaviors.
• Operate effectively within a team, gaining work experience.

Students who have never done any programming are advised to take CS 110A before beginning this program. English language skills are also required. (ESL 188 or higher recommended.)

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 Achievement in Game and Simulation Programming

Course ......................................................... Units
Choose one of the following courses in programming fundamentals:
CS 110B Programming Fundamentals: C++ ……… 4.0
CS 114B C# Programming …………………… 4.0
Required courses:
CS 185 Exploring Game Worlds …………………… 3.0
CS 110C Data Structures and Algorithms: C++ ……… 4.0
CS 24U Game and Simulation Programming in Unity … 4.0
MATH 90 Precalculus Algebra …………………… 5.0
Or placement into MATH 100A or 110A

Choose one of the following physics courses:
PHYC 2A Introductory Physics …………………… 3.0
PHYC 4A Classical Mechanics for Scientists and Engineers …………………… 3.0

Choose one of the following Internship/Project Experience courses:
CS 197 Software Engineering …………………… 3.0
CS 195/195 Software Development Practicum … 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: ......................................................... 24.0 – 27.0

iPhone App Programming Certificate

This certificate teaches how to program native apps (mobile device applications) to run on iPhones, iPads, and other iOS devices. Students learn programming in Swift, and also programming of data structures and algorithms in Java or C++. The specifics of how to program for iPhones is covered, as well as substantial project experience. 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, interfacing with Web APIs.
• Extend User Interface Kit (UIKit) classes to create custom view controllers.
• Create working iPhone applications that utilize the distinctive capabilities of iOS.
• Compare and contrast algorithms for efficiency.
• Predict the results of code using standard data structures with associated algorithms.
• 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 Achievement in iPhone App Programming**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 113A Introduction to Perl Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>Choose one of the following Programming Fundamentals courses:</td>
<td></td>
</tr>
<tr>
<td>CS II2 Beginning iPhone Programming using Swift</td>
<td>4.0</td>
</tr>
<tr>
<td>CS II0B Programming Fundamentals: C++</td>
<td>4.0</td>
</tr>
<tr>
<td>CS II1B Programming Fundamentals: Java</td>
<td>4.0</td>
</tr>
<tr>
<td>Required capstone course:</td>
<td></td>
</tr>
<tr>
<td>CS 212 iPhone Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>Choose one of the following Data Structures &amp; Algorithms courses:</td>
<td></td>
</tr>
<tr>
<td>CS II0C Data Structures and Algorithms: C++</td>
<td>4.0</td>
</tr>
<tr>
<td>CS II1C Data Structures and Algorithms: Java</td>
<td>4.0</td>
</tr>
<tr>
<td>Choose one of the following Internship/Project Experience courses:</td>
<td></td>
</tr>
<tr>
<td>CS 177 Software Engineering</td>
<td>3.0</td>
</tr>
<tr>
<td>CS 195/CNIT 195 Software Development Practicum</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>
<tr>
<td>Total:</td>
<td>13.0 – 16.0</td>
</tr>
</tbody>
</table>

**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, and configuring default servers. It is designed to prepare students 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.
- Design and implement bash shell scripts to solve administrative tasks.
- Analyze a Linux system and revise its configuration to solve issues of performance, security, connectivity, and 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.

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 Linux Administration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CS 160A Introduction to Unix/Linux</td>
<td>2.0</td>
</tr>
<tr>
<td>CS 160B Unix/Linux Shell Scripting</td>
<td>2.0</td>
</tr>
<tr>
<td>CS 260A Linux System Administration</td>
<td>4.0</td>
</tr>
<tr>
<td>Total:</td>
<td>8.0</td>
</tr>
</tbody>
</table>

**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 NIS, ssh, mail, DHCP, DNS, ftp, web servers and client LDAP. A second 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>CS 260B Linux Network Administration</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 106 Introduction to Networks</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following scripting languages:</td>
<td></td>
</tr>
<tr>
<td>CS II3A Introduction to Perl Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CS II1B Programming Fundamentals: Python</td>
<td>4.0</td>
</tr>
<tr>
<td>Total:</td>
<td>10.0</td>
</tr>
</tbody>
</table>

**Web Application Programming Certificate**

The program of study for the certificate in Web Application Programming will give students a solid grounding in full-stack 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, 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. Students who have never done any programming are advised to take CS 110A before beginning this program.

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
CS 150A Introduction to SQL Databases and NoSQL . . .3.0

Choose one of the following Programming courses:
CS 111B Programming Fundamentals: Java ........... 4.0
CS 131B Programming Fundamentals: Python ........ 4.0
CS 132A Ruby Programming .......................... 3.0
CS 130A PHP Programming ............................ 4.0

Choose one of the following Advanced Programming courses:
CS 211E Advanced Java: Enterprise .................. 3.0
CS 231 Advanced Python Programming ............... 3.0
CS 232 Ruby on Rails Development .................. 3.0
CS 130B Advanced PHP Programming ................. 3.0
CNIT 134 Server Side Technologies for the Web ....... 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
RECOMMENDED PREP: 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
RECOMMENDED PREP: 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
REQUIRE: 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 111B. Programming Fundamentals: Java (4)
Lec-70
RECOMMENDED PREP: 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 122

CS 111C. Data Structures and Algorithms: Java (4)
Lec-70
REQUIRE: 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 132

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. UC/CSU C-ID COMP 132

CS 113A. Introduction to Perl Programming (4)
Lec-70
P/NP available
RECOMMENDED PREP: 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
**Recommended Prep:** CS 110A or I11A
A continuation of the concepts and principles introduced in CS 110A or 111A. It covers programming using the C# language and the .NET/ Common Language Runtime platform. Students will learn object oriented software design techniques, and construct graphical user interface applications. CSU

**Offered on occasion**

**CS 114D. C# with Database (3)**
Lec-52.5  P/NP available
**Recommended Prep:** CS I11A or demonstrated equivalent programing experience; and CS 150A or CS 151A or CS 153A 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
**Recommended Prep:** CNIT 132 or demo of exit skills; and CS 110A or I11A 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

**Offered on occasion**

**CS 130B. Advanced PHP Programming (3)**
Lec-52.5  P/NP available
**Recommended Prep:** 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 131B. Programming Fundamentals: Python (4)**
Lec-70  P/NP available
**Recommended Prep:** CS I10A
This course covers programming fundamentals using the Python language. Python 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

**Offered on occasion**

**CS 142. Programming Techniques for XML (3)**
Lec-52.5  P/NP available
**Recommended Prep:** CS 110A or CS 111A or CS 113A or CS 130A or CS 131B 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

**Offered on occasion**

**CS 150P. SQL Server Programming Using T-SQL (4)**
Lec-70  P/NP available
**Recommended Prep:** CS 150A or CS 151A or CS 153A
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 151B. Oracle Database Administration (3)**
Lec-52.5  P/NP available
**Recommended Prep:** CS 150A or 151A or 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
**Recommended Prep:** 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 155B. MySQL Database Administration (3)**
Lec-52.5  P/NP available
**Recommended Prep:** CS 155A or 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
**Recommended Prep:** 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 151A or CS 155A.
A course in the design of database structures and the use of database modeling tools. We cover the relational model, relational algebra, and normalization. E-R diagrams and UML are used as modeling tools. We use SQL, views, triggers and stored procedures to implement logical and physical database designs. 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
Recommended Prep: 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
Recommended Prep: Prior programming experience such as; CS 110A or CS 111A or CS 113A or CS 130A or CS 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
Recommended Prep: 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 185. Exploring Game Worlds (3)
Lec-52.5 P/NP available
Recommended Prep: VMD 105
Utilizing Unity game engine and a range of additional tools, this course is an introduction to the career opportunities in the games industry. Students will learn how individual games are made, distributed, and sold both via physical media and online. Also examined are virtual reality and augmented reality. CSU

Formerly VMD 180

CS 186. XR: Games, Virtual and Augmented Reality using Unity (3)
Lec-52.5, field trips P/NP available
Recommended Prep: CS 185; VMD 166
Develops fundamental skills in the use of the Unity 3D game engine to develop games and X Reality (XR or Cross Reality), including virtual reality, augmented reality and simulations or ‘experiences’. Students will design independently and as part of a team. Also covers workflow itself - time and resource management, planning and production strategies for entertainment products. CSU

Formerly VMD 182

CS 195. Software Development Practicum (3)
Lec-52.5, field trips P/NP available
Recommended Prep: 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 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 white board 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
Recommended Prep: 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
Recommended Prep: 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  
Recommended Prep: CS IIIB

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  
Recommended Prep: CS IIIB 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). UC/CSU

Offered Spring semesters

CS 211S. Advanced Java: Standard Edition (3)  
Lec-52.5  
P/NP available  
Recommended Prep: CS IIIB

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. UC/CSU

CS 212. iPhone Programming (4)  
Lec-70  
P/NP available  
Recommended Prep: CS I102 or CS II0B or CS IIIB

An advanced course in the design and development of iOS applications using Xcode and Swift. CSU

CS 214U. Game and Simulation Programming in Unity (4)  
Lec-70  
P/NP available  
Prereq: CS I14B or CS II0B or CS IIIB

This course provides students with the opportunity to learn computer science concepts in the context of game and simulation 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  
Recommended Prep: CS I30A and CNIT I32 and CS I60A

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 I31B

Second course in the Python programming language. Covers resources, practices, and modules used by successful Python program

ners; 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  
Recommended Prep: CNIT 132 and CS I32A

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 I31B or CS IIIB or CS II0B or CS I32A or CS I12 or CS I14B or CS I13A

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  
Recommended Prep: CS I60B

The administration of a Linux server. Prepares students for industry certification and entry-level employment in System Administration. Topics include process control, system monitoring, filesystem preparation and maintenance, logical volumes, basic servers and the firewall, virtual machines, startup and shutdown, user accounts, periodic tasks, security issues and installations. CSU

CS 260B. Linux Network Administration (3)  
Lec-52.5  
P/NP available  
Prereq: CS I60A

The networking portion of the administration of a Linux server. Concepts and configuration of basic networking parameters and of various Linux networking services are discussed including DHCP, DNS, NFS, LDAP, Postfix, SSH, NIS, LDAP, Samba, and advanced Apache. Security issues are discussed. CSU

Formerly CNIT 270

Offered Spring semesters

CS 270. Computer Architecture with Assembly Language (4)  
Lec-70  
Prereq: CS I10B or CS IIIB

Recommended Prep: CS I60B and MATH I15

Basic computer organization including the instruction cycle, parts of CPU (Central Processing Unit), memory hierarchy including caching, pipelining, exception handling, and issues of multiprocessing. Write assembly language programs using a sample architecture. Translation from high-level code is discussed. Basic hardware components and control circuits are designed in logic using combinational and sequential circuits. UC/CSU

C-ID COMP 142
CS 280. Introduction to Parallel and Cloud Programming (4)
Lec-70, Lab-17.5  P/NP available
RECOMMENDED PREP: CS 110B OR CS 111B
Programming fundamentals using multiple processors or computers to solve a problem. Mechanics of computation, multi-tasking and multi-threading and object-oriented approaches to managing many computing elements working on the same problem. Programming for Cloud computation, Big Data access, and highly parallel computing hardware, e.g., multi-core processors and Graphics Processing Units. CSU
OFFERED ON OCCASION

CS 311D. Advanced Android Programming (3)
Lec-52.5  P/NP available
RECOMMENDED PREP: CS 211D
Advanced class on Android mobile phone and tablet programming. Includes more complex features such as animation, services, sensors, multi-threading, content provider, advanced debugging. Program apps using touch screen events and gestures, and telephony. CSU
OFFERED FALL SEMESTERS

Construction Trades
See Automotive/Motorcycle, Construction, and Building Maintenance.

Construction Management
See Architecture.

Consumer Education
See Health Education.

Counseling Development
Office: MUB 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

Counseling, New Student
Office: Conlan 205
Phone Number: (415) 239-3296
Web Site: www.ccsf.edu/nscd

Announcement of Courses
Credit, Degree Applicable Courses:
AAPS 100. Achieving an Academic Attitude (3)
Lec-52.5  P/NP available
Provides the student with tools to successfully approach college and life by taking into account personal, familial, communal, and cultural influences. The goal is for students to engage in their own action plan for future academic and personal success. CSU

AAPS 101. College Orientation (.5)
Lec-9  P/NP only
Assists students to identify their educational goals and chart their course to achieve success at City College of San Francisco. Topics include college policies and procedures, programs and services, expectations and requirements as well as the campus facilities, student’s rights and responsibilities. CSU
OFFERED ONLY IN SUMMER SEMESTERS

AAPS 103. Orientation to College Transfer (3)
Lec-52.5  P/NP available
COREQ: ENGL 88B OR ENGL 88
An overview of the concepts and significance of factors that contribute to college transfer and college success. Factors to be explored include social awareness, cultural identity, goal setting, educational planning, study skills, and college resources. Focus on understanding the college/university systems and on understanding of the relationship of cultural experiences and college success. UC/CSU
OFFERED FALL SEMESTERS

AAPS 104. Student Success Seminar (.5)
Lec-9  P/NP only
This brief course is intended to help students on first- or second-semester probation to regain good academic standing. Students develop time management and motivational strategies and learn about available college resources to help them reach academic success. Students also learn about academic polices and educational goal options. CSU

Noncredit Courses:
AAPS 1111. Orientation to Noncredit Certificate Programs (10 hrs)
RECOMMENDED PREP: 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 might be eligible to 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 IGETC 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 banquet services. Many of these positions are a few higher level career possibilities.

**Associate in Science Degree Programs**

Please visit [www.ccsf.edu/cahs](http://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, Food Safety Management Certification, students are required to successfully pass a California food safety certification examination* issued by an accredited food protection manager certification organization (SB602 & Sec 113790 of CA Health & Safety Code).

* e.g.: The National Registry of Food Safety Professionals - Food Safety Manager Certification exam or the ServSafe Food Protection Manager Certification exam, issued by the National Registry of Food Safety Professionals.

* This exam is administered through the CCSF Biology 121 (formerly Microbiology 51) course.

**Applicants who have already earned a college degree (A.S./A.A., B.A./B.S., etc.)** are still required to fulfill CCSF A.S. degree requirements. Students accepted to one of the CAHS degree programs and are registered in classes, request an “Evaluation of Transferred Credit”. Please see 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”.

**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 are advised to have ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English; or to have 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 CCF 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 10N/NL, CAHS 20A, CAHS 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, 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.

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 attitude 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.

#### Recommended preparation for entry into the program:

ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English

MATH 30 or equivalent

#### Courses Required for the Major in Culinary Arts Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Required Introductory Course: CAHS 100 Introduction to Hospitality</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAHS 10A</td>
<td>CAHS 10B Culinary Fundamentals I</td>
<td>5.0</td>
</tr>
<tr>
<td>CAHS 10B</td>
<td>CAHS 10B Culinary Fundamentals I</td>
<td>5.0</td>
</tr>
<tr>
<td>CAHS 10N</td>
<td>CAHS 10N Culinary Fundamentals I</td>
<td>4.0</td>
</tr>
<tr>
<td>CAHS 10NL</td>
<td>CAHS 10NL Culinary Fundamentals I Laboratory</td>
<td>6.5</td>
</tr>
</tbody>
</table>

#### Required Courses:

- CAHS 20A | | 3.0 |
- CAHS 20B | | 3.0 |
- CAHS 20C | | 3.0 |
- CAHS 21 Meat Analysis | | 2.0 |
- CAHS 30A | | 4.5 |
- CAHS 30B | | 4.5 |

Note: CAHS 10A/B-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

#### Required Introductory Course:

- BIO 121 Sanitation Principles and Practices | 2.0 |
- BIO 130 Nutrition and Culinary Arts | 2.0 |
- CAHS 33 Procurement and Costing | 3.0 |
- MGT 231 Introduction to Supervision and Management | 3.0 |
- CAHS 42 Fundamentals of Hospitality Financial Reports | 3.0 |
- CMST 11 Basic Public Speaking | 3.0 |

*To be taken in the student’s final semester and by consent of 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, Forcements, 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 60I Global Cuisines: United States ....................................... 1.0
CAHS 60J Advanced Pastry Doughs, Batters, and
   Creams ......................................................................................... 1.0
CAHS 60K Chocolate and Confections ............................................. 1.0
CAHS 60L Mousses: Cakes and Desserts ....................................... 1.0
CAHS 60M Wedding Cakes ............................................................. 1.0
CAHS 60N Advanced Baking Techniques ...................................... 1.0
CAHS 60O Pastry Doughs, Batters, and Creams ............................ 1.0
CAHS 60P Plated Desserts: Presentations & Techniques .................. 1.0
CAHS 53A Cuisines of Mexico: Oaxaca ........................................ 3.0
Total: ......................................................................................... 60.0 – 60.5

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 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 deadlines dates for each semester.

Prerequisites:
- Applicants are advised to have ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English; or to have 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. This major is offered to prepare students who are interested in a front of the house food-related career. These classes should be taken with A.S. degree requirements.

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.

Recommended preparation for entry into the program:
- ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
- MATH 30 or equivalent
Courses Required for the Major in Food Service 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 .................. 5.0
CAHS 10B Culinary Fundamentals I .................. 5.0
OPTION TWO
CAHS 10N Culinary Fundamentals I .................. 4.0
CAHS 10NL Culinary Fundamentals I Laboratory .... 6.5

Required courses:
CAHS 30A Restaurant Operations .................. 4.5
CAHS 30B Restaurant Operations .................. 4.5
CAHS 32 Hospitality Marketing ...................... 3.0
CAHS 33 Procurement and Costing .................. 3.0
CAHS 34 Fundamentals of Contemporary Hospitality
   Law .................................................. 3.0
CAHS 208 Intro to Event and Meeting Planning .... 4.0
BIO 121 Sanitation Principles and Practices ........ 2.0
MGT 231 Introduction to Supervision and Management 3.0
BIO 130 Nutrition and Culinary Arts ................ 2.0
CMST 11 Basic Public Speaking .................... 3.0
CAHS 32 Hospitality Marketing .................... 3.0
CAHS 40W Work Experience* ....................... 5.0

* CAHS 40W to be taken in student's final semester and by consent of instructor.

Choose one of the following required courses:
CAHS 205 Introduction to Wine .................... 3.0
CAHS 222 Beverage Management .................... 3.0

Choose one of the following required courses:
PSYC 26 Applied Psychology ....................... 3.0
LBCS 96C Labor Relations in the Modern American ... 3.0

Total: .............................................. 59.0 – 60.0

Hotel Management Program

Introduction. Students may earn an Associate in Science Degree 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 also 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 are advised to have ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English; or to have 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.

Recommended preparation for entry into the program:
ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
MATH 30 or equivalent

Courses Required for the Major in Hotel 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 ........................................ 5.0
- CAHS 10B Culinary Fundamentals I ........................................ 5.0

**OPTION TWO**
- CAHS 10N Culinary Fundamentals I ........................................ 4.0
- CAHS 10NL Culinary Fundamentals 1 Laboratory ..................... 6.5

**Required Courses:**
- CAHS 32 Hospitality Marketing ............................................... 3.0
- CAHS 33 Procurement and Costing ........................................... 3.0
- CAHS 34 Fundamentals of Contemporary Hospitality Law ................. 3.0
- CAHS 42 Fundamentals of Hospitality Financial Reports ................... 3.0
- CAHS 43 Principles of Hotel Administration ............................... 3.0
- CAHS 40W Work Experience* .................................................. 5.0

*To be taken in the student's final semester and with consent of the instructor

- BIO 121 Sanitation Principles and Practices ................................ 2.0
- CMST 11 Basic Public Speaking ............................................... 3.0

Choose one of the following required courses:
- PSYC 26 Applied Psychology .................................................. 3.0
- LBCS 96C Labor Relations in the Modern American .................... 3.0

Choose one of the following required courses:
- MGT 231 Introduction to Supervision and Management .................. 3.0
- MGT 233 Human Resources Management .................................. 3.0

Choose one of the following required options:

**OPTION ONE**
- CAHS 30A Restaurant Operations ............................................. 4.5
  and CAHS 30B Restaurant Operations ..................................... 4.5

**OPTION TWO**
- CAHS 208 Intro to Event and Meeting Planning ........................... 4.0

Total: ........................................................................ 48.0 – 53.5

**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)**
- Lec-35, Lab-170

**Prerequisite:** Admission to the Culinary Arts and Hospitality Studies degree program; completion of or concurrent enrollment in: CAHS 10B

**Recommended Preparation:** ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English; MATH 30 or equivalent. 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 10B formerly comprised one half-semester of CAHS 10.

**CAHS 10B. Culinary Fundamentals I (5)**
- Lec-35, Lab-170

**Prerequisite:** Admission to the Culinary Arts and Hospitality Studies degree program; completion of or concurrent enrollment in: CAHS 10A

**Recommended Preparation:** ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English; MATH 30 or equivalent. 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 10.

**CAHS 10N. Culinary Fundamentals 1 (4)**
- Lec-70

**Prerequisite:** Admission to the Culinary Arts and Hospitality Studies degree program

**Corequisite:** CAHS 10NL

**Recommended Preparation:** ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English; MATH 30 or equivalent. 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 10NL. CSU

All sections will charge a material fee of $75.00

**CAHS 10NL. Culinary Fundamentals 1 Laboratory (6.5)**
- Lab-350

**Corequisite:** 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)**
- Lec-23, Lab-104

**Prerequisite:** (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL); 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’oeuvres. CSU

**CAHS 20B. Culinary Fundamentals II B (3)**
- Lec-23, Lab-104

**Prerequisite:** (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL); 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

CAHS 20C. Culinary Fundamentals II C (3)
Lec-24, Lab-104
Prereq: (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL); 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

CAHS 21. Meat Analysis (2)
Lec-35
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English; 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 (4.5)
Lec-41.37, Lab-124.13
Prereq: CAHS 20A and CAHS 20B and CAHS 20C; 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

CAHS 30B. Restaurant Operations (4.5)
Lec-41.37, Lab-124.13
Prereq: CAHS 20A and CAHS 20B and CAHS 20C; 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

CAHS 32. Hospitality Marketing (3)
Lec-52.5
Recommended Prep: ESL 186 or ENGL 88 or placement in ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 186 or readiness for college-level English; MATH 30 or equivalent
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. Fundamentals of Contemporary Hospitality Law (3)
Lec-52.5
Prereq: Admission to the CAHS program
An overview of the legal system as it pertains to hotels, restaurants, bars, and private clubs with an emphasis on liability prevention particularly in the areas of employment, ADA and civil rights compliance, food service liability, responsible beverage service and the innkeeper/guest relationship. 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. Fundamentals of Hospitality Financial Reports (3)
Lec-52.5
Prereq: Admission to the CAHS program
An introductory and practical overview of hotel and restaurant accounting with emphasis on understanding what the numbers mean and how to apply them in actively managing the operation of a hotel, restaurant, or other food business. 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

CAHS 53A. Cuisines of Mexico: Oaxaca (3)
Lec-17.5, Lab-105, field trips
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English; 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, Forcemeats, 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 Spring 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 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL) or CSST 9661; completion of or concurrent enrollment in: (CAHS 20A or CAHS 20B or CAHS 20C) or (CSST 9650 or CSST 9651)
A study of the history and techniques for the production of tart doughs, choux paste, puff pastry, cookie doughs, creams and curds and their use in finished desserts. CSU
Offered on occasion

CAHS 60M. Chocolate and Confections (1)
Lec-17.5
Prereq: (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL) or CSST 9661; completion of or concurrent enrollment in: (CAHS 20A or CAHS 20B or CAHS 20C) or (CSST 9650 or CSST 9651)
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 Summer semesters

CAHS 60N. Mousses: Cakes and Desserts (1)
Lec-17.5
Prereq: (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL) or CSST 9661; completion of or concurrent enrollment in: (CAHS 20A or CAHS 20B or CAHS 20C) or (CSST 9650 or CSST 9651)
Applied study of techniques for the production process for creating mousse-based desserts and “entremet” cakes. Emphasis on current trends, including use of seasonal and local produce. CSU
Offered Spring semesters

CAHS 60O. Wedding Cakes (1)
Lec-17.5
Prereq: (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL) or CSST 9661; completion of or concurrent enrollment in: (CAHS 20A or CAHS 20B or CAHS 20C) or (CSST 9650 or CSST 9651)
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-17.5
Prereq: (CAHS 10A and CAHS 10B) or (CAHS 10N and CAHS 10NL) or CSST 9661; completion of or concurrent enrollment in: (CAHS 20A or CAHS 20B or CAHS 20C) or (CSST 9650 or CSST 9651)
Applied study of dessert presentations for restaurants and buffets: mousse-based and “entremet” cakes. Emphasis on current trends, including use of seasonal and local produce. CSU
Offered on occasion

CAHS 100. Introduction to Hospitality (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 186 or Placement in ESL 188 or readiness for college-level English
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 P/NP available
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 P/NP available
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
An introduction to the basics of meeting and event planning including types of meetings and events plus all the necessary steps needed to plan a successful meeting or event from site selection and budget to space planning and food and beverage options. CSU
Offered Spring semesters

CAHS 209. Food Business Entrepreneurship (3)
Lec-52.5, field trips
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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 P/NP available
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 P/NP available
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 on occasion

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_noncreditstudents.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 Certificate of Completion

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.
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 two 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSST 9660 Food Technology and Dining</td>
<td>510.0</td>
</tr>
<tr>
<td>CSST 9661 Food Preparation and Dining</td>
<td>510.0</td>
</tr>
<tr>
<td>Total:</td>
<td>1020.0</td>
</tr>
</tbody>
</table>

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 two 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>
<tr>
<td>Total:</td>
<td>1020.0</td>
</tr>
</tbody>
</table>

Announcement of Courses

Noncredit Courses:

CABT 9000. Introduction to Culinary Fundamentals (250 hrs)
Prerequisites: ESLN 3600 or TRST 2321 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)
Recommended Prerequisite: ESLN 3600 or TRST 2321 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)
Prerequisite: CSST 9650
Recommended Prerequisite: ESLN 3600 or TRST 2321 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: merinques, 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)
Recommended Prerequisite: 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  
**Recommended Prep:** 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)**

**Recommended Prep:** 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**

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**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 Frida Kahlo Way, San Francisco, CA 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. Recommended preparation for the program: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English.
5. Applicants are required to complete the following courses with a C or higher prior to applying to the Dental Assisting Program:
   - BIO 9 or BIO 106 or BIO 108 or BIO 112  
   - 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>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>First Semester:</td>
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<tr>
<td>DENT 51 Applied Dental Science I</td>
<td>4.0</td>
</tr>
<tr>
<td>DENT 55A Dental Roentgenography</td>
<td>2.0</td>
</tr>
<tr>
<td>DENT 62 The Dental Assistant in Practice</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester:</td>
<td></td>
</tr>
<tr>
<td>DENT 55B Dental Roentgenography</td>
<td>2.0</td>
</tr>
<tr>
<td>DENT 57 Dental Office Management</td>
<td>3.0</td>
</tr>
<tr>
<td>Third Semester:</td>
<td></td>
</tr>
<tr>
<td>DENT 52 Dental Materials and Procedures</td>
<td>3.0</td>
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<tr>
<td>DENT 53 Introduction to Chairside Assisting</td>
<td>3.0</td>
</tr>
<tr>
<td>Fourth Semester:</td>
<td></td>
</tr>
<tr>
<td>DENT 54 Applied Dental Science II</td>
<td>2.0</td>
</tr>
<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>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>33.5</strong></td>
</tr>
</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 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 Frida Kahlo Way, San Francisco, CA 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 CCSE. (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. Recommended preparation for the program: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English.
5. Applicants are required to complete the following courses with a C or higher prior to applying to the Dental Assisting Program:
   - BIO 9 or BIO 106 or BIO 108 or BIO 112
   - 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 test does not need to be met at college level. Proof of successful completion of a computer or typing class will be acceptable on any level.

Advanced Placement. Applicants who have been admitted to the curriculum and who have previous education or experience in dental assisting may apply for credit and advanced placement in the curriculum. However, such applicants should first have completed the science, English and keyboard requirements.

Basis for Disqualification. Students who receive a final grade lower than "C" in any dental assisting course will be disqualified from continuing in the curriculum. Students who receive a final grade lower than "C" will be permitted to repeat a course only once and must achieve a grade of "C" at all evaluation periods. Students who repeat a course and who do not achieve a grade of "C" at an evaluation period will be disqualified from continuing in the curriculum. Students may also be disqualified for safety and other reasons consistent with College policy.

Eligibility for the Certification Examination and Licensure Examinations. Graduates who complete the Major or the Certificate of Achievement in Dental Assisting are eligible to take the Certification Examination given by the Dental Assisting National Board and the Licensure Examinations to become a Registered Dental Assistant given by the California Board of Dentistry.

Dental Assisting Certificate

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>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 51 Applied Dental Science I</td>
<td>4.0</td>
<td>DENT 54 Applied Dental Science II</td>
</tr>
<tr>
<td>DENT 52 Dental Materials and Procedures</td>
<td>3.0</td>
<td>DENT 55A Dental Roentgenography</td>
</tr>
<tr>
<td>DENT 53 Introduction to Chairside Assisting</td>
<td>3.0</td>
<td>DENT 57 Dental Office Management</td>
</tr>
<tr>
<td>DENT 55A Dental Roentgenography</td>
<td>2.0</td>
<td>DENT 56 The Dental Assistant in Practice</td>
</tr>
<tr>
<td>DENT 62 The Dental Assistant in Practice</td>
<td>3.0</td>
<td>DENT 57 Dental Office Management</td>
</tr>
</tbody>
</table>

Total: ........................................33.5

Announcement of Courses:

Credit, Degree Applicable Courses:

DENT 51. Applied Dental Science I (4)
Lec-52.5, Lab-52.5
Prereq: BIO 9 or ANAT 14 or ANAT 25 or PHYS I or PHYS 12;
Completion of or concurrent enrollment in: DENT 55A and DENT 62

DENT 52. Dental Materials and Procedures (3)
Lec-52.5
Prereq: Completion of or concurrent enrollment in: DENT 51 and DENT 55A and DENT 62
Coreq: DENT 53

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

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

DENT 55A. Dental Roentgenography (2)
Lec-17.5, Lab-52.5
Prereq: Completion of or concurrent enrollment in: DENT 51 and DENT 62

DENT 55B. Dental Roentgenography (2)
Lec-17.5, Lab-52.5
Prereq: DENT 51 and DENT 55A and DENT 62

DENT 56. The Dental Assistant in Practice (3)
Lec-35
Prereq: DENT 51 and DENT 52 and DENT 53 and DENT 55A
Coreq:  DENT 55B and DENT 57

DENT 57. Dental Office Management (3)
Lec-52.5
Prereq: DENT 51 and DENT 55A and DENT 62
Coreq: DENT 55B

Offered Fall semesters

Offered Spring semesters
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 orthodontic bands. Lab fee is required. CSU

**Offered Spring semesters**

DENT 70. Clinical Chairside Assisting (7)
Lec-42.5, Lab-10, work-264
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

**Offered Spring semesters**

DENT 110A. Coronal Polish (.5)
Lec-7, Lab-8
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 strain. The students will be required to provide their own patients and follow program’s sterilization, and infection control policies. CSU

**Offered Spring semesters**

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### Disabled Students 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 (1)
Lec-17.5
P/NP only
Recommended Prep: Completion of or concurrent enrollment in: ENGL 88 or ENGL 1AS or ENGL 1A or ESL 182 or ESL 184 or ESL 186 or ESL 188
Designed for students with learning disabilities who are 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.

DSPS X. Strategies for Success in Math (2)
Lec-26.25, Lab-35 P/NP only
Recommended Prep: MATH 30 or MATH 40 or MATH 43
Strategies for success in Math for students with learning disabilities who are enrolled in Math 30, 40, or 43. Emphasis on strategies for processing, language expression, memory, reasoning, and processing speed as they relate to Math.

**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 introduced 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. Emphasis on 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)
Recommended Prep: 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 utilizes 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 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.

**Modified for individuals with all levels of ability.**

DSPS 4305. High School Level Learning Strategies (105 hrs)
Recommended Prep: 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.
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>Core course:</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 3/GEOG 3/SUST 31 Introduction to Environmental Science</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Choose one of the following biological science courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 11 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>
</tbody>
</table>

**Choose one of the following chemistry courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 40 Introduction to Chemical Principles</td>
<td>5.0</td>
</tr>
<tr>
<td>CHEM 101A General College Chemistry</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**Choose one of the following earth science course combinations:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>GEOL 10 Physical Geology</td>
<td>3.0</td>
</tr>
<tr>
<td>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>GEOL 30L Environmental Geology Laboratory</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Choose one of the following math courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
</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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 3 Introduction to Social and Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 3C Introduction to Cultural Anthropology: Focus on American Cultures</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>GEOG 4 Cultural Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOG 7 Economic Geography</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 22 Environmental Politics and Policy</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Choose 6 units from the following courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</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>CHEM 101B General College Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>ENRG 3 Introduction to Alternative Energy Laboratory</td>
<td>1.0</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 Personal and Community Health</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 221 Health and Social Justice</td>
<td>3.0</td>
</tr>
</tbody>
</table>
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>GEOG 1 Physical Geography</td>
<td>3.0</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’s 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 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><strong>Required courses:</strong></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 10L Physical Geology Lab</td>
<td>2.0</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>
<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><strong>RECOMMENDED:</strong> One of the following physics courses</td>
<td></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>or 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>
<tr>
<td><em>NOTE:</em> 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).</td>
<td></td>
</tr>
<tr>
<td><strong>RECOMMENDED:</strong> One or more of the following course options</td>
<td>For specialization:</td>
</tr>
<tr>
<td>GEOL 21A San Francisco Coastal Geology</td>
<td>0.5</td>
</tr>
<tr>
<td>GEOL 21B San Francisco Geology</td>
<td>0.5</td>
</tr>
<tr>
<td>GEOL 21C The San Andreas Fault System</td>
<td>0.5</td>
</tr>
<tr>
<td>OCAN 1 Oceanography</td>
<td>3.0</td>
</tr>
<tr>
<td>GEOL 30 Environmental Geology</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Recommended additional activities:</strong></td>
<td></td>
</tr>
<tr>
<td>Enroll in the Earth Sciences Club</td>
<td></td>
</tr>
<tr>
<td>Become part of the Earth Sciences Mentoring Program (see Department website for details).</td>
<td></td>
</tr>
</tbody>
</table>

**Total:** 29.0

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**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:

- Make accurate field observations at outcrops, distinguishing those from interpretations, especially as relates to oceanographic phenomena.
- Apply the methods of scientific inquiry to investigate oceanographic phenomena.
- Synthesize ideas from physics, chemistry, biology, and geology to solve complex ocean-related problems
- Analyze and discuss scientific topics with rigor, including a skeptical evaluation of evidence.
- Evaluate the impacts of society on the ocean ecosystem.

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

Course ..............................................  Units
Core courses:
OCAN 1 Oceanography ................................. 3.0
OCAN IL Oceanography Lab ........................  2.0
CHEM 101A General College Chemistry ..........  6.0
MATH II0A Calculus I .................................  5.0
MATH II0B Calculus II ................................  5.0
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
Choose one of the following courses:
CHEM 101B General College Chemistry ..........  5.0
MATH II0C Calculus III ...............................  6.0
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 II0C
Enroll in a computer class, such as GEOG II0
Total: .................................................. 39.0 – 44.0

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, criminal justice, 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 generate written and graphic medias at a professional level.
- Locate, assess, and retrieve spatial data and knowledge across the GIS technical community to design solutions for GIS projects.
- Distinguish from among the underlying theories of GIS technology (including projections and spatial databases) to effectively design appropriate solutions to project needs.

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 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 Geographic Information Systems (GIS)

Course ....................................................  Units
Required courses:
GEOG II0 Introduction to GIS ........................  3.0
GEOG III GIS Analysis and Modeling .............  3.0
GEOG II2 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 1L)

GEOG II. 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 110; C-ID GEOG 115 (GEOG1 + GEOG 1L)

GEOG III. 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
Offered on occasion

GEOG IV. 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 VII. 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
Geography

GEOL 10. Physical Geology (3)
Lec-52.5, field trips
Recommended Prep: ((MATH 55 and MATH 60) or ET 108B)) and completion of or concurrent enrollment in ENGL 88 or ESL 188 or readiness for college-level English
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 GEOL 100; C-ID GEOL 101 (GEOL 10 + GEOL 10L)

GEOL 10L. Physical Geology Lab (2)
Lec-17.5, Lab-52.5, field trips
Prereq: completion of or concurrent enrollment in GEOL 10
Recommended Prep: ((MATH 55 and MATH 60) or ET 108B)); completion of or concurrent enrollment in: ENGL 88 or ESL 188
Introduction to the materials of the Earth with emphasis on the identification and interpretation of common minerals and rocks (especially those common to California); interpretation of topographic, geologic, and structural maps; and analysis of plate tectonics processes. UC/CSU
C-ID GEOL 100L C-ID GEOL 101 (GEOL 10 + GEOL 10L)
One mandatory field trip. Transportation is NOT provided.

GEOL 11. Historical Geology (3)
Lec-52.5, field trips
Recommended Prep: ((MATH 55 and MATH 60) or ET 108A)) and ENGL 88 or ESL 188 or readiness for college-level English
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 GEOL 110
Offered on occasion

GEOL 11L. Historical Geology Lab (1)
Lec-17.5, Lab-52.5, field trips
Prereq: completion of or concurrent enrollment in GEOL 11
Recommended Prep: ((MATH 55 and MATH 60) or ET 108A)); completion of or concurrent enrollment in: ENGL 88 or ESL 188
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 GEOL 110L
Offered on occasion

GEOL 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
GEOL 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  
Recommended Prep: (MATH 55 and MATH 60) or ET 108A; Completion of or concurrent enrollment in: ENGL 88 or ESL 188 or readiness for college-level English  
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 on occasion  

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 (hydrosphere, atmosphere, soil systems, and land forms). UC/CSU  
C-ID GEOL 130L; C-ID GEOL 131L (GEOL 30 + GEOL 30L)  
Offered on occasion  

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  
Recommended Prep: (MATH 55 and MATH 60) or ET 108A; completion of or concurrent enrollment in: ENGL 88 or ESL 188  
Introduction to the major physical, biological, chemical, and geological processes at work in the oceans. Covers the formation and evolution of the oceans through Earth’s history and the dynamics and interactions of currents, coastal processes, climate, seawater chemistry and physics, marine ecosystems, and society. UC/CSU  
OCAN 1L. Oceanography Lab (2)  
Lec-17.5, Lab-52.5, field trips  
Prereq: Completion of or concurrent enrollment in: OCAN 1  
Recommended Prep: (MATH 55 and MATH 60) or ET 108B); completion of or concurrent enrollment in: ENGL 88 or ESL 188  
Introduction to the 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  
One mandatory field trip. Transportation is NOT provided.  

Economics  
Office: Batmale 656  
Phone Number: (415) 239-3330  
Web Site: www.ccsf.edu/socialsci  

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 the 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, analyze, 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 (AAT) must complete 60 CSU transfer
able 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>Units</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>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>
</tr>
<tr>
<td>PSYC 5 Statistics for Behavioral Sciences</td>
<td>5.0</td>
</tr>
</tbody>
</table>

* ECON 5 is recommended.

Choose one of the following Calculus options:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 110A Calculus I</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 100A Short Calculus I</td>
<td>3.0</td>
</tr>
</tbody>
</table>

* 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.

Choose ONE of the following elective courses (List A):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 110B Calculus II</td>
<td>5.0</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>
</tbody>
</table>

Choose ONE of the following elective courses (List B):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 6 International Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 15 Political Economy</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 20 LGBT Economics</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 25 Women in the Economy</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 30 Economics of the African American Community</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 22.0 – 24.0

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 placement in MATH 60 or other demonstration of exit skills
Recommended Prep: 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
Recommended Prep: 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
C-ID MATH H0

ECON 6. International Economics (3)

Lec-52.5
Introduction to the general principles, terminology, and methods of international economics, with emphasis on international trade. Examine several alternative models of international trade as well as foreign exchange markets, currency/financial crisis, globalization, unfair trade practices, regional integration, and the impact of trade on economic growth. 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 main-stream economic and political economy theories of gender inequality. 

UC/CSU

Offered on occasion

ECON 30. Economics of the African American Community (3)  
Pnc-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 economic development. The empirical link between race, class and income distribution will also be examined. UC/CSU

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, draftspersons, 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 a four-year institution 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>
</table>

Recommended First Semester:
- ENGN 10A Introduction to Engineering: The Profession 2.0
- ENGN 10B Introduction to Engineering: Software Tools and Design 2.0
- MATH 110A Calculus 5.0

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
- ENGN 20 Introduction to Circuit Analysis 3.0
- ENGN 20L Introduction to Circuit Analysis Laboratory 1.0
- ENGN 38 Introduction to Programming Concepts and Methodologies for Engineers 3.0
- MATH 110B Calculus II 5.0
- MATH 110C Calculus III 5.0
- MATH 125 Differential Equations 3.0
- PHYC 4A Classical Mechanics for Scientists and Engineers 3.0
- PHYC 4AL Mechanics Laboratory for Scientists and Engineers 1.0
- PHYC 4BL Electromagnetism Laboratory for Scientists and Engineers 3.0
- PHYC 4C Waves and Thermodynamics 3.0
- PHYC 4CL Waves and Thermodynamics Laboratory for Scientists and Engineers 1.0

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 successful 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.

* ET 108B can be replaced by an equivalent or more advanced math course.

Choose one of the following required Biology courses:
- BIO II 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 103 Protein Purification ........................... 2.0
- 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

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**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 all prerequisites are met, 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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGN 10A Introduction to Engineering: 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 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYC 2B Introductory Physics</td>
<td>3.0</td>
</tr>
<tr>
<td>MATH 100A Short Calculus I</td>
<td>1.0</td>
</tr>
<tr>
<td>CMST 12 Fundamentals of Oral Communication</td>
<td>3.0</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>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>
</tbody>
</table>

#### 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 | 4.0 |

**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: The Profession</td>
<td>2.0</td>
</tr>
</tbody>
</table>

ET 50 Technical Mathematics ................................. 4.0
ET 104 Introduction to Engineering Drawing and Manufacturing ................................. 2.0
ELEC 101 Electronics I: Essentials of Electronics Measurements and Passive Circuits ................. 2.5
PHYC 2A Introductory Physics ................................ 3.0
PHYC 2AL Introductory Physics Laboratory ................. 1.0
PHYC 2B Introductory Physics ................................ 3.0
PHYC 2BL Introductory Physics Laboratory ................. 1.0

Choose one of the following Speech options:

CMST 12 Fundamentals of Oral Communication ............... 3.0
CMST 4 Group Communication ................................ 3.0
CMST 11 Basic Public Speaking ................................. 3.0

Choose one of the following concentration OPTIONS:

OPTION 1: Computer Aided Drafting

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 180 Introduction to Technical Drawing</td>
</tr>
<tr>
<td>CAD 181 Introduction to Computer Aided Drafting CAD I</td>
</tr>
<tr>
<td>CAD 182 Engineering Detailing in Revit</td>
</tr>
<tr>
<td>CAD 184 Structural Building Information Modeling (BIM) in Revit</td>
</tr>
<tr>
<td>CAD 190 Part Modeling in SolidWorks</td>
</tr>
<tr>
<td>CAD 99A 3D Printing &amp; Solid Modeling</td>
</tr>
<tr>
<td>CAD 99B Advanced AutoCAD Techniques</td>
</tr>
</tbody>
</table>

OPTION 2: HVACR and Engineered Plumbing Systems

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 130 Applied Fluid Mechanics for Mechanical Engineering Technology</td>
</tr>
<tr>
<td>ET 136A HVAC System Fundamentals</td>
</tr>
<tr>
<td>ET 136B Fundamentals of Air Conditioning and Refrigeration</td>
</tr>
<tr>
<td>ET 139A Engineering Plumbing Systems</td>
</tr>
<tr>
<td>ET 139B Plumbing System Design Fundamentals</td>
</tr>
<tr>
<td>CAD 187 Mechanical, Electrical, and Plumbing (MEP) Building Information Modeling (BIM) in Revit</td>
</tr>
</tbody>
</table>

ELECTIVES -- choose 3 units from the following courses:

- ENGN 24 Engineering Design Graphics ...................... 3.0
- ENGN 38 Introduction to Programming Concepts and Methodologies for Engineers ...................... 3.0
- WELD 140 Manufacturing Processes ...................... 3.0
- WELD 141 Welding and Fabrication ...................... 3.0
- WELD 142 Welding and Fabrication ...................... 3.0
- WELD 143 Welding and Fabrication ...................... 3.0
- WELD 144 Welding and Fabrication ...................... 3.0

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

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 (HVAC) 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 from 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

Course .............................................. Units

ET 136A HVAC System Fundamentals .......................... 2.0
ET 136B Fundamentals of Air Conditioning and Refrigeration ... 2.0
CAD 187 Mechanical, Electrical, and Plumbing (MEP) Building Information Modeling (BIM) in Revit .... 2.5
Total: .............................................. 9.5

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

Course .............................................. Units

Required courses:
BTEC 115 Recombinant DNA Biotechnology .................. 2.0
BTEC 22 Enzyme Linked Immunosorbent Assay (ELISA) .................. 1.0
BTEC 21A Mammalian Cell Culture .......................... 2.0
BTEC 24 Introduction to PCR .......................... 1.0
BTEC 25 Analytical PCR Technology .................. 1.0
BTEC 1115 Recombinant DNA Biotechnology .............. 5.0
BTEC 120 Cell Biotechnology .................................. 5.0
Total: .............................................. 15.0

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 biotech-
nology 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 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

Course........................................Units
Required courses
BTEC 10 Research Skills for Career Opportunities in
Biology ........................................... 2.0
BTEC 107 Language Skills for Technicians .......... 3.0
BTEC 108A Practical Mathematics for Laboratory
Science ........................................... 3.0
BTEC 12A GLP and GMP Principles .................. 1.0
BTEC 14A Biotechnology Laboratory Techniques .... 2.0
BTEC 14B Biotechnology Internship Support ........ 4.0
Total.......................................15.0

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 labo-
ratory 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 cel-
lular 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 equiva-
lent) 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

Course........................................Units
Required courses:
BTEC 21A Mammalian Cell Culture .................... 2.0
BTEC 21B Fluorescent Cell Technology .............. 2.0
BTEC 21C Stem Cell Technology ...................... 3.0
BTEC 12A GLP and GMP Principles ................. 1.0

Choose at least 2 units of the following course or course
combinations:
BTEC 115 Recombinant DNA Biotechnology ........ 5.0
BTEC 24 Introduction to PCR ...................... 4.0
and BTEC 25 Analytical PCR Technology .......... 1.0

Choose at least 2 units from the following course or course
combinations:
BTEC 120 Cell Biotechnology ....................... 5.0
BTEC 118 Enzyme Linked Immunosorbent Assay
(ELISA) ........................................ 1.0
and BTEC 23 Western Blotting Techniques .......... 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, 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 utili-
ties, medical gas, compressed air, decorative pools, swimming
pools water treatment, waste water treatment, automatic fire
sprinklers.
• Propose solutions to problems dealing with basic principles of
fluid flow, including the general energy equation, friction losses,
pressure on submerged surfaces, buoyant forces, flow measure-
ment, pump and fan performance characteristics and flow of
real fluids in open and closed conduits.
• Employ standard practices in fire protection system design.

Students 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 previ-
ous 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 require-
ments as approved 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

Course........................................Units
Required courses:
ET 130 Applied Fluid Mechanics for Mechanical Engineering
Technology .................................. 3.0
ET 139A Engineering Plumbing Systems .......................... 3.0
ET 139B Plumbing System Design Fundamentals .............. 3.0
CAD 187 Mechanical, Electrical, and Plumbing (MEP)
Building Information Modeling (BIM) in Revit ............... 2.5
Total: .................................................. 11.5

Machining Technology Level I Certificate

Machining technology programs prepare graduates for careers in manufacturing industries. Topics include detailed drawing (electrical, electronic, and mechanical) blueprint reading, hands-on set up, machine tools, and machine shop operations with emphasis on lathes, horizontal and vertical milling machines.

Learning Outcomes

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

• Apply basic measuring tools (steel rules, vernier calipers, and micrometers), layout tools, and hand tools.
• Comply with current machine shop safety and environmental regulations.
• Perform basic operations using manual mills, lathes, and drill presses in accordance with industry recognized and accepted practices.

Students may apply for certificate having completed course work 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 Machining Technology Level I

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 104 Introduction to Engineering Drawing and Manufacturing</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 140 Manufacturing Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Machining Technology Level II Certificate

Machining technology programs prepare graduates for careers in manufacturing industries. A level II certificate includes basic machine shop blueprint reading and machine shop operations. Added are more advanced applications of lathes and milling which include Computer Numerical Control (CNC) training in G and M codes and explanation of Geometric Dimensioning and Tolerancing (GD&T) symbols and their meanings.

Learning Outcomes

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

• Utilize hand and layout tools.
• Comply with current machine shop safety and environmental regulations.
• Perform operations using manual mills, lathes, and drill presses in accordance with industry recognized and accepted practices.
• Develop tool path codes required to produce products using multi axis CNC turning equipment.
• Establish uniform dimensioning and tolerancing practices on manufacturing drawings.

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 Machining Technology Level II

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET 104 Introduction to Engineering Drawing and Manufacturing</td>
<td>2.0</td>
</tr>
<tr>
<td>WELD 140 Manufacturing Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>ET 150 Metrology and CNC Machining</td>
<td>2.0</td>
</tr>
<tr>
<td>Total:</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Sustainability Certificate

The Sustainability Certificate Program is designed for working professionals, business owners, and students working towards a degree who wish to understand and apply sustainability concepts to their existing or future educational pathways and careers.

Learning Outcomes

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 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>SUST 91 Applied Research in Sustainability</td>
<td>2.0</td>
</tr>
<tr>
<td>Choose 6 units from the following elective courses:</td>
<td></td>
</tr>
<tr>
<td>Biology Department:</td>
<td></td>
</tr>
<tr>
<td>BIO 19 Ecology</td>
<td>1.0</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>Earth Sciences Department:</td>
<td></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 Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>Engineering and Technology Department:</td>
<td></td>
</tr>
<tr>
<td>BTEC 5 Briefings in Biotechnology</td>
<td>1.0</td>
</tr>
<tr>
<td>ENRG 3I Introduction to Alternative Energy</td>
<td>1.0</td>
</tr>
<tr>
<td>Laboratory</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Social Sciences Department:
POLS 22 Environmental Politics and Policy ................. 3.0
Total: .................................................. 14.0

**Basic Electronics Certificate**

The Certificate in Basic Electronics includes instruction in the fundamental principles of electronics. Students will be able to apply this knowledge and understanding to perform tests, troubleshooting and repair of analog and digital electronic circuits and instruments. 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>
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</thead>
<tbody>
<tr>
<td>Total:</td>
<td>14.0</td>
</tr>
</tbody>
</table>

**Intermediate Electronics Certificate**

The Certificate in Intermediate Electronics provides 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, students 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.
- Verify circuit performance using typical electronic test and measurement equipment following industry accepted procedures.
- Determine circuit parameters and component values via related rules and calculations.
- Design and merge analog and digital technology in modern radio circuits.
- Describe a digital design, implement and test it using design software tools.
- Program a microcontroller to interface to electrical and electromechanical devices.

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 Intermediate Electronics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total:</td>
<td>15.0</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

Course: ............................................. Units

Required courses:
ARCH 20 Architectural Graphics I. ...................... 3.0
BIM 120 Revit Architecture I. ..................... 3.0
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 performing 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 manufacturing 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 Lectures in Manufacturing Processes ............... 3.0
WELD H44A Survey of Welding Processes ................. 2.0
WELD H44B 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 H44C 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

Welding Technology Level I Certificate

The Welding Technology program provides students with training in oxy-acetylene cutting, AC/DC shielded metal arc welding, gouging, semi-automatic gas metal arc welding, flux core welding and tungsten inert gas welding. Training in the planning, layout, forming, joining, and fabrication of various shapes in light and heavy gauge metal and pipes is provided. Students will work on various projects throughout the time they are enrolled in the welding program.

Learning Outcomes

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

- Demonstrate the use of welding and metal cutting processes safely and correctly.
- Perform diverse welding procedures on steel test plates in two or more welding positions.
- Select and calibrate welding and cutting methods to fabricate assigned projects.

Students may apply for certificate having completed course work within the past 5 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 Accomplishment in Welding Technology Level I

Course ......................................................... Units
Required courses:
WELD 144A Survey of Welding Processes .............. 2.0
WELD 144B Intermediate Welding Processes .......... 2.0
WELD 144C Advanced Welding Processes .......... 2.0
Total: ......................................................... 6.0

Announcement of Courses

Biotechnology

Credit, Degree Applicable Courses:
BTEC 5. Briefings in Biotechnology (1)
Lec-18 P/NP available
Career professionals in biotechnology and related fields will discuss their current bioscience programs and provide information on career opportunities and pathways. Presentations will cover basic research, new products, processes, and prospects for the future in medicine, environmental restoration, forensics, and agriculture. Implications for society and governmental regulations will also be discussed. UC/CSU

BTEC 6. Basics of Cell Culture (1)
Lec-9, Lab-27, field trips P/NP available
Recommended Prep: 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
Coreq: BTEC 107; BTEC 108A
Recommended Prep: ESLN 3700 or ESL 182 or ENGL 88 or placement into ESLN 3800 or ESL 184
Introduction to the laboratory skills and concepts necessary to work in the biotechnology industry, allied health or other biology-related fields. This course is part of the learning community Bridge to Biosciences program. CSU

BTEC 12A. GLP and GMP Principles (1)
Lec-18, Lab-6, field trips P/NP available
Recommended Prep: ESLN 3700 or ESL 182 or ENGL 88 or placement in ESLN 3800 or ESL 184
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
Recommended Prep: Completion of or concurrent enrollment in BTEC 10
An introduction to laboratory techniques needed for entry-level positions in the biotechnology industry and research laboratories. The course covers basic lab skills such as solution making, bacteria cultures, plasmid DNA and protein purification. Intended as an introductory class for the students in preparation of the more advanced biotechnology classes and/or an internship in a biotechnology lab for students who complete the Bridge to Biosciences. CSU

BTEC 14B. Biotechnology Internship Support (4)
Lec-70, field trips
Prereq: BTEC 14A and BTEC 15
Coreq: BTEC 93
Support for student interns placed in local bioscience laboratories. Provide tools to effectively communicate internship experience, present scientific concepts and network with professionals in the field. Types of internships may include, but are not limited to basic research, biomanufacturing, environmental sciences, quality control or assurance technicians. CSU

The BTEC 14A prerequisite can be satisfied by passing 4 units of CCSF Biotechnology Program laboratory courses. Contact the instructor to challenge the BTEC 14A prerequisite.

BTEC 15. Career Exploration in Bioscience (2)
Lec-35, Lab-17.5 P/NP available
Recommended Prep: Completion of or concurrent enrollment in any laboratory course in the CCSF Biotechnology Program or Bridge to Biosciences Program (BTEC 10, 107 and 108A); ESLN 3700 or ESL 182 or ENGL 88 or placement into ESLN 3800 or ESL 184
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
Prereq: BTEC 14A and BTEC 15
Lec-70, field trips
Recommended Prep: (MATH 40 or ET 108A) and BIO 11 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
Lec-36, Lab-18, field trips
Recommended Prep: (MATH 40 or ET 108A) and BIO 11 and (CHEM 32 or CHEM 40)
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
Lec-26.25, Lab-26.25
Recommended Prep: Completion of or concurrent enrollment in BTEC 10
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
Coreq: 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 iPS cells, immunolocalization, microarray analysis and tumor cell characterization.

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 iPS cells, immunolocalization, microarray analysis and tumor cell characterization.

Offered Spring semesters

BTEC 22. Enzyme Linked Immunosorbent Assay (ELISA) (1)
Lec-17.5, Lab-10.5, field trips P/NP available
Recommended Prep: 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.

BTEC 23. Western Blotting Techniques (1)
Lec-16, Lab-8, field trips P/NP available
Recommended Prep: 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.

BTEC 24. Introduction to PCR (1)
Lec-16, Lab-8 P/NP available
Recommended Prep: 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.

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 techniques. 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.

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.

BTEC 103. Protein Purification (2)
Lec-28, Lab-28 P/NP available
Recommended Prep: CHEM 32 AND (BIO II OR BTEC 10) AND BTEC 120
An introduction to protein purification techniques including sample preparation, column chromatography, and analysis of purification. Hands on training with manual and automated chromatography systems used in industry and research laboratories. Purification analysis includes gel electrophoresis, specific activity, and mass balance calculations.

BTEC 107. Language Skills for Technicians (3)
Lec-52.5, Lab-17.5 Coreq: BTEC 10 AND BTEC 108A
Recommended Prep: ESLN 3700 OR ESL 182 OR ENGL 88 OR PLACEMENT IN ESLN 3800 OR ESL 184
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.

BTEC 108A. Practical Mathematics for Laboratory Science (3)
Lec-52.5, Lab-17.5 Coreq: BTEC 10 AND BTEC 108A
Recommended Prep: ESLN 3700 OR ESL 182 OR ENGL 88 OR PLACEMENT IN ESLN 3800 OR ESL 184
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.

BTEC 115. Recombinant DNA Biotechnology (5)
Lec-52.5, Lab-105, field trips P/NP available
Recommended Prep: CHEM 32 AND (BIO II OR BTEC 10) AND BTEC 108A
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.

BTEC 120. Cell Biotechnology (5)
Lec-52.5, Lab-105, field trips P/NP available
Recommended Prep: 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 lysates, Western blot, immune precipitation, 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Prerequisite: 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  
Hardware-oriented digital logic systems. Digital to analog interfacing using digital-to-analog (D/A) and analog-to-digital (A/D) integrated circuits. Introduction to programmable logic devices, field programmable gate arrays (FPGA), VHDL (VHSIC Hardware Description Language), and Verilog hardware description language, and various computer memories. CSU

Offered Fall 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 102A or demonstration of exit skills  
Recommended Prep: ELEC 102B  
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  
Recommended Prep: Concurrent enrollment in ENRG 3L  
Introduction to the science that underpin 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; photo-synthesis; 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  
Recommended Prep: 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  
Recommended Prep: 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, Thevenin 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  
Recommended Prep: 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 orthogonal 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

Lec-52.5  
Prereq: PHYC 4A and Completion of or concurrent enrollment in: MATH 110C  
Recommended Prep: 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
ENGN 37. Engineering Mechanics - Dynamics (3)
Lec-52.5
Prereq: ENGN 36
Recommended Prep: 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
Recommended Prep: 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)
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.

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 130. Applied Fluid Mechanics for Mechanical Engineering Technology (3)
Lec-52.5
An introduction to fluid statics and the basic laws of fluid flow; conservation of mass, momentum and energy. Applications of the basic laws to internal and external incompressible flow, including specific topics in pipe flow systems, centrifugal pumps and fans, streamlining, fluid flow meters, psychometrics of air and water-vapor mixtures, and basic elements of air conditioning. Use of psychometric instruments and psychometric charts to graphically analyze processes. CSU

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
Recommended Prep: 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
Recommanded Prep: 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
Recommended Prep: 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

Credit, Degree Applicable Courses:

EMSA 22. Foundations in Environmental Instrumentation, Sampling and Monitoring (4)
Lec-52.5, Lab-52.5, field trips P/NP available
Recommanded Prep: MATH 40 or ET/BTEC 108A or placement in MATH 60; BIO 11; 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
Recommended Prep: BIO 11 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 31. Introduction to Environmental Science (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
SUST 31 = BIO 31 = GEOG 31

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
Recommended Prep: (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

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 and fabrication 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 including Gas Tungsten Arc Welding (GTAW) of 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
Recommended Prep: 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

Announcement of Curricula

English
Office: Batmale 556
Phone Number: (415) 239-3406
Web Site: www.ccsf.edu/english

English Major (AA-T)

Associate in Arts in English for Transfer. CCSF’s English major offers a wide variety of language, literature, and writing courses 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 in 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 IGEC 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

Course .................................. Units

Required Group 1: Core Reading and Composition courses:
ENGL IB Writing about Literature ................. 4.0
ENGL IC Writing about Nonfiction ................. 4.0

Choose 6 units from Group 2: Core Survey courses:
ENGL 30A American Literature, Beginnings to Civil War ........................................ 3.0
ENGL 30B American Literature, 1865-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 2: Late-17th through the Mid-19th Century ........ 3.0
ENGL 46C Survey of Literature in English, Part 3: Mid- Nineteenth through the Twentieth Century ...... 3.0

Choose 6 units from Group 3: Specialized Literature courses:
ENGL 35A Introduction to Writing Fiction .............. 3.0
ENGL 35B Intermediate Fiction Writing ................ 3.0
ENGL 35C Introduction to Writing Poetry .............. 3.0
ENGL 35D Intermediate Poetry Writing ................. 3.0
ENGL 35L Introduction to Literary Magazine .......... 3.0
ENGL 35M Intermediate Literary Magazine .............. 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 48C Science Fiction and Fantasy ................. 3.0
ENGL 48K The Bible as Literature ...................... 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
CLAS 35 Tragic Drama of Greece .......................... 3.0
Group 2 courses not already taken ................... 3.0
Total: ................................................. 20.0

**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 8 units from Group 1: Core Reading and Composition courses:
ENGL 1A University-Parallel Reading and Composition ................... 4.0
ENGL 1B Writing about Literature* .................. 4.0
ENGL 1C Writing about Nonfiction .................. 4.0
* 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 1: Beowulf through Milton ......... 3.0
ENGL 46B Survey of Literature in English, Part 2: 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: ................................................. 20.0

**Creative Writing Certificate**

The Creative Writing Certificate is interdisciplinary, allowing students to major or minor in creative writing and develop skills that support careers in publishing, editing, web-editing, and non-profit organizations in the arts/arts education. 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.

**Learning Outcomes**

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

- Identify craft elements of creative writing.
- Analyze and appraise published and unpublished literary work for its literary merit.
- Analyze and appraise the relationship between culture and literary expression.
- Compose original creative works in various genres.
- Apply skills used in the publication process.
- Design 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. Students must complete all courses 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 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
ENGL 35G Introduction to Writing Creative Nonfiction .... 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
ENGL 35H Intermediate Creative Nonfiction Writing .... 3.0
* Courses used in one section cannot be used to fulfill a requirement for another section.

**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

Courses used in one section in one section cannot be used to fulfill a requirement for another section.

**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 2: Late-17th through the Mid-19th Century ........................................................................................................ 3.0
- ENGL 46C Survey of Literature in English, Part 3: Mid-Nineteenth 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, and Literature: Traditional .................................................... 3.0
- or 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 Fā'a Pasefika: Interdisciplinary Cultural Expressions of Oceania ...... 3.0
- WGST 20 Her/His/Ourstories ............................................................................... 3.0
- Total: .................................................................................................................. 15.0

**Announcement of Courses**

CCSF English assessment and placement is required prior to enrollment in English courses. For more information, please see "Matriculation Steps for Enrollment in Credit Courses" 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.

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 the prerequisite challenge process, see the Matriculation Office webpage (https://www.ccsf.edu/en/student-services/matriculation_services.html) or meet with the English Eligibility Coordinator in Building 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 12. English Bridge (1.5)
  - Lec-26.25 P/NP only
  - A short term English Composition course offered to incoming and continuing students as preparation for full-term English courses.

**Credit, Degree Applicable Courses:**
- 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.

  **This course is not intended for ESL students.**

- ENGL 88. College Reading and Writing (6)
  - Lec-105, field trips
  - 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.

- ENGL 88A. College Reading and Writing (3)
  - Lec-52.5, field trips
  - 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 88B. College Reading and Writing (3)
  - Lec-70, field trips
  - 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.

- ENGL 1A. University-Parallel Reading and Composition (4)
  - Lec-70, field trips
  - Prereq: ENGL 88 or ENGL 88B or ESL 188 or placement in ENGL 1A
  - University-parallel reading, writing, and critical thinking with a major research component. Reading, writing, and research assignments are based predominately on non-fiction texts. UC/CSU C-ID ENGL 100 (ENGL 110)

- ENGL 1A. English 1A Support (2)
  - Lec-35, field trips
  - P/NP available
  - Prereq: Placement into ENGL 1AS
  - Coreq: ENGL 1A
  - This supplemental course, taken in conjunction with English 1A (depending on placement), provides additional support for students in English 1A in academic essay writing and analytical reading. Emphasis is on writing process and the skills involved in reading multiple academic texts and developing and revising text-based, thesis-driven essays at the collegiate level. CSU

  **This course must be taken in conjunction with English 1A**

- ENGL 1B. Writing about Literature (4)
  - Lec-70
  - Prereq: ENGL 1A
  - University-parallel reading, writing, and critical thinking applied to literature, including poetry, drama, and fiction. Essay writing employing
methods of literary analysis, academic research, and critical thinking. UC/CSU
C-ID ENGL 110; C-ID ENGL 120 (ENGL - LIT 100)

ENGL 1C. Writing about Nonfiction (4)
Lec-70, field trips
Prereq: ENGL 1A
A course in composition and rhetoric that helps students hone a style appropriate for upper-division work that integrates the close reading of nonfiction and the writing of expository and argumentative essays. Focus on sharpening critical thinking skills, analyzing and evaluating texts, and writing text-based prose. UC/CSU
C-ID ENGL 105 (ENGL 115)

ENGL 10. Introduction to English Tutoring (2)
Lec-36
Prereq: ENGL 1A
This course is designed to train students who wish to tutor in the English Lab or other English tutorial programs or classrooms on campus. The course content will cover tutoring theory and effective strategies for peer tutoring in English. CSU

ENGL 16. Academic Writing Workshop (3)
Lec-52.5
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
Recommended for students eligible for ENGL 1A. ENGL 16 does not satisfy any part of the graduation requirement in written composition; completion of ENGL 16 does not qualify a student for ENGL 1A
Offered on occasion

ENGL 17. Writing Workshop for English 1A (1.5)
Lec-26.25
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Offered on occasion

ENGL 26. English Grammar and Sentence Combining (3)
Lec-52.5
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
Recommended for students who wish to improve their knowledge and understanding of basic English grammar and those who want to tutor English/ESL.

ENGL 26A. English Grammar: Sentence Core (1)
Lec-17.5
This course teaches the fundamentals of parts of speech and strategies for identifying errors in pronoun and verb use to help students understand and fix common grammatical errors. CSU
Recommended for students who wish to improve their knowledge and understanding of basic grammar. ENGL 26 = ENGL 26A + ENGL 26B + ENGL 26C

ENGL 26B. English Grammar: Sentence Structure (1)
Lec-17.5
This course teaches the fundamentals of sentence structure and strategies to help students understand and fix common grammatical errors. CSU
Recommended for students who wish to improve their knowledge and understanding of basic grammar. ENGL 26A + ENGL 26B + ENGL 26C

ENGL 26C. English Grammar: Sentence Combining (1)
Lec-17.5
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
Recommended for students who wish to improve their knowledge and understanding of basic and more advanced English grammar and/or tutor English/ESL. ENGL 26A + ENGL 26B +ENGL 26C

ENGL 30A. American Literature, Beginnings to Civil War (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Beginning poetry writing course: reading, listening to, and analyzing poetry in order to apply basic poetic techniques to their work. Poetry
writing, both in and out of class, and workshopping with 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
Recommended Prep: ENGL 35C; ENGL 88 or ESL 188 or readiness for college-level English
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 35G. Introduction to Writing Creative Nonfiction (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 35L
The class teaches students intermediate to advanced editorial and project management skills involved in publishing a literary magazine, including managing submissions and reading groups and coordinating with other departments on design and layout. CSU Offered Spring semesters

ENGL 43. Introduction to Poetry (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 96 or ENGL 88 or ESL 188 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 important 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-LIT 165) 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- Nineteenth 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-LIT 165) 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
The roots, twentieth-century rise, and contemporary status of the science fiction and fantasy literary genres are studied. Focus is on
ENGL 48K. The Bible as Literature (3)
Lec-52.5, field trips  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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  P/NP available
Prereq: ENGL 88 or ENGL 88B or ESL 188 or placement in ENGL 1A
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 54. Children's and Young Adult Literature (3)
Lec-52.5, field trips  P/NP available
Recommended Prep: ENGL 88 or ENGL 88B or ESL 188 or readiness for college-level English
Children's and young adult literature from fairy tales to vampires, from monsters to magicians, including history, features, and cultural influences. Literary criticism and analysis applied to texts from diverse authors, cultures, and time periods, plus the social construction of the experience of youth and the meaning of "childhood." UC/CSU
Offered on occasion

ENGL 57. Survey of Women's Literature (3)
Lec-52.5, field trips  P/NP available
Prereq: Eligibility for English IA
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: Eligibility for English IA
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

ENGL 61. Literature and Film (3)
Lec-52.5, field trips  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Critical analysis of literary texts in relation to film. Develop critical thinking and literary analysis skills, and acquire knowledge of literary and film techniques, by examining the relationship between filmed and written versions of a single text, theme, social issue, historical period, or ethnic/cultural experience. UC/CSU

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 writing, reading, study skills, or research.

Announcement of Course
Credit, Degree Applicable Course:
CLAS 35. Tragic Dramas of Greece (3)
Lec-52.5, field trips  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

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.

Required courses:
- ENGL 35K. Survey of Women's Literature (3)
- ENGL 35M. Contemporary Women's Writing (3)
- ENGL 48K. The Bible as Literature (3)
- ENGL 51. The Graphic Novel as Literature (3)
- ENGL 52. Shakespeare (3)
- ENGL 54. Children's and Young Adult Literature (3)
- ENGL 57. Survey of Women's Literature (3)
- ENGL 58. Contemporary Women's Writing (3)
- ENGL 61. Literature and Film (3)
- ENGL 1000. Supplemental Instruction in English (50 hrs)
- CLAS 35. Tragic Dramas of Greece (3)

Total Units: 25
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: ....................................................................... 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, employers, and others with documented evidence of persistence and academic accomplishment in listening and speaking in academic and professional environments.

**Learning Outcomes**

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

- Analyze and synthesize complex oral and written material to participate in academic or professional oral discourse.
- Negotiate challenging listening encounters in academic or professional settings.
- Speak with fluency and accuracy in advanced academic or professional oral discourse.
- Recognize and correct pronunciation errors that impede successful 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 English as a Second Language Oral Communication Skills**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 142 High Intermediate Listening/Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>ESL 79 Advanced Speaking and Pronunciation</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose one of the following course electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 66 Advanced Listening and Reading</td>
<td>3.0</td>
</tr>
<tr>
<td>ESL 69 Accent Improvement</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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 12. ESL Bridge (1.5)  
Lec-26.25  
Recommended Prep: High School Diploma

A short-term ESL multi-skills course offered to incoming and continuing students as preparation for full-term ESL courses and the placement process.

ESL 75. Intermediate Editing and Grammar Review (3)  
Lec-52.5  
Prereq: ESLA 3180 or placement in ESL 182

Support for non-native speakers of English; intermediate grammar for texts which are lightly adapted for ESL and composition; editing/proofooding skills to improve quality and accuracy of written pre-college work at the intermediate level.

ESL 85. Advanced Editing and Grammar Review (3)  
Lec-52.5  
P/NP available  
Prereq: ESL 184 or ESL 75 or placement in ESL 186

Recommended Prep: Concurrent enrollment in ESL 186 or ENGL 88 or ENGL 88B

Support for non-native speakers of English; advanced grammar for high level texts and composition; editing/proofooding skills to improve quality and accuracy of written pre-college work at the advanced level.

ESL 95. High Advanced Editing and Grammar Review (3)  
Lec-52.5  
P/NP available  
Prereq: ESL 85 or ESL 186 or placement in ESL 188 or ENGL 1A

Recommended Prep: Completion of or concurrent enrollment in ESL 188 or ENGL 88 or ENGL 1A

Support for non-native speakers of English. High-advanced grammar for college and other authentic texts and composition. Editing/proofooding skills to improve quality and accuracy of written college work at the advanced level.

ESL 112. High Beginning Listening/Speaking (3)  
Lec-52.5  
P/NP available

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 low-intermediate 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 122. Low-Intermediate Listening/Speaking (3)  
Lec-52.5  
P/NP available  
Prereq: ESLA 3180 or placement in ESL 122

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 182, depending on the Reading/Writing course placement**

ESL 132. Intermediate Listening/Speaking (3)  
Lec-52.5  
P/NP available  
Prereq: ESLA 3180 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 182 or ESL 184 (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 182 or ESL 184 or ESL 186 (depending on Reading/Writing course placement)*

ESL 182. Intermediate Academic ESL (6)  
Lec-105, Lab-15  
Prereq: ESLA 3180 or placement in 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  
Prereq: ESLA 3180 or placement in ESL 182  
Systematic practice in American English sounds and speech for improved reading and oral communication, especially listening and pronunciation. Recommended for ESL 182 and 184 students. CSU *Intended to be taken together with a reading/writing class, such as ESL 182 and a listening/speaking class, such as ESL 122 or 132*

ESL 51A. ESL for Child Development (3)  
Lec-52.5  
Prereq: ESLA 3180 or placement in ESL 182  
Recommended Prep: ESL 182 or placement in ESL 184  
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 182 or placement in 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 67. Practical Writing for ESL Students (3)  
Lec-52.5  
Prereq: ESL 182 or placement in ESL 184  
Practice in interpreting documents, professional and academic applications and other written instructions, and composing a variety of writings, including those required to apply for admissions, scholarships, internships and employment opportunities, to take advantage of opportunities and funding, and to problem solve and engage effectively in civic life. CSU

ESL 69. Accent Improvement (3)  
Lec-52.5, Lab-15  
Prereq: ESL 182 or placement in ESL 184  
Improvement in standard American English pronunciation with emphasis on accent reduction, by improving overall clarity, voice quality, and physical presentation. Recommended for ESL 140, 150, 160 students with pronunciation problems. CSU

ESL 79. Advanced Speaking and Pronunciation (3)  
Lec-52.5  
Prereq: ESL 184 or placement in ESL 186  
Recommended Prep: 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 184. High Intermediate Academic ESL (6)  
Lec-105, Lab-15  
Prereq: ESL 182 or placement in 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 courses 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 184 or placement in 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 High Oral Communication 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
ESL Pre-Academic

Vocational ESL Programs
ESL Beginning Workplace Skills
Beginning VESL Communication
Beginning VESL for Janitorial Workers
Beginning VESL for the Hospitality Industry
High Beginning VESL for Search
High Intermediate ESL for Health Professionals
Intermediate VESL for Job Searching
Intermediate VESL-Office Workers
VESL for Construction Workers
VESL Preparation-Healthcare Careers
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 community 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

Course .................................................. Hours
Choose one of the following literacy courses:
ESLN 3010 ESL Literacy A (175 hrs) .................................. 175.0
ESLN 3015 ESL Literacy A ............................................. 85.0
ESLN 3100 Beginning Low 1 (175 hrs) ............................. 175.0
ESLN 3105 Beginning Low 1 Abridged .............................. 85.0

Choose one of the following Beginning Low 1 courses:
ESLN 3100 Beginning Low 1 (175 hrs) ............................. 175.0
ESLN 3105 Beginning Low 1 Abridged .............................. 85.0

Total: ..............................................175.0 – 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

Course .................................................. Hours
Choose one of the following Beginning Low 1 courses:
ESLN 3100 Beginning Low 1 (175 hrs) ............................. 175.0
ESLN 3105 Beginning Low 1 Abridged .............................. 85.0

Choose one of the following the Beginning Low 2 courses:
ESLN 3120 Beginning Low 1-2 Multilevel ......................... 175.0
ESLN 3200 Beginning Low 2 (175 hrs) ............................. 175.0
ESLN 3205 Beginning Low 2 Abridged .............................. 85.0

Total: ...............................................170.0 – 350.0

ESL Beginning Low Focus Skills
Noncredit Certificate

Low beginning skills are emphasized for students who want focused practice in listening, reading, and writing. These courses in English as a Second Language expand low beginning English skills and prepare students 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 spoken language in familiar contexts.
- Employ simple learned phrases and sentences to engage in limited social situations using familiar basic conversations.
- Construct limited meaning from simplified reading materials on familiar topics.
- Compose a series of simple sentences based on learned vocabulary and low beginning grammatical structures.

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 Focus Skills

Course .................................................. Hours
Choose one of the following core courses:
ESLN 3120 ESL Beginning Low 1-2 Multilevel ......................... 175.0
ESLN 3150 Beginning Low 1-2 Intensive .............................. 175.0
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 3128 Reading Beginning Low .................................. 85.0
ESLF 3129 Writing Beginning Low .................................. 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 3100 Beginning Low 1 (175 hrs)</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3105 Beginning Low 1 Abridged</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLN 3200 ESL Beginning Low 1-2 Multilevel</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3200 Beginning Low 2 (175 hrs)</td>
<td>175.0</td>
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<tr>
<td>ESLN 3205 Beginning Low 2 Abridged</td>
<td>85.0</td>
</tr>
<tr>
<td>Total:</td>
<td>125.0 – 260.0</td>
</tr>
</tbody>
</table>

ESL Beginning High Noncredit Certificate

These courses in English as a Second Language develop and expand high beginning 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

<table>
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<tr>
<th>Course</th>
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<td>ESLN 3100 Beginning High 3 (175 hrs)</td>
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<td>ESLN 3105 Beginning High 3 Abridged</td>
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<tr>
<td>ESLN 3200 ESL Beginning High 1-2 Multilevel</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3200 Beginning High 2 (175 hrs)</td>
<td>175.0</td>
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<tr>
<td>ESLN 3205 Beginning High 2 Abridged</td>
<td>85.0</td>
</tr>
<tr>
<td>Total:</td>
<td>175.0 – 350.0</td>
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</tbody>
</table>

ESL Beginning High Focus Skills Noncredit Certificate

High beginning skills are emphasized for students who want focused practice in listening, speaking, reading, or writing. These courses in English as a Second Language develop and expand high beginning English skills and prepare students for community participation, further study, and employment.

Learning Outcomes

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

- Identify main ideas and some details in spoken and written English in familiar contexts with some unfamiliar vocabulary.
- Utilize high beginning basic English language structures to speak and write about 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 High Focus Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3100 Beginning High 1-4 Multilevel</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3105 Beginning High 4 (175 hrs)</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3105 Beginning High 4 Abridged</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLN 3105 Beginning High 3-4 Multilevel</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3105 Beginning High 3-4 Intensive</td>
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<tr>
<td>Total:</td>
<td>175.0 – 350.0</td>
</tr>
</tbody>
</table>

ESL Beginning High Oral Communication Skills Noncredit Certificate

In this certificate, high beginning ESL students develop speaking skills to participate in social interactions on familiar topics to expand their ability to participate in the community, continue their education, and pursue better employment opportunities.

Learning Outcomes

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

- Identify general ideas and some details in high beginning oral discourse on a variety of familiar contexts.
- Engage in conversational exchanges in comprehensible English on familiar topics with some unfamiliar vocabulary.

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 High Oral Communication Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3100 Beginning High 1-4 Multilevel</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3105 Beginning High 4 (175 hrs)</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3105 Beginning High 4 Abridged</td>
<td>85.0</td>
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<tr>
<td>Total:</td>
<td>175.0 – 350.0</td>
</tr>
</tbody>
</table>

Choose one of the following communication skills courses:

- ESLF 3144 Pronunciation Beginning | 85.0
- ESLF 4127 Beginning Low Conversation | 85.0
- ESLF 5125 Speaking and Listening: Beginning Low | 85.0

Choose one of the following high beginning focused skill courses:

- ESLN 3105 Beginning Low 1 Abridged | 85.0
- ESLN 3105 Beginning Low 2 Abridged | 85.0
- ESLN 3105 Beginning Low 2 Abridged | 85.0

Choose one of the following core courses:

- ESLN 3000 Beginning Low 1 (175 hrs) | 175.0
- ESLN 3005 Beginning Low 1 Abridged | 85.0
- ESLN 3200 ESL Beginning Low 1-2 Multilevel | 175.0
- ESLN 3200 Beginning Low 2 (175 hrs) | 175.0
- ESLN 3205 Beginning Low 2 Abridged | 85.0
- ESLN 3300 Beginning Low 2 (175 hrs) | 175.0
- ESLN 3305 Beginning Low 2 Abridged | 85.0
- ESLN 3305 Beginning Low 3-4 Abridged | 85.0

ESLF 4347 Beginning High Conversation ............ 45.0
ESLF 5345 Speaking and Listening Beginning High .... 85.0

**Choose one of the following core courses:**
ESLN 3400 Beginning 1-4 Multilevel .................. 175.0
ESLN 3300 Beginning High 3 (175 hrs) .............. 175.0
ESLN 3305 Beginning High 3 Abridged .............. 85.0
ESLN 3340 Beginning High 3-4 Multilevel .......... 175.0
ESLN 3400 Beginning High 4 (175 hrs) .............. 175.0
ESLN 3405 Beginning High 4 Abridged ............... 85.0
Total: ................................................. 125.0 – 260.0

**ESL Beginning Intensive Noncredit Certificate**

This is an ESL Beginning Intensive accelerated study certificate.

**Learning Outcomes**

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

- Identify main topic of conversation on familiar material and general meaning of non-face-to-face speech in familiar contexts.
- Relate information about basic needs and routine activities in a variety of common social situations.
- Construct limited meaning from basic written material by using word analysis and vocabulary development strategies.
- Produce short grammatically correct paragraphs related to common familiar topics.

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 Intensive**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3510 Beginning Low 1-2 Intensive</td>
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<tr>
<td>ESLN 3530 Beginning High 3-4 Intensive</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>350.0</strong></td>
</tr>
</tbody>
</table>

**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.
- 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3400 Intermediate Low 5 (175 hrs)</td>
<td>175.0</td>
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</tbody>
</table>

**Choose one of the following courses:**

- ESLN 3550 Intermediate Low 5-6 Intensive ........ 175.0
- ESLN 3560 Intermediate Low 5-6 ..................... 175.0
- ESLN 3600 Intermediate Low 6 (175 hrs) .......... 175.0

**Total:** ........................................ 350.0

**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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ESLN 3400 Intermediate Low 5 (175 hrs)</td>
<td>175.0</td>
</tr>
</tbody>
</table>

**Choose one of the following courses:**

- ESLN 3550 Intermediate Low 5-6 Intensive ........ 175.0
- ESLN 3560 Intermediate Low 5-6 ..................... 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 general 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 ........... 175.0
ESLN 3560 Intermediate Low 5-6 .......................... 175.0
ESLN 3600 Intermediate Low 6 (175 hrs) .............. 175.0

Choose one of the following focus skill courses:
ESLF 3565 Speaking and Listening Intermediate Low 85.0
ESLF 3560 Intermediate Low 5-6 .......................... 85.0
ESLF 5565 Speaking and Listening Intermediate Low 85.0
Total: ................................................................ 260.0

ESL Intermediate High Certificate of Competency

This Certificate of Competency in English as a Second Language allows students to develop and expand high intermediate English skills for community involvement, the workforce, and/or future academic studies.

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

- Identify essential points and details of spoken English on familiar and unfamiliar topics.
- Apply high intermediate language structures and forms in extended oral discourse.
- Identify essential points of written English on familiar and unfamiliar topics.
- Apply high intermediate language structures and forms in extended written discourse.

Advisory: ESLN 3600 or placement in ESLN 3700 (Intermediate High 7)
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 Certificate of Competency in ESL Intermediate High

Course ........................................ Hours
Required course:
ESLN 3700 Intermediate High 7 (175 hrs) .............. 175.0
Choose one of the following courses:
ESLN 3580 Intermediate 5-8 Multilevel ............... 175.0
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

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 all courses to achieve a certificate.

Courses Required for the Noncredit Certificate in ESL Intermediate High Focus Skills

Course ........................................ Hours
Choose one of the following core courses:
ESLN 3580 Intermediate 5-8 Multi-Level ............. 175.0
ESLN 3780 Intermediate High 7/8 Multi-Level ....... 175.0
ESLN 3800 Intermediate High 8 ......................... 175.0
Choose one of the following focus skill courses:
ESLF 3002 ESL Current Events (85 hrs) ............... 85.0
ESLF 3584 Pronunciation Intermediate ............... 85.0
ESLF 5785 Speaking and Listening Intermediate High 85.0
ESLF 3788 Reading Intermediate High (85 hrs) ...... 85.0
ESLF 3789 Writing Intermediate High ................. 85.0
Total: ................................................................ 260.0

ESL Intermediate Oral Communication Skills Noncredit Certificate

In this certificate, intermediate ESL students develop speaking skills to participate in extended interactions to expand their ability to participate in the community, continue their education, and pursue employment opportunities. Students are also able to read and discuss authentic material on familiar topics.

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

- Interpret informational and narrative spoken and written texts on a variety of topics.
- Employ appropriate intermediate language structures and word choice in spoken English to communicate on a variety of topics in increasingly extended oral 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLF 3584 Pronunciation Intermediate</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLF 4567 Intermediate Low Conversation</td>
<td>45.0</td>
</tr>
<tr>
<td>ESLF 4787 Intermediate High Conversation</td>
<td>45.0</td>
</tr>
<tr>
<td>ESLF 5565 Speaking and Listening Intermediate Low</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLF 5785 Speaking and Listening Intermediate High</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 3819 Social Communication</td>
<td>85.0</td>
</tr>
</tbody>
</table>

Choose one of the following communication skills courses:

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

- Apply a variety of strategies to participate in a range of oral discourse with increasing fluency and control of complex language structures and forms.
- Interpret authentic narrative and informational 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLN 3500 Intermediate Low 5 (175 hrs)</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3560 Intermediate Low 5-6</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3580 Intermediate 5-8 Multilevel</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLN 3600 Intermediate Low 6 (175 hrs)</td>
<td>175.0</td>
</tr>
</tbody>
</table>

Total: ........................................ 220.0 – 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:

- Apply a variety of strategies to participate in a range of oral discourse with increasing fluency and control of complex language structures and forms.
- Interpret basic oral and written instructions to complete simple workplace tasks.
- Apply beginning level language skills when producing simple workplace texts using a computer.
- Examine and describe U.S. workplace culture and practices.

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 Pre-Academic

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLA 3180 Introduction to Academic ESL</td>
<td>175.0</td>
</tr>
</tbody>
</table>

Choose one of the following courses:

ESLN 3500 Intermediate Low 5 (175 hrs)       | 175.0 |
ESLN 3550 Intermediate Low 5-6 Intensive      | 175.0 |
ESLN 3560 Intermediate Low 5-6                | 175.0 |
ESLN 3580 Intermediate 5-8 Multilevel         | 175.0 |
ESLN 3600 Intermediate Low 6 (175 hrs)        | 175.0 |
ESLN 3700 Intermediate High 7 (175 hrs)       | 175.0 |
ESLN 3780 Intermediate High 7/8 Multi-Level    | 175.0 |
ESLN 3800 Intermediate High 8                  | 175.0 |
ESLN 3900 Advanced Low 9 (175 hrs)            | 175.0 |

Total: ........................................ 350.0

Vocational ESL Programs

ESL Beginning Workplace Skills Certificate of Competency

This certificate of competency provides beginning English language skills to prepare students for the workplace. Courses emphasize basic English communication and computer skills.

Learning Outcomes

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

- Interpret basic oral and written instructions to complete simple workplace tasks.
- Draw conclusions about simple oral and written workplace texts.
- Use learned language and strategies to produce written and spoken texts on pre-academic topics.

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 Certificate of Competency in ESL Beginning Workplace Skills

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3815 Beginning VESL for Customer Service</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 4041 ESL for Work Beginning</td>
<td>85.0</td>
</tr>
</tbody>
</table>

Choose one of the following courses:

ESLV 4004 Computer Assisted ESL Beginning Low | 85.0 |
ESLV 4005 Computer Assisted ESL Beginning High | 85.0 |
ESLV 3821 Introduction to Computers for ESL-Intermediate | 85.0 |
ESLV 3822 Keyboarding for ESL Students (175 hrs) | 175.0 |
ESLV 4821 Intermediate Introduction to Computers for ESL | 45.0 |
ESLV 4822 ESL Keyboarding                     | 85.0 |

Total: ........................................ 130.0 – 260.0
### Beginning VESL Communication Certificate of Competency

This Certificate of Competency provides beginning English language skill development for communication in the workplace.

**Learning Outcomes**

Upon completion of this program, students will be able to:
- Apply beginning ESL skills to communicate with co-workers and supervisors.
- Describe U.S. workplace culture and practices.

**Advisory:** ESLN 3200 or placement in ESLN 3300 (Beginning High 3)

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 Certificate of Competency in Beginning VESL Communication**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3836 Beginning VESL for Customer Service</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 4842 ESL for Work Beginning</td>
<td>85.0</td>
</tr>
</tbody>
</table>

**Total:** 170.0

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### 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.
- Demonstrate on-the-job safety practices.
- Relate basic workers’ rights 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 Janitorial Workers**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 4816 ESL for Janitors (85 hrs)</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 4842 ESL for Work Beginning</td>
<td>85.0</td>
</tr>
</tbody>
</table>

**Total:** 170.0

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### 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 (85 hrs)</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 3827 ESL for Hotel/Service Workers (85 hrs)</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 3836 Beginning VESL for Customer Service</td>
<td>85.0</td>
</tr>
</tbody>
</table>

**Required course:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 4842 ESL for Work Beginning</td>
<td>85.0</td>
</tr>
</tbody>
</table>

**Total:** 170.0

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### High Beginning VESL for Job Search Certificate of Competency

This Certificate of Competency provides high beginning level ESL students English language skill development for job search in the U.S.

**Learning Outcomes**

Upon completion of this program, students will be able to:
- Interpret written job search documents.
- Apply high beginning ESL structures and vocabulary to written and oral job search communication.
- Examine U.S. work culture in relation to job search.

**Advisory:** Completion of ESLN 3300 or placement in ESLN 3400

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 Certificate of Competency in High Beginning VESL for Job Search**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3826 Beginning Job Search</td>
<td>45.0</td>
</tr>
<tr>
<td>ESLV 3826 Beginning Job Search</td>
<td>45.0</td>
</tr>
</tbody>
</table>

**Total:** 90.0

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### High Intermediate ESL for Health Professionals Certificate of Competency

This certificate of competency prepares high intermediate non-native English speaking students with communication skills and cultural competencies to help them succeed in CCPS or other health care programs and future employment in the health care field.

**Learning Outcomes**

Upon completion of this program, students will be able to:
- Explore career goals and apply job search and professional development strategies in health care careers.
- Apply high intermediate English skills effectively to communicate in health care environments.
- Recognize and analyze current issues in the field of health care.
• Interpret cultural beliefs and values in health care and apply English skills effectively to communicate in a multicultural work environment.

Advisory: ESLN 3600 or placement in ESLN 3700 (Intermediate High 7)

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. Students must receive a Pass (P) for each course in the certificate.

Courses Required for the Certificate of Competency in High Intermediate 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>85.0</td>
</tr>
<tr>
<td>ESLV 3843 Healthcare Communication II</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 3844 Healthcare Communication III</td>
<td>85.0</td>
</tr>
<tr>
<td>Total</td>
<td>255.0</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 3800 ESL for the Workplace</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 4822 Workplace Communication Strategies (40 hrs)</td>
<td>40.0</td>
</tr>
<tr>
<td>ESLV 3801 Workplace Communication (175 hrs)</td>
<td>175.0</td>
</tr>
<tr>
<td>Total</td>
<td>125.0 – 260.0</td>
</tr>
</tbody>
</table>

Intermediate VESL-Office Workers Certificate of Competency

This Certificate of Competency provides skill development in intermediate level ESL to help students prepare for other CCSF or local office skills programs and future employment in an office setting.

Learning Outcomes

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

• Communicate appropriately in an office setting using intermediate ESL language skills.
• Analyze office workplace culture.

Advisory: ESLN 3600 (Intermediate Low 6)

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 Certificate of Competency in Intermediate VESL-Office Workers

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3804 VESL for Clerical Workers (175 hrs)</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLV 3819 Social Communication</td>
<td>85.0</td>
</tr>
<tr>
<td>Total</td>
<td>260.0</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

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3831 ESL for Construction Workers (175 hrs)</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLV 3832 ESL for Construction B (85 hrs)</td>
<td>85.0</td>
</tr>
<tr>
<td>Total</td>
<td>260.0</td>
</tr>
</tbody>
</table>

VESL Preparation-Healthcare Careers Certificate of Competency

This Certificate of Competency provides high intermediate level ESL students with oral communication skill development to prepare them for CCSF or local health care programs and future employment in health.

Learning Outcomes

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

• Apply high intermediate ESL language skills to communicate in a health care setting.
• Identify appropriate interaction in a multicultural healthcare setting.

Advisory: ESLN 3700 (Intermediate High 7).

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 Certificate of Competency in VESL Office Training

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESLV 3821 Introduction to Computers for ESL-Intermediate</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 3822 Keyboarding for ESL Students</td>
<td>175.0</td>
</tr>
<tr>
<td>ESLV 4822 ESL Keyboarding</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 3819 Social Communication</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 3823 ESL for Job Searching</td>
<td>85.0</td>
</tr>
<tr>
<td>ESLV 3829 Computer VESL High Intermediate</td>
<td>85.0</td>
</tr>
<tr>
<td>Total</td>
<td>690.0 – 780.0</td>
</tr>
</tbody>
</table>

ESL, Academic

ESLA 1000. Supplemental Academic English Instruction (22.5 hrs)
RECOMMENDED PREP: Non-native speaker of English
This course takes place in the Center for Language and Academic Development (CLAD), trains and supports students in identifying and choosing appropriate skill building activities, and offers direct instruction on the oral production, aural comprehension, pronunciation, reading, and writing of academic English.

ESLA 3180. Introduction to Academic ESL (175 hrs)
RECOMMENDED PREP: 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-native speakers 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.

ESL, Bridge

ESLB 3821. Introduction to Computers for ESL-Intermediate (85 hrs)
RECOMMENDED PREP: 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 3821. Introduction to Computers for ESL-Intermediate (85 hrs)
RECOMMENDED PREP: 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)
RECOMMENDED PREP: 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)
RECOMMENDED PREP: 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)
Recommended Prep: 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.

**ESL, Citizenship**

ESLC 3031. Beginning Low Citizenship (85 hrs)
Recommended Prep: 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 on occasion

ESLC 3032. ESL/Citizenship for Multi-Level 1-4 (85 hrs)
Recommended Prep: 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)
Recommended Prep: 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.

ESLC 4032. ESL Citizenship Multi-level 1-4 (40 hrs)
Recommended Prep: 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)
Recommended Prep: ESLN 3500 or placement in ESLN 3600
(Beginning 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 - Intermediate (175 hrs)
Recommended Prep: ESLN 3400 or placement in ESLN 3500
(Beginning Low 5)
Intermediate level ESL, listening, speaking, reading and writing skills are expanded and developed through communicative activities and individual or group computer projects. Instruction includes computer terminology and development and application of computer skills to a variety of projects.

ESLF 3020. Computer Assisted ESL - Multilevel (85 hrs)
Recommended Prep: ESLN 3100 or placement in ESLN 3200
(Beginning Low 2)
Development of speaking, listening, reading, writing, and basic computer skills through the use of language learning software and online ESL resources. Designed to meet the needs of ESL students at various levels.

ESLF 3128. Reading - Beginning Low (85 hrs)
Recommended Prep: Native Language literacy
Low beginning reading skills development. Comprehension of simple print materials on familiar topics. Beginning vocabulary development. Offered on occasion

ESLF 3129. Writing - Beginning Low (85 hrs)
Recommended Prep: Native Language literacy
Low beginning writing skills development. Basic sentence construction and form completion. Basic written communication for use in everyday life.

ESLF 3144. Pronunciation - Beginning (85 hrs)
Recommended Prep: Native Language literacy
Basic pronunciation skills through understanding of English sounds. Rhythm, stress, and intonation are introduced.

ESLF 3348. Reading - Beginning High (85 hrs)
Recommended Prep: ESLN 3200 or placement in ESLN 3300
(Beginning High 3)
High beginning reading skills development. Comprehension of adapted written materials on familiar topics. Beginning vocabulary and word analysis skills.

ESLF 3349. Writing - High Beginning (85 hrs)
Recommended Prep: ESLN 3200 or placement in ESLN 3300
(Beginning High 3)
High beginning writing skill development. Paragraphs on familiar topics and basic personal and practical correspondence. Basic editing skills.

ESLF 3568. Reading - Intermediate Low (85 hrs)
Recommended Prep: ESLN 3400 or placement in ESLN 3500
(Intermediate Low 5)
Low intermediate reading skill development. Comprehension and analysis of a variety of adapted and authentic written English materials. Expansion of word analysis skills.

ESLF 3569. Writing - Low Intermediate (85 hrs)
Recommended Prep: ESLN 3400 or placement in ESLN 3500
(Intermediate Low 5)
Low intermediate writing skill development. Strategies for writing clear, structured multi-paragraph texts and correspondence addressing a variety of purposes.

ESLF 3584. Pronunciation - Intermediate (85 hrs)
Recommended Prep: ESLN 3400 or placement in ESLN 3500
(Intermediate Low 5)
ESLF 3788. Reading - Intermediate High (85 hrs) (85 hrs)
Recommended Prep: 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)
Recommended Prep: ESLN 3600 or placement in ESLN 3700
(Intermediate High 7)
High intermediate writing focus course. Strategies for writing clear,
complex multi-paragraph texts and correspondence addressing a vari-
ety of purposes.

ESLF 4002. Computer Assisted ESL - Beginning Low (85 hrs)
Recommended Prep: Native language literacy
Low beginning level English as a Second Language (ESL) listening,
speaking, reading and writing skills are developed through computer-
assisted ESL language learning activities in a computer lab. Introduction
to basic computer vocabulary and technologies for ESL learning.
Formerly ESLF 3007

ESLF 4004. Computer Assisted ESL - Beginning High (85 hrs)
Recommended Prep: ESLN 3200 or placement in ESLN 3300
(Beginning Low 3)
High beginning 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. Includes
short in-class project.
Formerly ESLF 3008

ESLF 4006. Intermediate CALL (85 hrs)
Recommended Prep: 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 (45 hrs)
Recommended Prep: Native language literacy
Low beginning speaking and listening skills. Participation in short
conversations in routine social situations to communicate basic needs.
Offered on occasion

ESLF 4347. Beginning High Conversation (45 hrs)
Recommended Prep: ESLN 3200 or placement in ESLN 3300
(Beginning High 3)
High beginning speaking and listening skills. Participation in simple
conversations about common topics in routine social situations.

ESLF 4567. Intermediate Low Conversation (45 hrs)
Recommended Prep: ESLN 3400 or placement in ESLN 3500
(Intermediate Low 5)
Low intermediate speaking and listening skills. Participation in con-
versations and discussions on familiar and some unfamiliar topics.

ESLF 4787. Intermediate High Conversation (45 hrs)
Recommended Prep: ESLN 3600 or placement in ESLN 3700
(Intermediate High 7)
High intermediate speaking and listening skills. Participation in dis-
cussions and extended conversations on a variety of current topics.

ESLF 5006. Computer-Assisted ESL Projects (45 hrs)
Recommended Prep: 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 expanded through group
interactive computer lab projects in an abridged course. Exposure to
computer vocabulary and skills.
Offered Fall and Spring semesters

ESLF 5125. Speaking and Listening: Beginning Low (85 hrs)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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)
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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: Literate in native language
Beginning Low 1 language skills. Language for daily life and limited
participation in basic social exchanges. Aural, oral, and reading readi-
ness are stressed. Basic writing skills are introduced.

ESLN 3105. Beginning Low 1 Abridged (85 hrs)
Recommended Prep: 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)
**Recommended Prep:** 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)
**Recommended Prep:** 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 3150. Beginning Low 1-2 Intensive (175 hrs)
**Recommended Prep:** Literacy in native language
Low beginning accelerated course. Basic language skills, including frequently used vocabulary and low beginning grammar. Introductory listening comprehension, oral communication, reading, and writing skills.

ESLN 3200. Beginning Low 2 (175 hrs)
**Recommended Prep:** 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)
**Recommended Prep:** 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)
**Recommended Prep:** 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)
**Recommended Prep:** 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)
**Recommended Prep:** ESLN 3200 or placement in ESLN 3300 (Beginning High 3)
High beginning level English skills for school, work and basic needs. Development of listening, speaking and reading skills. Production of sentences and brief paragraphs.

ESLN 3350. Beginning High 3-4 Intensive (175 hrs)
**Recommended Prep:** ESLN 3200 or placement in ESLN 3300 (Beginning High 3)
High beginning accelerated course. High beginning language skills, including vocabulary, grammar, listening comprehension, oral communication, reading, and writing skills in familiar contexts.

ESLN 3400. Beginning High 4 (175 hrs)
**Recommended Prep:** 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)
**Recommended Prep:** 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)
**Recommended Prep:** 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)
**Recommended Prep:** ESLN 3400 or placement in ESLN 3500 (Intermediate Low 5)
Low intermediate accelerated course. Intermediate language skills, including vocabulary, grammar, listening comprehension, oral communication, reading, and writing skills in familiar and unfamiliar contexts.

ESLN 3560. Intermediate Low 5-6 (175 hrs)
**Recommended Prep:** ESLN 3400
Low intermediate language skills. Extended conversations on familiar and new topics. Development of reading and word analysis skills. Production of organized paragraphs.

ESLN 3580. Intermediate 5-8 Multilevel (175 hrs)
**Recommended Prep:** ESLN 3400 or placement in ESLN 3500 (Intermediate Low 5)
Intermediate level English skills for students with varying English language proficiencies for education, employment and social settings. Expansion of listening, speaking, and reading skills. Production of organized paragraphs and multi-paragraph texts.

ESLN 3600. Intermediate Low 6 (175 hrs)
**Recommended Prep:** ESLN 3500 or placement in ESLN 3600 (Intermediate Low 6)

ESLN 3700. Intermediate High 7 (175 hrs)
**Recommended Prep:** 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)
**Recommended Prep:** 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 3800. Intermediate High 8 (175 hrs)
Recommended Prep: 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)
Recommended Prep: 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 A Abridged (45 hrs)
Recommended Prep: 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)
Recommended Prep: Completion of ESLN 3300 (Beginning High 3)
Basic verbal communication skills and cultural knowledge needed in preparation for finding employment in the United States.
Offered on occasion

ESLV 3801. Workplace Communication (175 hrs)
Recommended Prep: 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.
Offered Spring semesters

ESLV 3804. VESL for Clerical Workers (175 hrs)
Recommended Prep: 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.
Offered on occasion

ESLV 3814. ESL for Chinese Cooking (85 hrs)
Recommended Prep: Completion of ESLN 3300 (Beginning High 3)
Intermediate verbal communication skills for the job. English terminology for cooking utensils, supplies, common tasks, and safety in restaurants specializing in Chinese cuisine.
Offered Fall and Spring semesters

ESLV 3819. Social Communication (85 hrs)
Recommended Prep: ESLN 3400 or placement in ESLN 3500 (Intermediate Low 5)
Development of intermediate ESL conversational strategies for appropriate interactions at work and in a variety of social situations in the United States. Discussions about U.S. workplace culture.

ESLV 3823. ESL for Job Searching (85 hrs)
Recommended Prep: 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.
Offered on occasion

ESLV 3825. Career Exploration (45 hrs)
Recommended Prep: ESLN 3300 or placement in ESLN 3400 (Beginning High 4)
Development of high beginning ESL oral communication skills and vocabulary for seeking employment in the U.S. workplace.
Offered on occasion

ESLV 3826. Beginning Job Search (45 hrs)
Recommended Prep: ESLN 3300 or placement in ESLN 3400 (Beginning High 4)
Development of high beginning ESL written and oral communication skills for seeking employment in the U.S. workplace.
Offered on occasion

ESLV 3827. ESL for Hotel/Service Workers (85 hrs)
Recommended Prep: 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)
Recommended Prep: 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.
Offered Spring semesters

ESLV 3830. High Intermediate VESL for Healthcare Careers (175 hrs)
Recommended Prep: ESLN 3600 or placement in ESLN 3700
Development of high intermediate English language skills necessary for healthcare workers. Study of and pronunciation of basic medical terms. Social and cultural skills necessary for successful interaction in healthcare surroundings.
Offered on occasion

ESLV 3831. ESL for Construction Workers (175 hrs)
Recommended Prep: 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)
Recommended Prep: 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. Beginning VESL for Customer Service (85 hrs)
Recommended Prep: ESLN 3200 or placement in ESLN 3300 (Beginning High 3)
Development of beginning level ESL communication skills for employ
ment in the customer service industry.

**Offered on occasion**

ESLV 3842. Healthcare Communication I (85 hrs)
Recommended Prep: Health care background; ESLN 3600 or placement in ESLN 3700 (Intermediate High 7)
Designed for health care professionals with high intermediate English language proficiency. Integrated language skills for career options and requirements in health care, patient-centered communication, discussion of treatment options with patients and alternative health perspectives, and communication strategies among culturally diverse patients and health workers. Prepares students for CCSF health care programs.

**Offered on occasion**

ESLV 3843. Healthcare Communication II (85 hrs)
Recommended Prep: Health care background; ESLN 3600 or placement in ESLN 3700 (Intermediate High 7)
Designed for health care professionals with high intermediate English language proficiency. Develop integrated language skills for professional communication including reporting safety issues, communicating with special-needs patients, resolving conflict, and cultural health disparities in health care settings. Prepares students for CCSF health care programs.

**Offered on occasion**

ESLV 3844. Healthcare Communication III (85 hrs)
Recommended Prep: Health care background; ESLN 3600 or placement in ESLN 3700 (Intermediate High 7)
Designed for health care professionals with high intermediate English language proficiency. Develop integrated language skills for professional communication including reporting safety issues, communicating with special-needs patients, resolving conflict, and cultural health disparities in health care settings. Prepares students for CCSF health care programs.

**Offered on occasion**

ESLV 4816. ESL for Janitors (85 hrs)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: Completion of ESLN 3300 (Beginning High 3)
Development of verbal and nonverbal communication strategies for successful interaction in multicultural workplaces.

**Offered on occasion**

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**Environmental Horticulture and Floristry**

**Office:** EH/F  
**Phone Number:** (415) 239-3140  
**Web Site:** www.ccsf.edu/envhort

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**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.

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**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, groundkeeper, 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>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester:</td>
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<tr>
<td>O H 50 Introduction to Environmental Horticulture</td>
<td>3.0</td>
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<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>
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<tr>
<td>Second Semester:</td>
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<tr>
<td>O H 58 Greenhouse Operations</td>
<td>3.0</td>
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<tr>
<td>O H 77 Spring and Summer Plant Identification</td>
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<tr>
<td>R F 81 Flower and Foliage Identification/Culture and Care</td>
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<tr>
<td>Third Semester:</td>
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<tr>
<td>O H 63 Soils</td>
<td>3.0</td>
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<tr>
<td>O H 65 Plant Propagation</td>
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<tr>
<td>CMST 11 Basic Public Speaking</td>
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<tr>
<td>R F 82 Interior Plant Identification</td>
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<tr>
<td>Fourth Semester:</td>
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<tr>
<td>O H 60 Business Practices</td>
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<tr>
<td>O H 75 Pest Management</td>
<td>3.0</td>
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<tr>
<td>O H 97 Work Experience</td>
<td>3.0</td>
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<tr>
<td>Fourth Semester: choose one of these Landscape courses:</td>
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<tr>
<td>O H 70A Principles of Landscape Design</td>
<td>3.0</td>
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<tr>
<td>O H 71A Landscape Construction</td>
<td>4.0</td>
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<tr>
<td>Recommended additional coursework:</td>
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<tr>
<td>ACCT 10 Introduction to Accounting</td>
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<tr>
<td>SMBS 135 Ownership and Operation of a Small Business</td>
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<td>Total:</td>
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</table>

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

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<tr>
<th>Course</th>
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<td>Second Semester:</td>
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<tr>
<td>O H 58 Greenhouse Operations</td>
<td>3.0</td>
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<tr>
<td>O H 77 Spring and Summer Plant Identification</td>
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<td>CMST 11 Basic Public Speaking</td>
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<td>Third Semester:</td>
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<tr>
<td>O H 53A Beginning Landscape Horticulture</td>
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<td>O H 63 Soils</td>
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<tr>
<td>O H 75 Pest Management</td>
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<tr>
<td>O H 77 Spring and Summer Plant Identification</td>
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<td>O H 53B Advanced Landscape Horticulture</td>
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<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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<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>
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<tr>
<td>O H 71B Landscape Construction</td>
<td>4.0</td>
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<tr>
<td>O H 97 Work Experience</td>
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</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

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<tr>
<td>O H 97 Work Experience</td>
<td>3.0</td>
</tr>
<tr>
<td>Recommended additional coursework:</td>
<td></td>
</tr>
<tr>
<td>ACCT 10 Introduction to Accounting</td>
<td>5.0</td>
</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>

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>
</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 construction.

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 a 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:

<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 71A Landscape Construction</td>
<td>4.0</td>
</tr>
<tr>
<td>O H 71B Landscape Construction</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total: ........................................ 32.0

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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

Total: ........................................ 32.0
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

Course .................................................. Units
First Semester:
R F 80A Flower Shop Procedures and Basic Designs .................. 5.0
R F 81 Flower and Foliage Identification/Culture and Care ................. 2.0
One of the following:
R F 85A Introduction to Floral Design Spring .................. 2.0
R F 85B Introduction to Floral Design-Summer .................. 2.0
R F 85C Introduction to Flower Arranging Fall .................. 2.0
R F 85D Introduction to Flower Arranging Winter .................. 2.0
Second Semester:
ACCT 10 Introduction to Accounting ........................................ 5.0
R F 80B Intermediate Floral Design ........................................ 5.0
R F 82 Interior Plant Identification ........................................ 3.0
Third Semester:
R F 80C Advanced Floral Design ........................................ 4.0
R F 86A Beginning Oriental Flower Arrangement .................. 1.5
R F 98 Retail Floristry Work Experience .................................. 3.0
Fourth Semester:
R F 84 Flower Shop Operations ........................................ 3.0
R F 98 Retail Floristry Work Experience .................................. 3.0
MRKT 122 Professional Selling ........................................ 3.0
or MRKT 140 Introduction to Marketing .................................. 3.0
or MRKT 170 Advertising and Integrated Marketing Communication .................. 3.0
Recommended additional coursework:
ART 130A Basic Drawing ........................................ 3.0
BSEN 74 Written Business Communication .............. 3.0
BSEN 76 Business and Technical Report Writing ...... 3.0
BSL 1 Business Law I ........................................... 3.0
SMBS 135 Ownership and Operation of a Small Business ........................................... 3.0
PSYC 26 Applied Psychology .................................. 3.0
Total: .................................................. 38.5 – 42.5

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
Recommended Prep: OH 53A; OH 50 and completion/concurrent enrollment in OH 76 or 77
The principles and practices of garden planting and maintenance will be covered in practical laboratory experiences in the Horticulture Center and on the college campus. Care and maintenance of established gardens; irrigation, fertilizing, pruning, identifying and controlling weeds and plant pests and diseases. CSU Offered Spring and Fall Semesters

O H 53B. Advanced 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 Offered Spring and Fall Semester

O H 55. Tree Care (3)
Lec-35, Lab-52.5, field trips P/NP available
Recommended Prep: O H 50, 53A, and completion/concurrent enrollment in O H 76 or 77
Care and management of trees common to residential, public, and commercial landscaping. Emphasizes correct planting, irrigating, fertilizing, pest control, and pruning. Use of saws, ropes, and other safety equipment in the tree industry is covered. Prepares student for the International Society of Arboriculture Certified Arborist Exam. CSU Offered on Occasion

O H 56. Horticulture Machines (3)
Lec-35, Lab-52.5, field trips
Recommended Prep: Completion/concurrent enrollment in O H 50
Field and shop practice in the safe and proper operation of necessary horticultural equipment. Preventive service and maintenance will be stressed during all lab and lecture sessions. CSU Offered Spring Semesters

O H 58. Greenhouse Operations (3)
Lec-35, Lab-52.5, field trips
Recommended Prep: 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. UC/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. CSU Offered Fall Semesters

O H 63. Soils (3)
Lec-35, Lab-52.5, field trips
Recommended Prep: 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 C-ID AG-PS 128L Offered Spring Semesters

O H 65. Plant Propagation (3)
Lec-35, Lab-52.5, field trips
Recommended Prep: 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 C-ID AG-EH 116L Offered Spring Semesters

O H 66. Irrigation (3)
Lec-35, Lab-52.5, field trips
Recommended Prep: 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. CSU
Offered Fall semesters

O H 70B. Advanced Principles of Landscape Design (3)
Lec-35, Lab-52.5, field trips
Recommended Prep: 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
Offered on occasion

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
Offered on occasion

O H 75. Pest Management (3)
Lec-52.5, field trips
Recommended Prep: 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 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
C-ID AG-EH 108 L (O H 76 + O H 77); C-ID AG-EH 112 L (O H 76 + O H 77)
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
C-ID AG-EH 108 L (O H 76 + O H 77); C-ID AG-EH 112 L (O H 76 + O H 77)
Offered Spring semesters

O H 91. Independent Study (1)
Lab-52.5, field trips
P/NP available
Prereq: 6 units of O H course work and project approval
Individual research on a special topic in environmental horticulture. Opportunity for students to investigate horticultural problems of special interest or conduct an in-depth project. Emphasis on practical application and current issues in horticulture. CSU
Offered on occasion

O H 92. Independent Study (2)
Lab-105, 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 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
Offered on occasion

O H 93. Independent Study (3)
Lab-157.5, 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
Offered on occasion

O H 97. Work Experience (2-4)
Lec-17.5, work-60-225
Recommended Prep: 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
Offered on occasion

O H 101. Urban 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
Offered on occasion

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 shrubs and trees. Multicolored planters will be...
created in class. A selected garden with vivid year round color will be
visited. CSU

Offered on occasion

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

Offered on occasion

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

Offered on occasion

O H 111D. Introduction to Xeriscaping (1)
Lec-17.5  P/np available
Recommended Prep: 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

Offered on occasion

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 acces-
sories as well as identification of floral materials and supplies used in
commercial floristry. This course is a prerequisite for RF 80B. CSU

Offered Fall and Spring semesters

R F 80B. Intermediate Floral Design (5)
Lec-70, Lab-52.5, field trips
Recommended Prep: 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

Offered Fall and Spring semesters

R F 80C. Advanced Floral Design (4)
Lec-70, Lab-17.5, field trips
Recommended Prep: 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

Offered Fall and Spring semesters

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 availa-
ble in the fall and winter. CSU

Offered Fall and Spring 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 Fall and Spring semesters

R F 82. Interior Plant Identification (3)
Lec-52.5, Lab-17.5  P/NP available
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 salesmans-
ship, 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 foli-
age 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

Offered Spring semesters

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

Offered on occasion

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 for fall arrangements. Basic historical peri-
ods and styles of decorating for beginners. CSU

Offered Fall semesters

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

Offered on occasion
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 Certificate**

The Fashion Design certificate gives students a strong basis in design concepts, industry terminology, clothing construction, presentations, and illustration techniques. Fashion design training can lead to careers as fashion illustrators, designers, technical designers, patternmakers, product developers and entrepreneurs.

**Learning Outcomes**

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

- Create fashion garments from initial design concept to final product.
- Analyze and select appropriate raw materials and techniques for fashion products.
- Relate the history and social context of fashion to the current fashion zeitgeist.
- Apply technical and professional skills expected in the fashion industry, as an employee or an entrepreneur.

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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required foundational courses:</td>
<td></td>
</tr>
<tr>
<td>FASH 42 Introduction to the Fashion Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 15A Apparel Construction 1</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 22 Textile Analysis</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 23 Fashion History</td>
<td>3.0</td>
</tr>
<tr>
<td>Required advanced courses:</td>
<td></td>
</tr>
<tr>
<td>FASH 15B Apparel Construction 2</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 36B Fashion Design 2</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 63 Fashion Design &amp; Production Internship</td>
<td>2.0</td>
</tr>
<tr>
<td>FASH 137 Fashion Portfolio</td>
<td>1.0</td>
</tr>
<tr>
<td>FASH 138 Fashion Workplace and Career Essentials</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose 6 units from the following specialties:

- FASH 15C Apparel Construction 3
- FASH 16 Garment Fitting Techniques
- FASH 35A Fashion Illustration I
- FASH 36A Fashion Design 1
- FASH 26 Flat Pattern Design I
- FASH 27 Fashion Draping
- FASH 35B Fashion Illustration II
- FASH 36B Flat Pattern Design II
- FASH 37 Flat Pattern Design II
- FASH 112 Digital Illustration for Fashion

Total: ..................................................... 42.0
FASH 37 Flat Pattern Design II ...................... 3.0
FASH 112 Digital Illustration for Fashion ............ 3.0
Total: .............................................. 42.0

**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/Marketing 
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 Styling and Personal Styling Certificate**

The Certificate of Achievement in Fashion Styling and Personal Styling is a hands-on, field-based program that teaches students the requisite skills to become fashion stylists, personal stylists, personal shoppers, and sales associates, for a retailer or an independent contractor. Coursework includes instruction in assembling a styling kit, the different aspects of merchandise styling, color and wardrobe selection, figure analysis, and setting up a business. Students completing this certificate will be qualified for employment as a photo, fashion show, film, video, and personal stylist.

**Learning Outcomes**

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

- Apply the principles of design, skills, and styling techniques to diverse styling roles.
- Communicate using standard fashion terminology and references to fashion icons and designers, and visually through styling methods.
- Create and present digital mood boards.
- Assemble and maintain a fashion styling kit.
- Create a digital and printed styling portfolio for entrepreneurial business and entry-level employment.

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 Achievement in Fashion Styling and Personal Styling**

Course ........................................... Units
Required Courses:
FASH 45A Image Consulting ........................ 3.0
FASH 45B Advanced Image Consulting ............ 3.0
FASH 47 Fashion Direction and Coordination .... 3.0
FASH 53 Fashion Forecasting .......................... 3.0
FASH 54A Fashion Styling .................................. 3.0
FASH 54B Advanced Fashion Styling ................. 3.0
FASH 57 Fabric Glossary ................................. 1.0
FASH 60 Fieldwork Fashion Merchandising ......... 1.0

Choose five units from the following courses:
FASH A Introduction to Sewing ......................... 1.0
FASH 41A Hot Topics in Fashion ................. 1.0
FASH 42 Introduction to the Fashion Industry .... 3.0
FASH 61 Fashion Merchandising/Marketing Internship ... 2.0
FASH 62 Work Experience in Image Consulting .. 3.0
FASH 137 Fashion Portfolio ............................ 1.0
FASH 138 Fashion Workplace and Career Essentials ... 3.0
Total: ...................................................... 25.0

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 1.

NOTE: Some courses include a materials fee.

Credit, Degree Applicable Courses:
FASH 15A. Apparel Construction 1 (3)
Lec-35, Lab-52.5, field trips P/NP available
Recommended Prep: FASH A
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 2 (3)
Lec-35, Lab-52.5, field trips 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 overlock, complex construction sequences. Students construct three garments using techniques from class. CSU

FASH 15C. Apparel Construction 3 (3)
Lec-35, Lab-52.5, field trips P/NP available
Prereq: FASH 15B
Recommended Prep: FASH 26 or FASH 27
This class teaches advanced sewing techniques used in industry. Students will learn menswear techniques, machine tailoring, industry lining applications, and how to combine fabrics and textures. Projects include a sheath dress, a pant or pencil skirt, and a machine tailored jacket. CSU

Offered Spring semesters

FASH 16. Garment Fitting Techniques (3)
Lec-35, Lab-52.5, field trips P/NP available
Prereq: FASH 15A
Recommended Prep: 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 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
Recommended Prep: 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
Recommended Prep: 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. 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 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 P/NP available
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, instore 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 of 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
Recommended Prereq: ENGL 88 or ESL 188 or Readiness for College-Level English
Learn about fabrics used for clothing, how to identify fashion fabrics, and how to determine the suitability of these fabrics to various styles of fashion. CSU
Offered on occasion

FASH 58. Image Consulting (3)
Lec-52.5, field trips P/NP available
Students 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 59. Fashion Show Production (3)
Lec-52.5, field trips P/NP available
Fashion show production work experience. Students work backstage as dressers for a variety of designers or stores. CSU

FASH 60. Field Work - Fashion Merchandising (1)
Work-60 to 75 P/NP only
Repeat: Repeated up to 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: Repeated up to 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 62. Work Experience in Image Consulting (3)
Work-180-225 (total hrs) P/NP available
Repeat: Repeated up to 16 units
Image consulting internship with local employers to gain meaningful work experience. CSU
Offered Spring semesters

FASH 63. Fashion Design and Production Internship (2)
Work-120-150 (total hrs) P/NP available
Repeat: Repeated up to 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, appliqué, natural dyes including indigo, silk painting, nuno felting, and discharge dyeing. CSU
Offered on occasion

FASH 66. 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 digitizing and plotting patterns. CSU
Offered Spring semesters

FASH 67A. 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 digitizing and plotting patterns. CSU
Offered on occasion
FASH 69. Basic Pant Draft (1)  
Lec-9, Lab-26  
Prereq: FASH 15A  
Offered Fall semesters  
Students will learn the specialized skills needed to properly measure a figure and draft a well-fitting pant pattern. CSU

FASH 70. Copying Ready-to-Wear (1)  
Lec-12, Lab-20  
Prereq: FASH 15A  
Offered Fall semesters  
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

FASH 71. Creating & Upcycling Wearable Art (3)  
Lec-35, Lab-52.5, field trips  
Prereq: FASH 15A  
Offered Fall semesters  
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

FASH 72. Drafting a Sloper (Moulage) (1)  
Lec-12, Lab-20  
Prereq: FASH 15A  
Offered on occasion  
Students learn the classic techniques needed to measure a figure and draft a well-fitting moulage/sloper/basic pattern CSU

FASH 73. Sewing with Knit and Stretch Fabrics (1)  
Lec-8.75, Lab-26.25, field trips  
Prereq: FASH 26 or FASH 15A  
Offered on occasion  
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

FASH 74. Haute Couture Sewing Techniques (3)  
Lec-35, Lab-52.5, field trips  
Prereq: FASH 26 or FASH 15A  
Prereq: FASH 27 and FASH 15B  
“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

FASH 111A. Beginning Leather and Heavy Textiles (1)  
Lec-12, Lab-20, field trips  
Prereq: FASH 15A  
Offered Fall semesters  
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  
Prereq: FASH 111A  
Offered Fall semesters  
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  
Recommended Prep: VMD 105; FASH 35A; FASH 36A or FASH 54A  
Offered Spring semesters  
This course covers techniques in Adobe Photoshop and Illustrator appropriate for Fashion Designers and Merchandisers. CSU

FASH 113. Sustainability in Fashion (1)  
Lec-18  
Recommended Prep: FASH 112; FASH 53  
Offered Fall semesters  
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

FASH 115. Structured Foundations & Swimwear (3)  
Lec-35, Lab-52.5  
Prereq: FASH 15B or Demonstration of Exit Skills  
Prereq: FASH 26  
Offered Fall semesters  
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

FASH 120. Intimate Apparel & Lingerie (3)  
Lec-35, Lab-52.5  
Prereq: FASH 15A  
Offered Fall semesters  
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

FASH 127. Fashion Workplace and Career Essentials (3)  
Lec-17.5, field trips  
Recommended Prep: FASH 112; FASH 53  
Offered Fall semesters  
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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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:

- Engage in conversation at the intermediate-high level in standard French.
- Summarize contemporary French non-fiction texts and simple French literary texts appropriate to an intermediate-high learner.
- Compose mid-length written texts in French for both personal expression and academic discourse or analysis, at the intermediate-high level.
- Express in-depth knowledge of the various Francophone cultures of the world.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose 15 units from the following core courses:</td>
<td></td>
</tr>
<tr>
<td>FREN 2 Continuation of Elementary French</td>
<td>5.0</td>
</tr>
<tr>
<td>or FREN 2A Continuation of Elementary French</td>
<td>3.0</td>
</tr>
<tr>
<td>and 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>
<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</td>
<td>3.0</td>
</tr>
<tr>
<td>Literature and Culture</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 22 Grammar Review and Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 23 French Phonetics</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose an additional three (3) units from the following courses:</td>
<td></td>
</tr>
<tr>
<td>FREN 1 Elementary French</td>
<td>5.0</td>
</tr>
<tr>
<td>FREN 1A Elementary French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 1B Elementary French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 10B Continuation of Beginning Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 10C Intermediate Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 10D Intermediate Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 10E Continuation of Intermediate Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 11A Advanced Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 11B Advanced Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 15A Continuation of Advanced Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 15B Continuation of Advanced Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 41 Culture and Civilization of France</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 42 Contemporary French Culture and Civilization</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>18.0</td>
</tr>
</tbody>
</table>

French Certificate

The Certificate of Accomplishment in French provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language.
Learning Outcomes

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

- Engage in basic dialogue/conversation on familiar topics at the intermediate level, using the main standard structures of French.
- Demonstrate comprehension of short non-fiction texts that use high-frequency French vocabulary.
- Compose simple texts on familiar topics of personal interest and for practical communication.
- Demonstrate awareness of the diverse cultures of the Francophone world.

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

Course ............................................ Units
Choose 9 units from the following core courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 1 Elementary French</td>
<td>5.0</td>
</tr>
<tr>
<td>or FREN 1A Elementary French</td>
<td>3.0</td>
</tr>
<tr>
<td>and FREN 1B Elementary French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 2 Continuation of Elementary French</td>
<td>5.0</td>
</tr>
<tr>
<td>or FREN 2A Continuation of Elementary French</td>
<td>3.0</td>
</tr>
<tr>
<td>and FREN 2B Continuation of Elementary French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 3 Intermediate French</td>
<td>5.0</td>
</tr>
<tr>
<td>or FREN 3A Intermediate French</td>
<td>3.0</td>
</tr>
<tr>
<td>and 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>
</tbody>
</table>

Choose an additional 6 units from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 10A Beginning Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 10B Continuation of Beginning Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 10C Intermediate Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 10D Intermediate Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 10E Continuation of Intermediate Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 11A Advanced Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 11B Advanced Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 15A Continuation of Advanced Conversational French</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 15B Continuation of Advanced Conversational French</td>
<td>3.0</td>
</tr>
<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>3.0</td>
</tr>
<tr>
<td>FREN 41 Culture and Civilization of France</td>
<td>3.0</td>
</tr>
<tr>
<td>FREN 42 Contemporary French Culture and Civilization</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>15.0</td>
</tr>
</tbody>
</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
Recommended Prep: ENGL 88 or ESL 188 or any City College or University foreign language course or readiness for College-level English
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
Prereq: 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
Prereq: FREN 1 OR FREN 1B or demonstration of FREN 1or 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
Prereq: 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
Prereq: 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
Prereq: FREN 2 or 2B or demonstration of FREN 2/2B 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
Prereq: FRENCH 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 on occasion

FREN 3B. Intermediate French (3)
Lec-52.5
Prereq: 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 on occasion

FREN 4. Continuation of Intermediate French (3)
Lec-52.5
Prereq: 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
Prereq: FREN 2/2B or demonstration of FREN 2/2B exit skills.
Recommended Prep: FREN 3 or 3B
Reading in and discussion of French literature and culture. Exclusively oral training to acquire greater command of the spoken language through building vocabulary, improving pronunciation and expressing ideas in a more natural manner. CSU
Offered on occasion

FREN 10A. Beginning Conversational French (3)
Lec-52.5
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.
Offered Fall semesters

FREN 10B. Continuation of Beginning Conversational French (3)
Lec-52.5
Recommended Prep: FREN 10A
This is the second of a series of 5 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 1B wishing to get more oral practice. CSU
Recommended for students enrolled in FREN 1 or FREN 1A.
Not recommended for native speakers of French.
Offered Spring semesters

FREN 10C. Intermediate Conversational French (3)
Lec-52.5
Recommended Prep: FREN 10B or demonstration of FREN 10B exit skills
Continuation of extensive oral training in French. Designed for students who wish to continue acquiring more advanced skills of the spoken language with a minimum of formal grammar. CSU
Recommended for students enrolled in FREN 2 or 2A or 2B.
Not recommended for native speakers of French.
Offered Fall semesters

FREN 10D. Continuation of Intermediate Conversational French (3)
Lec-52.5
Recommended Prep: 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 Spring semesters

FREN 10E. Continuation of Intermediate Conversational French (3)
Lec-52.5
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: FREN 10E or FREN 3 or (FREN 3A and FREN 3B) or demonstration of 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
Recommended Prep: 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
Recommended Prep: 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 3A, 3B, or 4 or demonstration 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 French 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.
UC/CSU
May not be offered every semester.
Offered on occasion

FREN 41. Culture and Civilization of France (3)
Lec-52.5  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for col-
lege-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for col-
lege-level English
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
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 persis-
tence and academic accomplishment in the language.

Learning Outcomes

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

- Interpret the main points of standard German speech and gram-
  mar on familiar matters encountered in everyday situations and
  the media.
- Read and show comprehension of texts that consist mainly of
  high-frequency everyday or job-related German language.
- Communicate in most situations likely to arise while traveling
  in an area where the German language is spoken.
- Write simple, connected text in German on topics of familiar or
  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 German

Choose 9 units from the following core courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 1 Elementary German</td>
<td>5.0</td>
</tr>
<tr>
<td>or GERM 1A Elementary German</td>
<td>3.0</td>
</tr>
<tr>
<td>and GERM 1B Elementary German</td>
<td>3.0</td>
</tr>
<tr>
<td>GERM 2 Continuation of Elementary German</td>
<td>5.0</td>
</tr>
<tr>
<td>or GERM 2A Continuation of Elementary German</td>
<td>3.0</td>
</tr>
<tr>
<td>and GERM 2B Continuation of Elementary German</td>
<td>3.0</td>
</tr>
<tr>
<td>GERM 3 Intermediate German</td>
<td>5.0</td>
</tr>
<tr>
<td>or GERM 3A Intermediate German</td>
<td>3.0</td>
</tr>
<tr>
<td>and GERM 3B Intermediate German</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Web Site: www.ccsf.edu/forlang
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
Recommended Prep: ENGL 88 or ESL 188 or any City College or university foreign language course or readiness for college-level English
Beginner’s course: Grammar, composition, and reading; practice in speaking and understanding German. UC/CSU
GERM 1A + 1B = GERM 1

GERM 1B. Elementary German (3)
Lec-52.5  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or any City College or university foreign language course or readiness for college-level English
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
Required: GERM 1 or 1B or demonstration of GERM 1A 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
Required: GERM 1 or 1B or demonstration of GERM 1A 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
Required: 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

GERM 3. Intermediate German (5)
Lec-87.5  P/NP available
Required: 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
Required: 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
Required: 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 passive voice within fairly basic 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 4A. Continuation of Intermediate German (3)
Lec-52.5  P/NP available
Required: 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 the subjunctive 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
Required: 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  
**Recommended Prep: 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.**

GERM 10C. Intermediate Conversational German (3)  
Lec-52.5  
P/NP available  
**Recommended Prep: 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  
**Recommended Prep: 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, 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 2B or GERM 3.**

GERM 11A. Advanced Conversational German (3)  
Lec-52.5  
P/NP available  
**Recommended Prep: GERM 10D**  
Extensive oral training in German. Designed for students who wish to continue acquiring more advanced skills of the spoken language. UC/CSU  
**GERM 11A is not a prerequisite for GERM 11B. These courses may be taken non-sequentially. Offered on occasion.**

GERM 11B. Advanced Conversational German (3)  
Lec-52.5  
P/NP available  
**Recommended Prep: GERM 10D or demo of exit skills.**  
Extensive oral training in German. Designed for students who wish to continue acquiring more advanced skills of the spoken language. UC/CSU  
**GERM 11A is not a prerequisite for GERM 11B. These courses may be taken non-sequentially. Offered on occasion.**

**Graphic Communication**

See Visual Media Design
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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVT 201 Advanced Cardiovascular Technician</td>
<td>7.0</td>
</tr>
<tr>
<td>CVT 210 Advanced Cardiovascular Skills</td>
<td>7.0</td>
</tr>
</tbody>
</table>

**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

**Cardiovascular Technician/Echocardiography Major (AS)**

Students who complete their training satisfactorily are prepared to hold positions as cardiovascular technicians, echocardiography technicians, cardiovascular technicians in a medical center, cardiology officer or health center. Students must maintain a grade of "C" or higher. Students who complete their training satisfactorily are prepared to graduate from a medical center, cardiology officer or health center. 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 cardiovascular technician.
- Demonstrate technical skills necessary to fulfill the role of cardiovascular technician.
- Behave professionally, skillfully, and in a manner consistent with employer expectations for an entry-level position in cardiovascular 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECHO 101 Echocardiography</td>
<td>7.0</td>
</tr>
<tr>
<td>CVT 101 Cardiovascular Technician</td>
<td>3.0</td>
</tr>
<tr>
<td>CVT 110 Cardiovascular Skills</td>
<td>7.0</td>
</tr>
</tbody>
</table>

**Fall Semester**
- ECHO 201 Advanced Echocardiography Technician ...... 7.0
- CVT 201 Advanced Cardiovascular Technician .......... 4.0

**Spring 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

**Fall Semester**
- ECHO 401 Advanced Echocardiographic Studies ...... 6.0
- CVT 410 Clinical Experience in Advanced Cardiac Ultrasound .................................................... 13.0
- Total: ........................................ 71.0

<table>
<thead>
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<td>ECHO 301 Advanced Cardiac Abnormalities</td>
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</tr>
<tr>
<td>CVT 301 Physics of Cardiac Ultrasound</td>
<td>3.0</td>
</tr>
<tr>
<td>CVT 310 Clinical Experience in Cardiac Ultrasound</td>
<td>9.0</td>
</tr>
</tbody>
</table>

**Spring Semester**
- ECHO 401 Advanced Echocardiographic Studies ...... 6.0
- CVT 410 Clinical Experience in Advanced Cardiac Ultrasound .................................................... 13.0
- Total: ........................................ 71.0

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>ECHO 401 Advanced Echocardiographic Studies</td>
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</tr>
<tr>
<td>CVT 410 Clinical Experience in Advanced Cardiac Ultrasound</td>
<td>13.0</td>
</tr>
</tbody>
</table>
- Total: ........................................ 71.0

**CVT/Echocardiography Technician Certificate**

Students who complete their training satisfactorily are prepared to hold positions as cardiovascular technicians, echocardiography technicians, cardiovascular technicians in a medical center, cardiology officer or health center. Students must maintain a grade of "C" or higher. Students who complete their training satisfactorily are prepared to hold positions as cardiovascular technicians, echocardiography technicians, cardiovascular technicians in a medical center, cardiology officer or health center. 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 cardiovascular technician.
- Demonstrate technical skills necessary to fulfill the role of cardiovascular technician.
- Behave professionally, skillfully, and in a manner consistent with employer expectations for an entry-level position in cardiovascular 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.
EKG Technician Certificate

This program prepares students to operate ECG equipment and work as an ECG Technician in a cardiology office, non-invasive cardiac diagnostic department in a hospital, medical clinic or other medical facilities. 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:

- Evaluate and apply information relative to the role of an ECG Technician.
- Apply clinical knowledge necessary to fulfill the role of an entry-level ECG Technician.
- Perform clinical tasks on ECG machines, Holter monitor systems, and exercise stress test equipment.
- Communicate and interact with patients and members of the healthcare team according to employer expectations and standards of the healthcare profession.
- Qualify for the national registry examination: Cardiovascular Credentialing International (CCI).

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 EKG Technician
Course ............................................ Units

Required Courses
ECGT 101 ECG Technician I ................................... 4.0
ECGT 102 ECG Technician II ................................... 4.0
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. In this rapidly expanding field, EMT’s most often work in the prehospital setting 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, respiratory therapist, physician’s assistant, or physician.

This program is in compliance with requirements set forth in the California Code of Regulation, Title 22, Division 9, Chapter 2. All aspects of the EMT Training Program meet the NHTSA National EMS Education Standards. Students must maintain a grade of “C” or higher to receive a course completion certificate. The minimum completion time is one semester and must include all required elements of the State-approved curriculum.

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

- Apply pathophysiology, assessment principles, and treatment strategies to emergency care of ill and injured patients within the scope of practice of an Emergency Medical Technician.
- Integrate technical skills of the Emergency Medical Technician into complex patient situations as a basic level responder in a diverse community.
- Display professionalism, responsibility, and patient advocacy within a culturally diverse community as a member of the Emergency Medical Services healthcare team.

Students must have the following before enrolling in the EMT 100 course:
- Current certification in CPR at the healthcare provider level required (ex. AHA Basic Life Support provider certification).
- Attendance at one of the EMT program information sessions held monthly.
- Once enrolled in EMT 100, students must complete drug screening, background check, and immunization screening prior to completion of clinical time.

Courses Required for the Certificate of Accomplishment in Emergency Medical Technician
Course .................................................... Units

Required Courses
EMT 100 Emergency Medical Technician .................. 8.0
EMT 99 National Registry EMT Exam Preparation
Course .................................................... 1.0
Total: ......................................................... 9.0

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
Course .................................................... Units

Required courses:
EMTP 120 Human Systems and Patient Assessment ........ 5.0
EMTP 121 Introduction to EMS .............................. 3.0
EMTP 122 Pharmacology and Advanced Airway .......... 3.0
EMTP 123 Trauma Emergencies ............................. 3.0
EMTP 124 Trauma Certification .............................. 2.0
EMTP 125 Cardiorespiratory Emergencies ................. 4.0
EMTP 126 Neuroendocrine Emergencies ................. 3.0
and inpatient care. This is one of the few health occupations in which the management of electronic health information, revenue cycle management and personnel management. 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: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English.
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)

The Health Information Technology (HIT) program provides instruction and professional practice experience in the management and quality of health data relating to paper-based, electronic, and hybrid medical records. Health information professionals are responsible for maintaining components of health information systems consistent
with the medical, administrative, ethical, legal, regulatory, and accreditation requirements of a health care delivery system. This program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education.

Learning Outcomes

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

- Apply the knowledge and record management skills necessary for HIM entry-level employment as a health information professional in various health care settings.
- Apply the knowledge and computer skills 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 for the Certified Coding Associate (CCA) national certification examination offered by the American Health Information Management Association (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 ......................................................... 2.0
HIT 50A Medical Terminology I ................................................................. 3.0
HCT 67 Computer Applications in the Health Care Setting ............................... 2.0
Second semester required courses:
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 ................................................................. 3.0
HIT 73A ICD-10-CM Coding ................................................................. 3.0
Third semester required courses:
HIT 72 Legal Aspects of HIM ................................................................. 3.0
HIT 73B ICD-10-PCS Coding ................................................................. 4.0
HIT 77A Professional Practice I ................................................................. 5.0
HIT 75 Organization and Management in Health ................................................. 3.0
Fourth semester required courses:
HIT 74 Introduction to Quality Improvement ..................................................... 2.0
HIT 76 CPT Coding ................................................................. 3.0
HIT 77B Professional Practice II ................................................................. 5.0
HIT 78 Reimbursement Methods in HIM ......................................................... 2.0
Total: ......................................................... 52.0 – 57.0

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:

- Apply 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.
- Apply 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 I

Course ........................................ Units
Choose one of the following options in Anatomy and Physiology:
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 88 College Reading and Writing ................................................................. 6.0
ESL 186 ESL Introduction to College Reading and Writing ......................................... 6.0
Required courses:
HCT 61 Introduction to Health Care ......................................................... 2.0
HIT 50A Medical Terminology I ................................................................. 3.0
HCT 67 Computer Applications in the Health Care Setting ............................... 2.0
Total: ......................................................... 17.0 – 22.0

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:

- Organize, analyze, compile, and abstract data from a paper based or electronic medical record.
• Apply the knowledge and technical skills necessary for Health Information Management (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.
• Exhibit 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HIT 77A Professional Practice I</td>
<td>3.0</td>
</tr>
<tr>
<td>HIT 73A ICD-10-CM Coding</td>
<td>4.0</td>
</tr>
<tr>
<td>HIT 65 Organization of Health Data</td>
<td>3.0</td>
</tr>
<tr>
<td>HIT 50B Medical Terminology I</td>
<td>3.0</td>
</tr>
<tr>
<td>HIT 57 Disease Process</td>
<td>3.0</td>
</tr>
<tr>
<td>HIT 77A Professional Practice I</td>
<td>5.0</td>
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<td>Total: 24.0</td>
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Second semester required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 76 CPT Coding</td>
<td>3.0</td>
</tr>
<tr>
<td>HIT 77A Professional Practice I</td>
<td>5.0</td>
</tr>
<tr>
<td>HIT 78 Reimbursement Methods in HIM</td>
<td>3.0</td>
</tr>
<tr>
<td>Total: 11.0</td>
<td></td>
</tr>
</tbody>
</table>

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.

Learning Outcomes

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

• Assign diagnosis and procedure codes using the International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) and the International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-PCS) official coding guidelines for inpatient and outpatient records.

Health Information Technology Certificate

This certificate program is designed for students entering City College with a degree (A.A./A.S. or higher) or who wish to work in health information technology before completing CCSF graduation requirements.

Learning Outcomes

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

• Apply the knowledge and record management skills necessary for HIM entry-level employment as a health information professional in various health care settings.
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 ........................................2.0
HIT 50A Medical Terminology I ........................................3.0
HCT 67 Computer Applications in the Health Care Setting ..................2.0

**Second semester required courses:**
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 ....................................3.0
HIT 73A ICD-10-CM Coding ...........................................3.0

**Third semester required courses:**
HIT 72 Legal Aspects of HIM ........................................3.0
HIT 73B ICD-10-PCS Coding ........................................4.0
HIT 77A Professional Practice I ......................................5.0
HIT 75 Organization and Management in Health ..................3.0

**Fourth semester required courses:**
HIT 74 Introduction to Quality Improvement ..........................2.0
HIT 76 CPT Coding ..................................................3.0
HIT 77B Professional Practice II ......................................5.0
HIT 78 Reimbursement Methods in HIM ................................2.0

**Total: ..........................................................52.0 – 57.0**

**Medical Assisting Program**

**Degree Curricula**

(Options in Medical Assisting and Medical Administrative Assisting)

The curriculum in Medical Assisting, a two-year course of study, offers students training for employment through options in two areas: Medical Assisting and Medical Administrative Assisting. The Medical Assisting program is offered in cooperation with the American Association of Medical Assistants (AAMA).

**Admission.** Enrollment is open to all interested students; however, strongly recommended for success in the program: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English.

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 wheelchairs
- 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 screening, and complete a HIPAA Awareness training to qualify for the Professional Practice Internship. Students are responsible for all fees required to qualify for enrolment in the Professional Practice Internship.

**Credit by Examination.** Applicants who have been admitted to the Program and who have previous education or medical assisting/clinical or related experience may apply for credit and advanced placement in the curriculum by transfer or challenge process.

**Purchase of Uniform and Clinical Supplies.** Students are responsible for purchasing a uniform 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) 25400 US Highway 19 North, Suite 158, Clearwater, FL 33763, (727) 210-2350, www.caahep.org, 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 unpaid 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 setting. For more information, please contact the Health Care Technology Department.
Students who complete the internship 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 qualified for the positions of receptionist, medical biller, admitting, ward clerk, or office manager in an outpatient clinic, medical office, and health center.

**Associate in Science Degree.** The curriculum is designed so that students may satisfy the requirements for graduation from the College. Students who satisfy these requirements and complete their training in Medical 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), 25400 US Highway 19 North, Suite 158, Clearwater, FL 33763, (727) 210-2350, www.caahep.org, 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) 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>
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<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><strong>OPTION 1:</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 106 Introduction to Human Anatomy and Physiology</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>OPTION 2:</strong></td>
<td></td>
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<tr>
<td>BIO 108 General Human Anatomy</td>
<td>4.0</td>
</tr>
<tr>
<td>AND choose one of the following Physiology options:</td>
<td></td>
</tr>
<tr>
<td>BIO 111 Human Physiology</td>
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<tr>
<td>BIO 112 Introduction to Human Physiology</td>
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</table>

**First Semester:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>HCT 61 Introduction to Health Care</td>
<td>2.0</td>
</tr>
<tr>
<td>HCT 104 Phlebotomy Technician</td>
<td>5.5</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 56 Administrative Procedures</td>
<td>3.5</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>HIT 50B Medical Terminology II</td>
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</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>
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**Summer Session:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>HCT 82 Professional Practice Internship/Certification</td>
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**Third Semester:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HIT 73A ICD-10-CM Coding</td>
<td>3.0</td>
</tr>
<tr>
<td>HIT 75 Organization and Management in Health</td>
<td>3.0</td>
</tr>
<tr>
<td>MED 73 Advanced Medical Manager</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total: 59.0 – 64.0

### 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**

Course: ............................................ Units

**Required course:**

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 choose 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 ............... 2.0

HIT 50A Medical Terminology I ....................... 3.0

HIT 67 Computer Applications in the Health Care Setting ............................................ 2.0

MED 55 The Electronic Health Record ....................... 4.0

MED 56 Administrative Procedures ....................... 4.0

**Second Semester:**

HIT 50B Medical Terminology II ....................... 2.0

HIT 57 Disease Process ................................ 3.0

HIT 73A ICD-10-CM Coding ....................... 3.0

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), 25400 US Highway 19 North, Suite 158, Clearwater, FL 33763, (727) 210-2350, www.caahep.org, 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.

**Program recommended preparation:** ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English.

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 ............... 2.0

HCT 104 Phlebotomy Technician ....................... 5.5

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 ....................... 4.0

**Second Semester:**

HIT 50B Medical Terminology II ....................... 2.0

HIT 57 Disease Process ................................ 3.0

HIT 73A ICD-10-CM Coding ....................... 3.0

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:** ....................................... 54.5 – 59.5
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-10-CM coding, medical terminology, disease processes, computer bookkeeping procedures, and manual and computer insurance billing for commercial insurance, Medicaid, Medicare, Worker’s Compensation, and managed care plans.

Learning Outcomes

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

- Assign CPT codes to outpatient services and procedures.
- Assign ICD-10-CM 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>First Semester</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>4.0</td>
<td></td>
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<tr>
<td>HCT 67 Computer Applications in the Health Care Setting</td>
<td>2.0</td>
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</tr>
<tr>
<td>HIT 76 CPT Coding</td>
<td>3.0</td>
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<tr>
<td>MED 70 Medical Insurance Billing</td>
<td>2.0</td>
<td></td>
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<tr>
<td>MED 71 Electronic Management of Financial Medical Records</td>
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</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Second Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 50B Medical Terminology II</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>HIT 57 Disease Process</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>HIT 73A ICD-10-CM Coding</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>MED 55 The Electronic Health Record</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>MED 72 Advanced Medical Insurance Billing</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>MED 73 Advanced Medical Manager</td>
<td>1.5</td>
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</table>

Total: 31.5

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, computer applications, medical records, 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:

- Effectively perform clinical procedures, laboratory tests, phlebotomy, and diagnostic studies.
- Practice infection control and adhere to OSHA regulations.
- 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>Fall Semester</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 50A Medical Terminology I</td>
<td>3.0</td>
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</table>
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 88 or ESL 188 or placement in ENG 1A.
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

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.

Courses Required for the Certificate of Achievement in Medical Receptionist

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<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>
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<tr>
<td>MED 62 Communication and Professionalism in Health Care</td>
<td>2.0</td>
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</tbody>
</table>

Fall Semester: choose one of the following Anatomy and Physiology options:

<table>
<thead>
<tr>
<th>OPTION 1:</th>
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</thead>
<tbody>
<tr>
<td>BIO 106 Introduction to Human Anatomy and Physiology</td>
<td>4.0</td>
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</table>

<table>
<thead>
<tr>
<th>OPTION 2:</th>
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<tbody>
<tr>
<td>BIO 108 General Human Anatomy</td>
<td>4.0</td>
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</table>

AND choose one of the following Physiology courses:

<table>
<thead>
<tr>
<th>BIO III Human Physiology</th>
<th>5.0</th>
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<tbody>
<tr>
<td>BIO II Introduction to Human Physiology</td>
<td>4.0</td>
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</tbody>
</table>

Spring Semester:

<table>
<thead>
<tr>
<th>HCT 104 Phlebotomy Technician</th>
<th>5.5</th>
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</thead>
<tbody>
<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>HLTH 66 Chronic Conditions Management</td>
<td>3.0</td>
</tr>
<tr>
<td>MED 49 Clinical Procedures</td>
<td>5.5</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 |

Total: 41.0 – 46.0
Successful applicants are required to submit evidence of a recent tuberculin skin test or chest x-ray, proof of immunizations, and a physical examination which indicates they are in good physical health to include the following:

- 20/100 vision correctable to 20/30 in both eyes with normal color perception
- able to stand unassisted for long periods of time
- able to walk, bend, reach, lift product, and stoop frequently
- possess normal hearing or corrected hearing within the normal range
- able to manipulate stationary and mobile medical equipment

Before you apply to the program, please review the following description of the tasks, knowledge, skills, abilities and work activities that a student will need to perform in classes and assigned internship settings. The website for the Dictionary of Occupational Titles is: http://www.occupationalinfo.org/

All applicants who meet the above requirements are eligible for the program. Classroom space and clinical site placements limit the class size to 30 students, therefore, students are selected by lottery from the eligible applicants.

Background Check. A background check may be required by the assigned clinical sites. The cost of this will be incurred by the student. Students must complete this background check prior to clinical placement.

Drug Screening. Drug screening may be required by the clinical placement site. The student is responsible for this cost.

Each course must be completed 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 classes completed per semester.

Courses Required for the Certificate of Achievement in Pharmacy Technician

Course .................................................. Units
First Semester:
PHTC 101 Pharmacy Technician I Theory* ............... 9.0
PHTC 102 Pharmacy Technician I Clinical* ............... 7.0
* Both theory and clinical courses must be taken in the same semester.

Second Semester:
PHTC 103 Pharmacy Technician II Theory* ............... 9.0
PHTC 104 Pharmacy Technician II Clinical* ............... 5.0
* Both theory and clinical courses must be taken in the same semester.

Total: .................................................... 30.0

Announcement of Courses
Credit, Degree Applicable Courses:

Echocardiography

ECHO 101. Echocardiography (7)
Lec-105, Lab-105
Prereq: BIO 106 or BIO 108
Coreq: CVT 101 and CVT 110
Recommended Prereq: Background check, drug screening, immunization records and TB testing required by the medical centers for internship attendance; ENGL 88 or ESL 188 or readiness for college-level English

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 root disease. Emphasis on cardiac embryology and congenital cardiac defects and the associated echocardiographic findings. Content includes echocardiographic identification of surgical repairs of congenital cardiac diseases. CSU

Offered in alternate fall semesters

ECHO 401. Advanced Echocardiographic Studies (6)
Lec-105
Prereq: ECHO 101, CVT 101, ECHO 201, CVT 102, ECHO 301, CVT 301, CVT 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 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: BIO 106 or BIO 108
Coreq: ECHO 101 and CVT 110
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 lead ECGs, 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: BIO 106 or BIO 108
Coreq: ECHO 101 and CVT 101
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 (TTEs). 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 210
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 Fall semesters

CVT 410. Clinical Experience in Advanced Cardiac Ultrasound (13)
Lec-87.5, Lab-420
Prereq: CVT 310
Provide students with advanced experience in performing echocardiograms on adults in the clinical setting under the guidance of departmental preceptors. Emphasis is on the completion of diagnostic quality cardiac ultrasound exam with application of measurements, Doppler interrogation, and interpretation of results. CSU
Offered in alternate Spring semesters

ECG Technician
ECGT 101. ECG Technician I (4)
Lec-52.5, Lab-70
Recommended Prep: ENGL 88 or ESL 186 or readiness for college-level English
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 P/NP only
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-180.00, 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 childcare providers in pediatric CPR and first aid including the practice of universal precautions, use of an AED and integration with the EMS system. Qualified participants are awarded the American Heart Association Pediatric Heartsaver First Aid CPR AED card. This course fulfills the requirement of the State EMS Authority for Childcare Providers. CSU
Students enrolled in this course will be assessed a lab/material fee for CPR 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 $20 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. Students enrolled in this course will be assessed a $25 lab/material fee for CPR and Heartsaver First Aid/CPR/AED card.

EMT 99. National Registry EMT Exam Preparation Course (1)
Lec-18
P/NP only
Recommended Prep: 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
Recommended Prep: 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

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
Recommended Prep: 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.

Students enrolled in this course will be assessed a $20 lab/material fee for CPR and First Aid cards.

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.

Noncredit Courses:

EMT 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 (3)
Lec-35, Lab-52.5
Prereq: EMTP 120 or BIO 106; EMT 104
Introduction to Emergency Medical Services (EMS) including the history of EMS development, medical legal issues in emergency care, health and safety of the paramedic, principles of patient assessment, and EMS research. CSU
Offered Fall semesters

EMTP 122. Pharmacology and Advanced Airway (3)
Lec-35, Lab-52.5
Prereq: EMTP 120 or BIO 106; EMT 104
Coreq: EMTP 121; EMTP 123; EMTP 125
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 (3)
Lec-52.5
Prereq: EMTP 120 or BIO 106; EMT 104
Coreq: EMTP 124
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 (2)
Lec-17.5, Lab-52.5
Prereq: EMTP 120 or BIO 106; EMT 104
Coreq: EMTP 123
This course meets the requirements for trauma certification according to national, state and local standards in emergency medical services. This course is a required for students enrolled in the paramedic program. CSU
Offered Fall semesters

EMTP 125. Cardiorespiratory Emergencies (4)
Lec-52.5, Lab-52.5
Prereq: EMTP 120 or BIO 106; EMT 104
Assessment and management principles in EMS advanced life support care of patients with respiratory and cardiovascular emergencies in the emergency setting. Includes ECG interpretation of dysrhythmias, 12-Lead ECG, and cardiorespiratory pharmacology. Advanced cardiac life support guidelines and preparation for certification. CSU
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
Recommended Prep: 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
Recommended Prep: 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 (2)
Lec-35
Prereq: ESL 186 or ENGL 88 or placement in ESL 188 or readiness for college-level English
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
Offered Spring and Fall semesters

HCT 67. Computer Applications in the Health Care Setting (2)
Lec-17.5, Lab-52.5
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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 data security are emphasized. CSU

**Formerly HIT 67**

**Offered Spring and Fall semesters**

HCT 82. Professional Practice Internship/ Certification (5)
Lec-21, Lab-35, Work-196
P/NC only
Prereq: HIT 50B and MED 56; MED 70; MED 71; MED 55; MED 49
Repeat: 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 (5.5)
Lec-92.5, Lab-27
Recommended Prep: ENGL 88 or ESL 186 or Placement in ESL 188 or readiness for college-level English
Theoretical knowledge and skills competencies necessary to meet California regulatory requirements for phlebotomy technicians. Emphasis on phlebotomy techniques, equipment, medical/legal considerations, safety, infection control, specimen collection and handling, patient preparation and patient care. Course prepares student to take the CPT-1 examination. CSU

**Formerly ERT 104**

**Offered Spring and Fall semesters**

**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, diagnostic 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
Continuing medical terminology course with emphasis on the hematology, lymphatic, immune, musculoskeletal, integumentary, and endocrine systems, and the sense organs. Selected terminology and abbreviations used in specialty areas of psychology, oncology, radiology, and nuclear medicine. CSU

**Offered Spring and Fall semesters**

**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

**Offered Spring and Fall semesters**

**HIT 57. Disease Process (3)**
Lec-52.5
Prereq: BIO 106; 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

**Offered Spring and Fall semesters**

**HIT 63. Health Information Systems (3)**
Lec-35, Lab-52.5
Prereq: HIT 61 and HIT 50A
Recommended Prep: HCT 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 (EHR), and healthcare information systems. CSU

**Offered Spring semesters**

**HIT 65. Organization of Health Data (3)**
Lec-35, Lab-52.5
Prereq: Completion of or concurrent enrollment in: HIT 61
Recommended Prep: HCT 67
The study of basic hospital and health statistics including sources, definitions, and use of health data. Computerized and manual methods of collecting, processing, and preparing statistical reports and spreadsheets for health care management, including various methods of presenting data, predictability studies, data mining, calculation of common rates and percentages. CSU

**Offered Spring semesters**

**HIT 72. Legal Aspects of HIM (3)**
Lec-35, Lab-52.5
Prereq: HIT 61
Recommended Prep: HCT 67 and HIT 50B
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 Spring semesters**

**HIT 73A. ICD-10-CM Coding (3)**
Lec-52.5
Prereq: BIO 106 COREQ: HIT 50A
Coreq: HIT 50A
Recommended Prep: HCT 61
Provides students with basic International Classification of Disease, 10th Edition, Clinical Modification (ICD-10-CM) coding principles with emphasis on inpatient and outpatient guidelines. The course focuses on format, code conventions, Uniform Hospital Discharge Data Set (UHDDS) guidelines, document sources, code sequencing, and code assignment. CSU

**Offered Spring and Fall semesters**

**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 health care 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

Offered Spring and Fall semesters

HIT 77A. Professional Practice I (5)
Lec-52.5, Lab-105
P/NP only
Coreq: HIT 73A
Recommended Prep: HIT 63 and HIT 65
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

Offered Spring and Fall semesters

HIT 77B. Professional Practice II (5)
Lec-52.5, Lab-105
P/NP only
Prereq: HIT 77A
Provide students with advanced, specialty 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

Offered Spring and Fall semesters

HIT 78. Reimbursement Methods in HIM (2)
Lec-35
Coreq: 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: BIO 106 and HIT 50A
Recommended Prep: BSMA G, H, or J or MATH 30
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 telecommunication; 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 coach 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
Recommended Prep: MED 70 and HIT 76
A course in medical office management, office policies, and procedures. Office management is covered with an emphasis on the medical office setting. This course includes the use of electronic medical records (EMR), medical terminology, pharmacy calculations, and pharmacology.

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
Prereq: HIT 76
An advanced medical 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 state reports and patient statements, complete collection procedures 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 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 40
Coreq: PHTC 102
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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.

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
Prereq: PHTC 101
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 102
Coreq: PHTC 103
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 9121. Skills for Home Care Providers (25 hrs)
Training in the basic communication, health, safety, nutrition, and job readiness skills competencies required of a home care provider.

Unit Coordinator and Medical Computing Skills

AHWC 9183. Unit Coordinator (108 hrs)
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.

Health Education

Office: MUB 353
Phone Number: (415) 239-3220
Web Site: www.ccsf.edu/hlthed
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 inequities.
The Department offers a wide range of courses and career and technical education training programs designed to:

- Provide students with academic training in the interdisciplinary field of Health Education.
- Meet associate degree and transfer requirements.
- Train students for careers in public health.
- Diversify the health work force.

To this end, we offer a Health Education Major, an Associate Degree for Transfer in Public Health Sciences, and certificates in the following areas for students interested in health-related careers:

- Community Health Worker, with specialty areas in Youth Advocacy, Re-entry, HIV/HCV Navigation and Elder Advocacy
- Addiction and Recovery Counseling
- Community Mental Health
- Health Care Interpreter
- Nutrition Assistant

**Public Health Science Major (AS-T)**

The Associate in Science in Public Health Science for Transfer degree is designed to provide students with sufficient understanding of public health theories, concepts and applications to succeed in upper division coursework in public health and health-related majors at a four-year college or university. This degree emphasizes a social justice framework, with a focus on the social determinants of health and improving the health of diverse communities. The major in Public Health prepares students for careers in public health and related health professions in settings including community-based organizations, health departments, local state and federal agencies, social service organizations, healthcare organizations, educational institutions and research organizations.

The Public Health Science Associate in Science Degree for Transfer (AS-T) prepares students to transfer to the California State University (CSU) System in the field of Public Health and other health-related majors. Students who earn this degree and meet the CSU minimum eligibility requirements are guaranteed admission to a CSU, but not to a particular campus or major. Students who wish to earn the 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 General Education (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:

- Apply a public health equity framework to support the health and well-being of diverse communities.
- Access, interpret, and analyze health data and evidence-based research to understand and improve community health.
- Integrate principles of biology and chemistry into a public health framework.

The Public Health Science Associate of Sciences Degree for Transfer (AS-T) is open to all students who are admitted to City College of San Francisco and have satisfied any prerequisites required for classes listed in the major.

For students who begin this AS-T at transfer-level math and English, the minimum time to completion is 4 semesters. Completion time will vary based on student preparation and number of units completed each semester.

**Courses Required for the AS-T in Public Health Science**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 80 Probability and Statistics</td>
<td>5.0</td>
</tr>
<tr>
<td>HLTH 54 Introduction to Public Health</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 53 Personal and Community Health</td>
<td>3.0</td>
</tr>
<tr>
<td>CHEM 40 Introduction to Chemical Principles</td>
<td>5.0</td>
</tr>
<tr>
<td>PSYC 1 General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 108 General Human Anatomy</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Choose one of the following required Biology courses:

- BIO 9 Human Biology | 4.0 |
- BIO 11 Science of Living Organisms | 4.0 |

Choose one of the following required Physiology courses:

- BIO 112 Introduction to Human Physiology | 4.0 |
- BIO 113 Human Physiology | 5.0 |

Choose one of the following courses:

- ECON 3 Principles of Microeconomics | 3.0 |
- ECON 1 Principles of Macroeconomics | 3.0 |
- SOC 1 Introduction to Sociology | 3.0 |
- IDST 17 Human Sexuality | 3.0 |
- HLTH 221 Health and Social Justice | 3.0 |
- HLTH 30 Drugs and Society | 3.0 |
- BIO 132 Introduction to Nutrition | 3.0 |

**Total: 34.0 – 35.0**

**Health Education Major (AS)**

The Health Education major is 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. The coursework includes personal and community health topics, an analysis of the major determinants of health from an equity perspective, and the application of critical thinking and quantitative reasoning to contemporary public health challenges. The goal of the program is to develop a diverse student body to address the health needs of our communities. With a Bachelor’s Degree in Health Education, students are prepared for careers within a wide range of public and private employers.

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 health and health-related subjects. 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 are required to take four core courses that help to satisfy transfer requirements to local universities. 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 required for certain classes. Courses requiring prerequisites are highlighted with an asterisk (*).

**Learning Outcomes**

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

- Analyze factors that shape health and illness of individuals and communities.
will vary based on student preparation and number of units completed per semester.

The 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 Health Education
Course ........................................... Units
Required course:
HLTH 54 Introduction to Public Health .................. 3.0

Choose one of the following required courses:
HLTH 53 Personal and Community Health ................ 3.0
HLTH 27 Men's Health .................................. 3.0
HLTH 25 Women's Health ................................ 3.0

Choose one of the following required courses:
BIO 9 Human Biology ................................... 4.0
BIO 11 Science of Living Organisms ...................... 4.0

Choose one of the following required courses:
MATH 80 Probability and Statistics ...................... 5.0
PSYC 5 Statistics for Behavioral Sciences ............... 5.0
ECON 5 Introductory Statistics for Economics, Business and Social Sciences ....................... 5.0
LALS 5 Introduction to Statistical Methods in Latin American and Latino/a Studies ................... 5.0

Choose six units from the following elective courses:
HLTH 10 Health and Aging .............................. 3.0
HLTH 30 Drugs and Society .............................. 3.0
HLTH 38 Trauma Response and Recovery ............... 3.0
HLTH 48 Violence as a Public Health Issue: Prevention Strategies ................. 3.0
HLTH 56 Politics of Food and Health .................... 3.0
HLTH 64 Health Education Training: Skills and Practice .................................................. 3.0
HLTH 66 Chronic Conditions Management ............. 3.0
HLTH 67 HIV and Hepatitis Navigation Skills ........ 3.0
HLTH 80 Interpreting in Health Care I ................. 6.5
HLTH 91H Elder Abuse Prevention ..................... 1.0
HLTH 91C Hepatitis ABCs .............................. 1.0
HLTH 95 Transgender Health: Working with Clients and Communities .............................. 1.0
HLTH 97 Stress and Resilience .......................... 3.0
HLTH 102 Helping Relationships: Recovery and Wellness ................................................. 3.0
HLTH 110 Health Impacts of Incarceration ............. 3.0
HLTH 116 Conflict Resolution Skills in Health ........ 1.0
HLTH 120 Educational Justice and Health Equity .... 3.0
HLTH 221 Health and Social Justice .................... 3.0
HLTH 231 Healthy Cities and Communities ............. 3.0
BIO 108 General Human Anatomy ..................... 4.0
BIO 111 Human Physiology ................................ 5.0
BIO 120 Introduction to Microbiology ................... 4.0
BIO 134 Introduction to Nutrition for Health Sciences ........................................... 3.0
IDST 17 Human Sexuality ................................ 3.0
LBCS 81 Organizing for Economic and Social Justice ... 3.0
PSYC 21 Lifespan Development .......................... 3.0

Total: ................................................................ 21.0

Below you will find specific information for each certificate program.

Addiction and Recovery Counseling Certificate
The Certificate in Addiction and Recovery Counseling is designed to prepare individuals for work in alcohol, drug, and other addictions counseling. The program emphasizes a public health approach that addresses community, social, and individual level factors in addiction while providing certificate candidates with a strong background in treatment modalities, health education and prevention, professional and ethical responsibilities, and client advocacy. Courses are sequenced based on knowledge and skills that are acquired as students move through the program.

The pre-requisite to the program, HLTH 100, Introduction to Drug and Alcohol Studies, is offered every semester. Other courses are offered either on a semester or annual basis. Please consult the current class schedule to confirm course availability.

The Addiction and Recovery Counseling Certificate is accredited by an external accreditation agency. For more information, see the “Overview of the College” section of this Catalog.

Learning Outcomes
Upon completion of this program, students will be able to:
• Distinguish the ethical skills necessary for professional employment as an addiction, treatment and recovery counselor in health care settings
• Explain the content and skills necessary for counselor certification in the field
• Synthesize client-centered counseling skills, harm reduction and motivational counseling concepts, and cultural humility
• Integrate substance use, addiction and recovery research into professional practice.

Admission. Admission to the program is based on the successful completion of the prerequisite course HLTH 100, Introduction to Drug & Alcohol Studies (1 unit).

Requirements for the Certificate of Achievement. The certificate requires the completion of 31.5 units. Up to 6 units may be taken outside of City College of San Francisco to satisfy the requirements. The internship must be completed through City College of San Francisco.

Internship. Students must complete internship coursework and fieldwork with a state-licensed substance abuse services agency. Preparation and supervision for the field work experience will be provided in HLTH 79 and HLTH 79W.

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 Addiction and Recovery Counseling
Course ........................................... Units
Required courses:
HLTH 30 Drugs and Society .............................. 3.0
HLTH 70 Physiological Effects of Addiction ........... 3.0
HLTH 73 Case Management/Individual Intervention .... 3.0
HLTH 75 Treatment Modalities .......................... 3.0
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 competencies for working effectively with diverse individuals, groups 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.

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 120-150 internship hours during HLTH 203W

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 H203W 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.

Community Health Worker, Elder Advocate Specialist Certificate

The Community Health Worker, Elder Advocate Specialist Certificate of Achievement is designed to prepare individuals for positions working with older adults in community health and social service agencies and programs. It emphasizes competencies for working with older adults adopted by the Association for Gerontology in Higher Education (AGHE). These include culturally responsive outreach, case management, client-centered intake and counseling skills, and community organizing and advocacy. As part of their education, students will complete an internship with a local agency serving older adults.

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 competencies for working effectively with diverse individuals, groups and communities.
- Analyze and apply key concepts and skills for working with older adults.

ADMISSION REQUIREMENTS

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.

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 120-150 internship hours during HLTH 203W

2. All courses must be completed within a 3-year period, starting from the first semester of enrollment in HLTH 201.

Courses Required for the Certificate of Achievement in Community Health Worker

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>HLTH 201 CHW Principles &amp; Practice 1</td>
<td>5.0</td>
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<tr>
<td>HLTH 202 CHW Principles &amp; Practice 2</td>
<td>5.0</td>
</tr>
<tr>
<td>HLTH 203 Professional Skills for Community Health Workers</td>
<td>2.0</td>
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<tr>
<td>HLTH 203W CHW Internship Placement</td>
<td>2.0</td>
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<tr>
<td>HLTH 64 Health Education Training: Skills and Practice</td>
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<td>HLTH 66 Chronic Conditions Management</td>
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Courses Required for the Certificate of Achievement in Community Health Worker

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>HLTH 64 Health Education Training: Skills and Practice</td>
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<tr>
<td>HLTH 66 Chronic Conditions Management</td>
<td>3.0</td>
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<td>Total</td>
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</table>
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 H203W 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, Elder Advocate Specialist**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
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<td>HLTH 201 CHW Principles &amp; Practice 2</td>
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<tr>
<td>HLTH 203 Professionals for Community Health Workers</td>
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<td>HLTH 10 Health and Aging</td>
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<td>HLTH 91H Elder Abuse Prevention</td>
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<tr>
<td>HLTH 87 Assessment and Services for Older Adults</td>
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<td><strong>Total:</strong></td>
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**Community Health Worker, HIV and Hepatitis Navigation Specialist Certificate**

The Community Health Worker, HIV and Hepatitis Navigation Specialist Certificate of Achievement is part of the Community Health Worker (CHW) Program. This certificate is designed to prepare individuals for positions working with people and communities impacted by HIV and Hepatitis in community health and social service agencies and programs. CHW HIV and Hepatitis Navigation 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 agency.

The San Francisco Department of Public Health accepts this certificate of achievement to satisfy six out of the twelve months experience that is required to meet the minimum qualifications for the Health Worker 1-3 job classification.

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 clients and communities impacted by HIV and Hepatitis.

**Admission to the program is based on:**

1) The completion of HLTH 59, “Introduction to Community Health Work” (1 unit) with a grade of C or higher, OR
2) Documented successful experience as a Community Health Worker and submission of a completed Program Application by the stipulated deadline.

**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 120-150 internship hours during HLTH 203W
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 203W 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, HIV and Hepatitis Navigation Specialist**

<table>
<thead>
<tr>
<th>Course</th>
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<td>HLTH 66 Chronic Conditions Management</td>
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<tr>
<td>HLTH 91C Hepatitis ABCs</td>
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<tr>
<td>HLTH 95 Transgender Health: Working with Clients and Communities</td>
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<tr>
<td>HLTH 201 CHW Principles &amp; Practice 1</td>
<td>5.0</td>
</tr>
<tr>
<td>HLTH 202 CHW Principles &amp; Practice 2</td>
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<tr>
<td>HLTH 203 Professional Skills for Community Health Workers</td>
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<td><strong>Total:</strong></td>
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**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.

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 120-150 internship hours during HLTH 203W
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 203W 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tr>
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<tr>
<td>HLTH 202 CHW Principles &amp; Practice 2**</td>
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<tr>
<td>HLTH 203 Professional Skills for Community Health Workers</td>
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<td>HLTH 66 Chronic Conditions Management</td>
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<tr>
<td>HLTH 110 Health Impacts of Incarceration</td>
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<tr>
<td>HLTH 203W CHW Internship Placement</td>
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</tbody>
</table>

* 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.

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 120-150 internship hours during HLTH 203W
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 203W 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

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<tr>
<th>Course</th>
<th>Units</th>
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<tr>
<td>Required courses:</td>
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<tr>
<td>HLTH 201 CHW Principles &amp; Practice 1*</td>
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<tr>
<td>HLTH 202 CHW Principles &amp; Practice 2**</td>
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<tr>
<td>HLTH 203 Professional Skills for Community Health Workers</td>
<td>2.0</td>
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<tr>
<td>HLTH 203W CHW Internship Placement</td>
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</tr>
<tr>
<td>HLTH 65 Youth Development &amp; Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>HLTH 64 Health Education Training:</td>
<td></td>
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<tr>
<td>Skills and Practice</td>
<td>3.0</td>
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</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 Worker Certificate of Achievement is based on the wellness and recovery model in mental health. The program trains a diverse group of individuals to provide culturally affirming mental health and wellness and recovery services in San Francisco. The program engages consumers of mental health services, 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:
- Evaluate information on wellness and recovery promotion.
Upon completion of this program, students will be able to:

- Formulate wellness and recovery strategies to work with members of diverse communities.
- Demonstrate proficiency in entry-level skills including care brokerage, advocacy, outreach, systems navigation, documentation, and behavioral health coaching and mental health counseling.
- Perform behavioral, ethical, and professional skills necessary for employment in the mental health field.

**Requirements for the Certificate of Achievement**

**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 2 semesters. Completion time will vary based on the semester in which students enter the program, student preparation, and number of units completed per semester.

**Courses Required for the Certificate of Achievement in Community Mental Health Worker**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>HLTH 88 Family Systems</td>
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<tr>
<td>HLTH 102 Helping Relationships: Recovery and Wellness</td>
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<tr>
<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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<td>HLTH 105 Professional Skills for Community Mental Health Workers</td>
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<td>HLTH 105W CMHC Internship Placement</td>
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<td><strong>Total:</strong></td>
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**Healthcare Interpreter Certificate**

The curriculum for the Healthcare 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. A maximum of fifteen students (who share the same language-pair) will be admitted during any semester. Upon completion of the certificate and the HLTH 84 course, students would have completed a minimum of 350 hours of education and training.

**Learning Outcomes**

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

- Interpret accurately and completely between English and language of service (LOS) in healthcare settings; conveying the meaning of the message and facilitating understanding and communication between parties speaking different languages and from different cultures.
- Apply appropriate interpreting roles, modes, and techniques to manage the flow of communication effectively in situations with varying degrees of complexity.
- Bridge cultural gaps and clarify diverse cultural beliefs and practices within the healthcare encounter.
- Apply healthcare interpreting standards, protocols and ethical principles.
- Assess and integrate professional skills necessary for employment in the healthcare interpreting (HCI) field.

**Admission requirements**

1. Proficiency in English and an additional language (see below for language proficiency evaluation)
2. Passing grade required in introductory course HLTH 84, Introduction to Healthcare Interpreting (.5 unit)
3. Submission of written application distributed in HLTH 84
4. Priority is given to those who have successfully completed at least three units of the following recommended courses: BIO 106 (Human Biology and Physiology), BIO 112 (Intro to Human Physiology), and HIT 51 (Basic Medical Terminology).
5. Assignment by program coordinator to a specific LOS group with a proposed semester of admission

**Language Proficiency**

Students’ language proficiency is evaluated using a rubric through conversation and other assessment activities with a language coach. Anyone scoring below a rating of “4” is not accepted into the program. This scale is used to assess both English and the language of service (LOS).

- **Level 1:** Very poor skills. Little or no fluency. Does not understand or follow the conversation.
- **Level 2:** Poor to fair skills. Very heavy accent and problems with pronunciation. Hard to understand without much effort. Limited vocabulary and grammatical errors.
- **Level 3:** Conversational skills only. Fairly simple but clear vocabulary. Understandable pronunciation and accent, but some difficulty with certain sounds. Some grammatical errors. Difficulty with fluency. Limited understanding of speaker.
- **Level 4:** Very good skills. May have an accent but is completely understandable in the language. No or very minor grammatical errors. Very good fluency with few pauses. Understands the speaker easily.
- **Level 5:** Excellent skills. Native speaker with extensive vocabulary. Unobtrusive accent. Able to express abstract thoughts. Words flow fluently with no pauses or stutters. Understands the speaker completely.

**Requirements for the Certificate of Achievement**

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 an HCI program withdrawal form.

Any student wishing to take HLTH 81, HLTH 82 and/or HLTH 300 12 months or more after completing HLTH 80 must submit a written reinstatement request to the program. Any student who receives a grade less than a “C” in HLTH 80 must re-apply for admission to the program in subsequent semesters.

**Internship**

Students must complete a 60-hour internship in HLTH 300, concurrent with HLTH 82. The HCI program will arrange and/or approve placements.
Upon award of the Healthcare Interpreter Certificate, students may take HLTH 91N Coaching Healthcare Interpreters in order to improve their skills as lead-interpreters in hospital settings or be able to coach emerging interpreters.

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.

For more information call the Health Education Department at (415) 452-5158.

Courses Required for the Certificate of Achievement in Healthcare Interpreter

Course ............................................. Units
HLTH 80 Interpreting in Health Care I ............. 6.5
HLTH 81 Interpreting in Health Care II ............. 6.5
HLTH 82 Professional Skills for Healthcare Interpreters . 3.0
HLTH 300 Work Experience in Health and Social Services ................................. 1.0-4.0
Total: ................................................. 17.0 – 20.0

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.
• Apply basic nutrition and food safety principles.
• Apply learner-centered facilitation skills for group and individual nutrition education.
• Assess and integrate professional skills necessary for employment in the nutrition field.

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 88 or ESL 186 or placement in ESL 188 or readiness for college-level English.

All applicants to the program must enroll in HLTH 170 which is offered the first five weeks of the fall semester.

Internship: Students must complete HLTH 175 Professional Skills for Nutrition Assistants, and HLTH 175W 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 CCSF Student Health Center.

The minimum time for completion of this certificate is 2 semesters plus 1 month. HLTH 175 and HLTH 175W are late-start courses that extend 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

Course ............................................. Units
First Semester (Fall):
HLTH 170 Introduction to Dietetics Profession ........ 1.0
BIO 134 Introduction to Nutrition for Health Sciences .... 3.0
HLTH 172 Foodways, Nutrition & Health ................. 3.0
Second Semester (Spring):
HLTH 173 Life Span Nutrition & Assessment ............ 4.0
HLTH 174A Intro to Clinical Nutrition ................... 2.0
HLTH 174B Community Nutrition ......................... 2.0
HLTH 175 Professional Skills for Nutrition Assistants ... 2.0
HLTH 175W Nutrition Assistant Field Experience ..... 2.5
HLTH 175L Nutrition Assistant Clinic .................... 0.5
Total: ................................................. 20.0

Sexual Health Educator Certificate*
*See Women’s and Gender 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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Credits</th>
<th>Recommended Prep:</th>
<th>Offered On/Event</th>
<th>Course Description</th>
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</thead>
<tbody>
<tr>
<td>HLTH 25</td>
<td>Women's Health</td>
<td>3</td>
<td>P/NP</td>
<td>ENGL 88 or ESL 186</td>
<td>Lec-52.5, field trips</td>
<td>This course offers an examination of the history of alcohol, tobacco and drug use. Students will analyze and critically examine drug policies and the impact on culturally diverse, marginalized, and low income communities. CSU</td>
</tr>
<tr>
<td>HLTH 27</td>
<td>Men's Health</td>
<td>3</td>
<td>P/NP</td>
<td>ENGL 88 or ESL 186</td>
<td>Lec-52.5</td>
<td>This course offers an examination of the history of alcohol, tobacco and drug use. Students will analyze and critically examine drug policies and the impact on culturally diverse, marginalized, and low income communities. CSU</td>
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<tr>
<td>HLTH 30</td>
<td>Drugs and Society</td>
<td>3</td>
<td>P/NP</td>
<td>ENGL 88 or ESL 186</td>
<td>Lec-52.5</td>
<td>This course offers an examination of the history of alcohol, tobacco and drug use. Students will analyze and critically examine drug policies and the impact on culturally diverse, marginalized, and low income communities. CSU</td>
</tr>
<tr>
<td>HLTH 33</td>
<td>Introduction to Health and Wellness</td>
<td>2</td>
<td></td>
<td>ENGL 88 or ESL 184</td>
<td>Lec-35</td>
<td>This course offers an examination of the history of alcohol, tobacco and drug use. Students will analyze and critically examine drug policies and the impact on culturally diverse, marginalized, and low income communities. CSU</td>
</tr>
<tr>
<td>HLTH 38</td>
<td>Trauma Response and Recovery</td>
<td>3</td>
<td>P/NP</td>
<td>ENGL 88 or ESL 184</td>
<td>Lec-52.5, field trips</td>
<td>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</td>
</tr>
<tr>
<td>HLTH 48</td>
<td>Violence as a Public Health Issue: Prevention</td>
<td>3</td>
<td>P/NP</td>
<td>ENGL 88 or ESL 184</td>
<td>Lec-52.5</td>
<td>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</td>
</tr>
<tr>
<td>HLTH 50</td>
<td>Tai Chi for Health</td>
<td>3</td>
<td></td>
<td>ENGL 88 or ESL 184</td>
<td>Lec-44, Lab-26, field trips</td>
<td>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</td>
</tr>
</tbody>
</table>

*Offered Fall semesters*

*Offered Spring semesters*

*Offered on occasion*
HLTH 65. Youth Development & Leadership (3)
Lec-52.5  P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
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. CSU
Offered Spring semesters

HLTH 66. Chronic Conditions Management (3)
Lec-52.5  P/NP available
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  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 70. Physiological Effects of Addiction (3)
Lec-52.5  Prereq: 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 73. Case Management/Individual Intervention (3)
Lec-52.5  Prereq: HLTH 75 and HLTH 78
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 use and community behavioral health services. CSU
Offered Spring semesters

HLTH 75. Treatment Modalities (3)
Lec-52.5  Prereq: 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  Prereq: 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 Spring semesters

HLTH 78. Ethics and Drug Counseling (2)
Lec-35  Prereq: 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 79. Professional Skills for Addiction and Recovery Counselors (3)
Lec-52.5, field trips  Prereq: HLTH 30 and HLTH 70 and HLTH 75 and HLTH 78
Coreq: HLTH 79W
This course addresses key professional concepts and skills for students enrolled in the Addiction and Recovery Counseling Certificate and co-enrolled in the internship course. CSU
Formerly HLTH 79A and HLTH 79B

HLTH 79W. Addiction and Recovery Counseling Work Experience (1-4)
Work-60.0-250.0  Prereq: Approval of Health Education Department; completion of or concurrent enrollment in: HLTH 79
Repeat: max. 4.0 units
Students complete an internship with local employers to gain meaningful work experience and earn credit towards their Addiction and Recovery Counseling certificate. One unit of credit is earned for 60 hours of unpaid, or 75 hours of paid work. CSU

HLTH 80. Interpreting in Health Care I (6.5)
Lec-105, Lab-27, field trips  Prereq: HLTH 84
Prereq: HLTH 82
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Training for bilingual individuals to develop awareness, knowledge, and skills necessary for effective language interpretation in health care 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  Prereq: HLTH 82
Coreq: HLTH 82
This course addresses key professional concepts and skills for students enrolled in the Healthcare Interpreter Certificate (HCI) program and co-enrolled in an internship course. CSU

HLTH 82. Professional Skills for Healthcare Interpreters (3)
Lec-52.5  Prereq: HLTH 80
Coreq: HLTH 300
This course addresses key professional concepts and skills for students enrolled in the Healthcare Interpreter Certificate (HCI) program and co-enrolled in an internship course. 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 Fall semesters

HLTH 84. Introduction to Interpreting in Healthcare (.5)
Lec-9
P/NP only
Recommended Prep: ESL 142 and excellent proficiency in a second language such as Spanish, Cantones, Mandarin, Vietnamese, Russian, Arabic, Korean, Mongolian, or Burmese
Bilingual students are introduced to the field of healthcare interpreting and the California HCl Standards. Required for CCSF’s Healthcare Interpreter (HCI) Certificate Program, this course explores the roles, scopes and practice of healthcare interpreters. In addition, the HCI program will be explained and linguistic Niciencies will be assessed. CSU

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 (CAAED) CSU

Offered Fall semesters

HLTH 87. Assessment and Services for Older Adults (3)
Lec-52.5
P/NP available
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 Fall 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. Independent Study in Health (1-3)
Lab-52.5 to 157.5
P/NP available
Recommended Prep: Successful completion of a Health Education Course
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. Introduction to Wellness and 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. Social determinants of elder abuse, multicultural perspectives, and methods of prevention. CSU

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 focuses on Mindfulness-Based Stress Reduction elements including mindfulness meditation and movement practices. Application of these stress reduction practices in everyday life will be supported through the in-class practice of various mindfulness techniques and shared self-reflection. CSU

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 CHI™ or CoreCHI™ from the Certification Commission for Healthcare Interpreters or the 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 Fall Semesters**

HLTH 97. Stress and Resilience (3)
Lec-52.5 P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English

**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 Fall 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. Professional Skills for Community Mental Health Workers (2)
Lec-35 P/NP available
Prereq: HLTH 104
Coreq: HLTH 105W
This course addresses key professional concepts and skills for students enrolled in the Community Mental Health Certificate Program and co-enrolled in an internship course. CSU

**Offered Fall Semesters**

HLTH 105W. CMHC Internship Placement (2)
Work-120.0-150.0 P/NP available
Prereq: Approval of the Health Education Department; completion of or concurrent enrollment in: HLTH 105
Students complete an internship with local employers to gain meaningful work experience and earn credit towards their Community Mental Health Certificate. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU

HLTH 110. Health Impacts of Incarceration (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
Health impacts of incarceration for individuals, families and communities. Incarceration and reentry policies will be examined. New models for promoting positive health outcomes among formerly incarcerated populations will be analyzed. CSU

**Offered Fall Semesters**

HLTH 116. Conflict Resolution Skills in Health (1)
Lec-17.5 P/NP available
In this interactive course, students will learn the impact of unresolved conflict on health and practice essential skills for the management of conflict in their own lives, their communities and community health settings. Implications of culture and power dynamics on conflict resolution will be examined. Students will develop an understanding of their own conflict style and identify areas for growth. CSU

HLTH 120. Educational Justice and Health Equity (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
Exploration of the history of educational systems and its impact on public health 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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
Focuses on the scope and nature of work in the nutrition field, including higher education pathways, career opportunities, professional roles, skills, responsibilities, ethics. Includes guest presentations by various nutrition paraprofessionals and networking opportunities with registered dietitians. This course is a prerequisite for acceptance to the Nutrition Assistant Program. CSU

**Formerly HOEC 98**

**Offered Fall Semesters**

HLTH 172. Foodways, Nutrition & Health (3)
Lec-52.5
Prereq: HLTH 170
This course is the study of the cultural, social, and economic influences on food habits/practices of different population groups; their diet-related health risks and implications. Cross-cultural communication strategies; food budgeting, food service safety and sanitation 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 174A. Intro to Clinical Nutrition (2)
Lec-35
Prereq: BIO 134 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: BIO 134 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. Professional Skills for Nutrition Assistants (2)
Lec-35
Prereq: HLTH 173 and HLTH 174A and HLTH 174B
Coreq: HLTH 175L and HLTH 175W
This course addresses key professional concepts and skills for students enrolled in the Nutrition Assistant Certificate Program and co-enrolled in an internship course. CSU
Formerly HOEC 106
Offered Spring semesters

HLTH 175L. Nutrition Assistant Clinic (.5)
Lec-3.5, Lab-16
P/NP only
Prereq: 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 dietitian faculty. CSU
Offered Spring semesters

HLTH 175W. Nutrition Assistant Field Experience (2.5)
Work-160-187.5
Prereq: Approval of the Health Education Department; Completion of or concurrent enrollment in: HLTH 175
Students complete a field experience with local employers to gain meaningful work experience and earn credit towards their Nutrition Assistant Certificate. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU

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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
The course provides an 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, the feeding relationship, breastfeeding & child nutrition, planning healthy meals & snacks, food safety, child-hood obesity, physical activity, nutrition education, child nutrition programs & food assistance resources. CSU
HLTH 177=CDEV 107 Formerly HOEC 107

HLTH 201. CHW Principles & Practice 1 (5)
Lec-87.5
Prereq: HLTH 59
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. CSU

HLTH 203. Professional Skills for Community Health Workers (2)
Lec-35
Prereq: Completion of or concurrent enrollment in: HLTH 202
Coreq: HLTH 203W
This course addresses key professional concepts and skills for students enrolled in the Community Health Worker Certificate program and co-enrolled in an internship course. CSU

HLTH 203W. CHW Internship Placement (2)
Work-120-150
Prereq: Approval by the Health Education Department; Completion of or concurrent enrollment in: HLTH 203
Students complete an internship with local employers to gain meaningful work experience and earn credit towards their CHW Certificate. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU

HLTH 221. Health and Social Justice (3)
Lec-52.5
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
Explore the role of social injustices as root causes of the uneven distribution of ill health according to class, race and gender. Students will examine current issues, the process for influencing change and the role
of social movements in creating more healthy and equitable communities. Students will also build their skills to effectively advocate for health and social justice. UC/CSU

**Offered Fall Semesters**

**HIST 12A. United States Women's History: Pre-colonial**
Lec-52.5  P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English

Explores the relationship between policy, the built urban environment and health. Survey current policy issues in urban community health, and the process for influencing policy. Develop skills to serve as an effective advocate for policy change and community health. UC/CSU

**Offered on occasion**

**HIST 12B. United States Women's History: 1890-Present**
Lec-52.5  P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English

Explores the relationship between policy, the built urban environment and health. Survey current policy issues in urban community health, and the process for influencing policy. Develop skills to serve as an effective advocate for policy change and community health. UC/CSU

**HLTH 203. Nutrition for the Later Years**
(35 hrs)

Practical application of Tai Chi and Tai Chi Qigong as meditation in movement exercises, and understanding of their benefits for stress relief, mental alertness and bodily control.

**Formerly HLTH 5122**

**HLTH 5123. Practical Nutrition Skills for the Later Years**
(12 hrs)

Practical information, effective strategies, and skills that teach the student how to practice good nutrition and manage personal health, and maintain an active, healthy lifestyle in the later years.

**Noncredit Courses:**

**HLTH 300. Work Experience in Health and Social Services**
(1-4)

Work-60.0-300.0  P/NP available
Prereq: Approval of Health Education Department;
Completion of or concurrent enrollment in: HLTH 82 or HLTH 105 or HLTH 203 or HLTH 175 or HLTH 79
Repeat: max. 8.0 units

Students complete an internship with local employers to gain meaningful work experience and earn credit towards a certificate in the Health Education field. One unit of credit is earned for each 60 hours of unpaid, or 75 hours of paid work. CSU

**HLTH 5018. Tai Chi for Health**
(36-43 hrs)

Practical application of Tai Chi and Tai Chi Qigong as meditation in movement exercises, and understanding of their benefits for stress relief, mental alertness and bodily control.

**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.

**HLTH 5123. Practical Nutrition Skills for the Later Years**
(12 hrs)

Practical information, effective strategies, and skills that teach the student how to practice good nutrition and manage health 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.

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

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<tr>
<th>Course</th>
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<tr>
<td>HIST 17A The United States</td>
<td>3.0</td>
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</tr>
<tr>
<td>HIST 17B The United States</td>
<td>3.0</td>
<td></td>
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<tr>
<td>HIST 4A Western Civilization</td>
<td>3.0</td>
<td></td>
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<tr>
<td>HIST 4B Western Civilization</td>
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**Choose one of the following Diversity courses for United States Under-Represented Groups:**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>HIST 9 Immigrants in American History</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>HIST 12A United States Women's History: Pre-colonial Through 1880s</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>HIST 12B United States Women's History: 1890-Present</td>
<td>3.0</td>
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</tbody>
</table>
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 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 40 History of California.................................................. 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
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
Development of Western Civilization from ancient times through the Reformation. The emergence of civilization in the Near East; Greek and Roman civilizations, development of Christianity, Byzantine, and Islamic influences, the Middle Ages, and the intellectual and religious changes of the Renaissance and Reformation. UC/CSU
C-ID HIST 170

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
C-ID HIST 180
HIST 4A NOT PREREQUISITE TO 4B. HIST 4B COVERS THE PERIOD FROM THE REFORMATION INTO THE TWENTIETH CENTURY.

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 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.

Offered in Fall Semesters

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 15A is NOT PREREQUISITE TO 15B. EMPHASIS ON INDIANS EAST OF THE MISSISSIPPI.
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 the role of the United

Course will focus on the roles and interactions of Native Americans, with native cultures and Spanish exploration and colonization. The course examines the forces, events, and lives that shaped California, beginning from the pre-colonial period to the present day. The evolution of national culture, political and social institutions, and foreign relations will also be examined. UC/CSU

HIST 35A. History of China (3)
Lec-52.5 P/NP available
HIST 35A 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 1900.

HIST 35B. History of China (3)
Lec-52.5 P/NP available
HIST 35A is not prerequisite to 35B. HIST 35B covers from 1900 to the present. Offered on occasion.

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 post-Civil War era. 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 40. History of California (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
Examine the forces, events, and lives that shaped California, beginning with native cultures and Spanish exploration and colonization. The course will focus on the roles and interactions of Native Americans, Latino Americans, European Americans, and Asian Americans within the broader context of California's political, economic, cultural, and social history. UC/CSU

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
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
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 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 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 religious 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Interdisciplinary Studies

HUM 11. Music, Art, and Literature: Traditional (3)  
Lec-52.5, field trips  P/NP available  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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  
Offered Fall semesters

HUM 25. Women in the Arts (3)  
Lec-52.5, field trips  P/NP available  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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  
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English  
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 are eligible to 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

Announcement of Curricula

Critical Middle East /South West Asia and North Africa Studies Major (AA)

The Critical Middle East Studies Associate's of Arts degree introduces students to an analysis of the history, politics, society, culture and religions of the Middle East/South West Asia and North Africa (SWANA) with attention to major events in the region and their representations and impacts across the Diaspora, especially in the United States. The program integrates area studies, ethnic studies, gender studies, and interdisciplinary methodologies. The required 3 unit 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/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 cultural and ideological influence of Islam and other major religions in the Middle East (SWANA).  
• Compare the political systems of the Middle East/SWANA within an historical and social context.  
• Examine social and cultural expressions within Middle Eastern /SWANA societies and diaspora communities.  
• Analyze the relationship of women and minority groups to the state and society in the Middle East/SWANA and within diaspora communities.
• Evaluate and challenge the assumptions that underpin anti-Semitic and anti-Arab discrimination, Islamophobia and other forms of oppression.

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 Middle East/South West Asia and North Africa Studies

Course ................................................................. Units
Required core courses:
IDST 29 Islam: Identity & Culture .......................... 3.0
IDST 30 Demystifying the Middle East ........................ 3.0
IDST 31 Women and Gender in the Middle East ............ 3.0
IDST 81B Diversity and Social Justice: Anti-Semitism/ Anti-Arabism .............................................. 1.0
POLS 45 Governments and Politics of Middle East ........ 3.0

Choose (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

Choose one of the following Social Justice courses for a minimum of 3 units:
IDST 37 Introduction to Ethnic Studies ...................... 3.0
LGBT 5 Introduction to Lesbian, Bisexual, Gay, and Transgender Studies .................................................. 3.0
WGST 25 Introduction to Women's Studies: Feminism Demystified ......................................................... 3.0
SOC 25 Sex and Gender in American Society ............... 3.0

Choose one of the following electives for a minimum of 3 units:
ART 104 Asian Art History ........................................ 3.0
ARCH 31A History of Architecture ............................ 3.0
ARCH 31B History of Architecture ............................ 3.0
BCST 104 Race and Media ........................................ 3.0
ECON 6 International Economics .............................. 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
GEOG 4 Cultural Geography ..................................... 3.0
HUM 7 Comparative Religions ................................... 3.0
HUM 8 Philosophies of Religion ............................... 3.0
IDST 4 Ways of Faith .............................................. 3.0
IDST 7 Introduction to the United Nations .................... 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 36 Poetry for the People .................................... 3.0
IDST 40 Contemporary Issues in the Filipino Community ........................................................................... 3.0
IDST 42 Introduction to Philippine Arts ....................... 3.0
IDST 45 Pacific Islanders in the U.S. .......................... 3.0
IDST 46 Fa’a Pasifikia: Interdisciplinary Cultural Expressions of Oceania ........................................... 3.0

IDST 47 Trauma and the Arts: An Interdisciplinary Approach ................................................................. 3.0
LGBT 55 Contemporary Global LGBT Art and Culture 3.0
MUS 41 African Drumming Ensemble ........................ 3.0
POLS 2 Comparative Government ............................. 3.0
POLS 5 International Relations .................................. 3.0
WGST 20 Her/His/Ourstories ..................................... 3.0
Total: ........................................................................ 21.0

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 used to meet the Certificate of Achievement in Critical Pacific Islands & Oceania Studies may also be used to fulfill the requirements...
for this major. Courses used to meet the requirements for this major may also be used to meet IGETC or CSU GE requirements for the AA-T Social Justice Studies major.

Courses Required for the Major in Critical Pacific Islands & Oceania Studies

Course: Required core courses:  
IDST 45 Pacific Islanders in the U.S. 3.0  
IDST 46 Fa’a Pasifikia: 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 Laboratory 2.0  
P SCI 11 Conceptual Physical Science 3.0  
and P SCI 11L Physical Science Laboratory 1.0  
SUST 31/BIO 31/GEOG 31 Introduction to Environmental Science 3.0  
and SUST 31L /BIO 31L /GEOG 31L 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  
WGST 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  
CINE 22 The Documentary Tradition 3.0  
GEOG 4 Cultural Geography 3.0  
IDST 7 Introduction to the United Nations 3.0  
IDST 14 American Cultures in Literature and Film 3.0  
IDST 29 Islam: Identity & Culture 3.0  
IDST 30 Demystifying the Middle East 3.0  
IDST 36 Poetry for the People 3.0  
IDST 37 Introduction to Ethnic Studies 3.0  
IDST 40 Contemporary Issues in the Filipino Community 3.0  
IDST 42 Introduction to Philippine Arts 3.0  
LGBT 9/LALS 9 The Latin American and Latina/o LGBT Experience 3.0  
PHST 20 The Filipino Family 3.0  
PHST 30 Philippine Society and Culture Through Film 3.0  

Total: 23.0 – 24.0

Social Justice Studies: Ethnic Studies Major (AA-T)

The Associate of Arts in Social Justice Studies: Ethnic Studies for Transfer is designed to prepare students who wish to transfer to pursue studies in social justice with an emphasis in ethnicity and race. The Social Justice Transfer Model Curriculum (TMC) is an area of emphasis (AOE) and has specifically been designed to prepare students for transfer into a variety of CSU majors, such as:

African American Studies  
Africana Studies  
American Indian Studies  
American Studies  
Arabic Language, Literature and Culture  
Asian American Studies  
Chicano/Chicana Studies  
Ethnic Studies  
Gender Studies  
History with an emphasis in Immigrant Studies  
Labor and Employment Studies  
Labor Studies  
Latin American Studies  
Liberal Studies w/Option in Interdisciplinary Studies in Culture & Society  
Liberal Studies Border Studies w/Option in Mexican-American Studies  
Modern Jewish Studies  
Negotiation, Conflict Resolution and Peace building  
Political Science with an emphasis in Ethnic Studies  
Sociology with a concentration in Critical Race Studies  
Sociology with a concentration Race, Class, and Gender  
Sociology with Inequalities and Diversity Option  
Social Science with Emphasis in Islamic and Arabic Studies  
Women, Gender, and Sexuality Studies  
Women’s Studies  
and many other possible CSU majors.
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.

**Courses Required for the AA-T in Social Justice Studies: Ethnic Studies**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td><strong>Required core course:</strong></td>
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<tr>
<td>IDST 37 Introduction to Ethnic Studies</td>
<td>3.0</td>
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<tr>
<td><strong>Choose one of the following core courses:</strong></td>
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<tr>
<td>LGBT 5 Introduction to Lesbian, Bisexual, Gay, and Transgender Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>WGST 25 Introduction to Women’s Studies: Feminism Demystified</td>
<td>3.0</td>
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<tr>
<td><strong>Choose one of the following major preparation core courses:</strong></td>
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<tr>
<td>AFAM 30 African American Consciousness</td>
<td>3.0</td>
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<tr>
<td>ASAM 20 Asian American Experience Since 1820</td>
<td>3.0</td>
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<tr>
<td>HIST 15A History of the American Indian: Eastern Tribes</td>
<td>3.0</td>
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<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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<tr>
<td><strong>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:</strong></td>
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<tr>
<td><strong>Area 1: History and Government</strong></td>
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<tr>
<td>ASAM 20 Asian American Experience Since 1820</td>
<td>3.0</td>
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<tr>
<td>HIST 9 Immigrants in American History</td>
<td>3.0</td>
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<tr>
<td>HIST 18A The Colonial History of Latin America</td>
<td>3.0</td>
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<tr>
<td>HIST 12B United States Women’s History: 1890-Present</td>
<td>3.0</td>
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<tr>
<td>HIST 15A History of the American Indian: Eastern Tribes</td>
<td>3.0</td>
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<tr>
<td>HIST 15B History of the American Indian: Western Tribes</td>
<td>3.0</td>
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<tr>
<td><strong>Area 2: Arts and Humanities</strong></td>
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<tr>
<td>AFAM 40 The Black Experience in California</td>
<td>3.0</td>
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<tr>
<td>AFAM 60 African American Women in the US</td>
<td>3.0</td>
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<td>ASAM 6 Asian American Issues through Literature</td>
<td>3.0</td>
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<td>ASAM 10 Asian American Popular Culture</td>
<td>3.0</td>
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<tr>
<td>ASAM 30 Asian American Issues Through Film</td>
<td>3.0</td>
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<tr>
<td>ASAM 35 Asian American Women</td>
<td>3.0</td>
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<tr>
<td>HIST 18A The Colonial History of Latin America</td>
<td>3.0</td>
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<tr>
<td>HIST 18B History of Latin American</td>
<td>3.0</td>
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<td>HIST 20 History of Mexico</td>
<td>3.0</td>
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<td>HIST 21 History of the Mexican American/Chicano</td>
<td>3.0</td>
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<tr>
<td>HIST 37 History of the Filipines</td>
<td>3.0</td>
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<tr>
<td>HIST 41A The African American in the United States From the Colonial Era to the Civil War</td>
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<tr>
<td>HIST 41B The African American in the United States From the Reconstruction to the Present</td>
<td>3.0</td>
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<tr>
<td>IDST 7 Introduction to the United Nations</td>
<td>3.0</td>
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<tr>
<td>LBCS 70A Who Built America? From the Colonial Era to the Civil War and Reconstruction</td>
<td>3.0</td>
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<tr>
<td>LBCS 70B Who Built America? From Reconstruction to the Present</td>
<td>3.0</td>
</tr>
<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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<tr>
<td>LALS 11 Drug Wars in the Americas</td>
<td>3.0</td>
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<tr>
<td>LALS 13 Latin American &amp; Latino/a Cross-Border Social Movements</td>
<td>3.0</td>
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<tr>
<td>POLS 12 Ethnic Politics in the United States</td>
<td>3.0</td>
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<tr>
<td>POLS 45 Governments and Politics of Middle East</td>
<td>3.0</td>
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<tr>
<td><strong>Area 3: Social Science</strong></td>
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<tr>
<td>AFAM 30 African American Consciousness</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>
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<tr>
<td>AFAM 60 African American Women in the US</td>
<td>3.0</td>
</tr>
</tbody>
</table>
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
WGST 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 Achievement introduces
students to an analysis of the history, politics, society, culture and reli-
gions of the Middle East/South West Asia and North Africa (SWANA)
with attention to major events in the region and their representations
and impacts across the Diaspora, especially in the United States. The
program integrates area studies, ethnic studies, gender studies, and
interdisciplinary methodologies. The required 3 unit courses are

University of California and California State University transferable
and collectively the courses 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/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 develop-
ment for employers, community-based organizations and social and
government agencies.

Learning Outcomes

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

- Describe the cultural and ideological influence of Islam and
  other major religions in the Middle East/SWANA.
- Compare the political systems of the Middle East/SWANA
  within a historical and social context.
- Examine social and cultural expressions within Middle Eastern/
  SWANA societies and diaspora communities.
- Analyze the relationship of women and minority groups to the
  state and society in the Middle East/SWANA and within dias-
  pora communities.
- Evaluate and challenge the assumptions that underpin anti-
  Semitic and anti-Arab discrimination, Islamophobia and other
  forms of oppression.

Credit towards other certificates: Some courses that count towards the
Critical Middle East Studies/SWANA Certificate also fulfill require-
ments for the Diversity and Social Justice Certificate, the Political
Science and Women’s Studies majors, and the Social Justice Studies
AA-Ts.

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 Achievement in Critical Middle
East/South West Asia and North Africa Studies

Course ................................................................. Units
Required Courses:
IDST 29 Islam: Identity & Culture ........................ 3.0
IDST 30 Demystifying the Middle East ................ 3.0
IDST 31 Women and Gender in the Middle East ..... 3.0
IDST 81B Diversity and Social Justice: Anti-Semitism/
Anti-Arabism .............................................. 1.0
POLS 45 Governments and Politics of Middle East .... 3.0
Total: ................................................................ 13.0

Critical Pacific Islands & Oceania Studies Certificate

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 immi-
gration. 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),

- Analyze the relationship of women and minority groups to the
  state and society in the Middle East/SWANA and within dias-
  pora communities.
- Evaluate and challenge the assumptions that underpin anti-
  Semitic and anti-Arab discrimination, Islamophobia and other
  forms of oppression.

Credit towards other certificates: Some courses that count towards the
Critical Middle East Studies/SWANA Certificate also fulfill require-
ments for the Diversity and Social Justice Certificate, the Political
Science and Women’s Studies majors, and the Social Justice Studies
AA-Ts.

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 Achievement in Critical Middle
East/South West Asia and North Africa Studies

Course ................................................................. Units
Required Courses:
IDST 29 Islam: Identity & Culture ........................ 3.0
IDST 30 Demystifying the Middle East ................ 3.0
IDST 31 Women and Gender in the Middle East ..... 3.0
IDST 81B Diversity and Social Justice: Anti-Semitism/
Anti-Arabism .............................................. 1.0
POLS 45 Governments and Politics of Middle East .... 3.0
Total: ................................................................ 13.0

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introduces students to a substantive and critical analysis of Pacific
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militarization, social movements, diversity, social justice, and immi-
gration. 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), and H1 (Ethnic Studies).

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. The program should also 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 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, adultism, 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 two semesters. Completion time will vary based on student preparation and number of units completed per semester.

Courses Required for the Certificate of Achievement in Critical Pacific Islands & Oceania Studies

Course ............................................. Units

Required core courses:
IDST 45 Pacific Islanders in the U.S. ................. 3.0
IDST 46 Fa‘a Pasifika: Interdisciplinary Cultural
Expressions of Oceania ........................... 3.0
IDST 50/LERN 50 College Success .................. 3.0

Choose two 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 ............... 3.0
- 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 II Conceptual Physical Science ................. 3.0
- and P SC II L 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 elective courses:
ASAM 8 Filipino American Community ............... 3.0
ANTH 15 Philippine Culture and Society .......... 3.0
CINE 22 The Documentary Tradition ................. 3.0
GEOG 1 Cultural Geography .......................... 3.0
IDST 4 Ways of Faith .................................. 3.0
IDST 7 Introduction to the United Nations ............ 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 29 Islam: Identity & Culture .................... 3.0
IDST 30 Demystifying the Middle East ............... 3.0
IDST 36 Poetry for the People ........................ 3.0
IDST 37 Introduction to Ethnic Studies ............... 3.0
IDST 40 Contemporary Issues in the Filipino
Community ........................................... 3.0
IDST 42 Introduction to Philippine Arts .............. 3.0
LGBT 9/LALS 9 The Latin American and Latina/o
LGBT Experience .................................... 3.0
PHST 20 The Filipino Family .......................... 3.0
PHST 30 Philippine Society and Culture Through Film 3.0
WGST 20 Her/His/Ourstories ............... 3.0

Total: .................................................. 18.0 – 19.0

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 adultism/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 take 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>
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<tbody>
<tr>
<td>IDST 80A Diversity and Social Justice: Racism</td>
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<tr>
<td>IDST 80C Diversity and Social Justice: Sexism</td>
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<tr>
<td>IDST 80D Diversity and Social Justice: Heterosexism</td>
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<tr>
<td>IDST 80E Diversity and Social Justice: Ableism</td>
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<tr>
<td>IDST 80F Diversity and Social Justice: Class and Classism</td>
</tr>
<tr>
<td>IDST 80G Diversity and Social Justice: Transphobia</td>
</tr>
<tr>
<td>IDST 81A Diversity: Ageism and Adultism (Age-based Oppression)</td>
</tr>
<tr>
<td>IDST 81B Diversity and Social Justice: Anti-Semitism/ Anti-Arabism</td>
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</tbody>
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Total: 5.0

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>
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<tbody>
<tr>
<td>IDST 47 Trauma and the Arts: An Interdisciplinary Approach</td>
</tr>
<tr>
<td>HLTH 38 Trauma Response and Recovery</td>
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<tr>
<td>HLTH 48 Violence as a Public Health Issue: Prevention Strategies</td>
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<tr>
<td>WGST 54 The Politics of Sexual Violence</td>
</tr>
<tr>
<td>HLTH 90C Introduction to Trauma and Recovery</td>
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<tr>
<td>CDEV 100 Violence and Its Impact on Children and Their Families</td>
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<tr>
<td>CDEV 101 Intro to Violence Intervention</td>
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</table>

Choose one of the following required diversity courses:

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>IDST 80A Diversity and Social Justice: Racism</td>
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<tr>
<td>IDST 80C Diversity and Social Justice: Sexism</td>
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<tr>
<td>IDST 80D Diversity and Social Justice: Heterosexism</td>
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<tr>
<td>IDST 80E Diversity and Social Justice: Ableism</td>
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<tr>
<td>IDST 80F Diversity and Social Justice: Class and Classism</td>
</tr>
<tr>
<td>IDST 80G Diversity and Social Justice: Transphobia</td>
</tr>
</tbody>
</table>

Choose three (3) units from the following elective courses. Courses counted as a required course above cannot be used to fulfill an elective:

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ADMJ 64 Progressive Policing in the 21st Century</td>
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<tr>
<td>CDEV 72 Supervised Field Experience in Early Childhood Education</td>
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<tr>
<td>CDEV 78 Supervised Field Experience in Community Youth Organizations</td>
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<tr>
<td>CDEV 100 Violence and Its Impact on Children and Their Families</td>
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<tr>
<td>CDEV 101 Intro to Violence Intervention</td>
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<tr>
<td>HLTH 91H Elder Abuse Prevention</td>
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<tr>
<td>HLTH 97 Stress and Resilience</td>
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<tr>
<td>HLTH 116 Conflict Resolution Skills in Health</td>
</tr>
<tr>
<td>IDST 80A Diversity and Social Justice: Racism</td>
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<tr>
<td>IDST 80C Diversity and Social Justice: Sexism</td>
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<tr>
<td>IDST 80D Diversity and Social Justice: Heterosexism</td>
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</tr>
<tr>
<td>IDST 81A Diversity: Ageism and Adultism (Age-based Oppression)</td>
</tr>
<tr>
<td>IDST 81B Diversity and Social Justice: Anti-Semitism/ Anti-Arabism</td>
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<tr>
<td>LBCS 81 Organizing for Economic and Social Justice</td>
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<tr>
<td>PSYC 9 Psychology of Stress</td>
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<td>PSYC 15 Assertive Behavior</td>
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<td>PSYC 26 Applied Psychology</td>
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<tr>
<td>WGST 55 Ending Sexual Violence: Peer Education</td>
</tr>
</tbody>
</table>

Total: 19.0
Announcement of Courses

Interdisciplinary Studies

Credit, Degree Applicable Courses:

IDST 3. Intro to Museum Studies (3)
Lec-52.5, field trips P/NP available
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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, field trips P/NP available
An introduction to the United Nations, including the UN Charter’s mission to achieve international peace, and the function of the organization’s six administrative bodies. In addition to studying the theory and practice of international diplomacy, students evaluate the successes and challenges of collective security, peacekeeping attempts, and technological cooperation. UC/CSU
Offered Fall semesters

IDST 14. American Cultures in Literature and Film (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
An interdisciplinary survey of literary and cinematic works of fiction, drama, non-fiction and poetry that investigates unity in diversity in the shifting trajectories of American identities and interrelationships. Groups featured to assess their interactive contributions to American cultures include Native-, European-, African-, Latin-, Asian-Americans, and Pacific Islanders. UC/CSU

IDST 17. Human Sexuality (3)
Lec-52.5 P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 P/NP available
Recommended Prep: ESL 186 or ENGL 88 or placement in ESL 188
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 on occasion

IDST 30. Demystifying the Middle East (3)
Lec-52.5 P/NP available
An 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 and Gender in the Middle East (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
An interdisciplinary examination of differences/similarities in women’s lives in the Muslim/Arab world, including the diaspora, and among minorities in the Middle East/Southwest Asia and North Africa (SWANA). Analysis includes 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
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 U.S. (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or Readiness for College-level English
This course examines Pacific Islander migrations to the United States mainland including the history, culture, and politics of Hawai'i and U.S. Pacific territories. It explores indigenous cultures and American experiences of Pacific Islanders from Guam, American Samoa, Palau, Marshall Islands, Fiji, Samoa, Tonga, Tahiti, New Zealand, and Australia. UC/CSU

IDST 46. Fa'a Pasefika: Interdisciplinary Cultural Expressions of Oceania (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ESL 184 or ENGL 88 or Placement in ESL 186 or Readiness for College-level English
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
Recommended Prep: ESL 184 or ENGL 88 or Placement in ESL 186 or Readiness for College-level English
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
Recommended Prep: ESL 184 or ENGL 88 or Placement in ESL 186 or Readiness for College-level English
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
Recommended Prep: ESL 184 or ENGL 88 or Placement in ESL 186 or Readiness for College-level English
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 80F. Diversity and Social Justice: Class and Classism (.5)
Lec-9 P/NP available
Recommended Prep: ESL 184 or ENGL 88 or Placement in ESL 186 or Readiness for College-level English
A consciousness raising analysis and evaluation of classism and class oppression (discrimination based on perceived or real social class of one's social group or one's own social class and classism, 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 80G. Diversity and Social Justice: Transphobia (.5)
Lec-9 P/NP available
Recommended Prep: ESL 184 or ENGL 88 or Placement in ESL 186 or Readiness for College-level English
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: Ageism and Adultism (Age-based Oppression) (1)**
Lec-18  P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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 adultism 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
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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**

**IDST 300. Social Justice Work Experience (1-6)**
Work-60-450  P/NP only
Prereq: Approval of the Interdisciplinary Studies Department
Repeat: max. 16 units
General work experience course designed for students considering careers in social justice, public service and the nonprofit sector. Through supervised internships and at social justice and community-based organization, students can increase their skills working with the public section and their knowledge of career options and pathways, including the skills necessary for work in this sector. One unit of credit is earned for each 60 hours of unpaid work or 75 hours of paid work. CSU

**Design**

**Credit, Degree Applicable Courses:**

**DSGN 101. Design Fundamentals (3)**
Lec-35, Lab-70, field trips  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 105. Design Thinking (1.5)**
Lec-26.25  P/NP available
Design thinking is an iterative process of discovery, ideation, and experimentation to gain insight and produce innovative experiences, processes and products. This course will introduce design thinking models and processes through historical and contemporary practice. Hands-on exercises will provide practice with design thinking activities for visual artists, designers, engineers, makers and others. UC/CSU

**DSGN 110. Design Drawing Techniques (1.5)**
Lec-17.5, Lab-35  P/NP available
Recommended Prep: DSGN 101 or VMD 101 or PHOT 100; ESL 188 or ENGL 88 or readiness for college-level English
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

**Offered Fall semesters**

**DSGN 150. Color in Design (3)**
Lec-35, Lab-70  P/NP available
Recommended Prep: 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 both written and oral Italian, through the intermediate level and to gain a knowledge of Italian culture. The program is designed to meet transfer goals as well as personal development and career growth.

**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:

* Interpret oral and written Italian texts applying knowledge of intermediate vocabulary and structures.
* Apply a range of intermediate vocabulary, grammar, and syntax to communicate in oral and written Italian.
* Analyze and synthesize aspects of Italian culture and 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 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 11A Continuation of Intermediate Conversational Italian .................. 3.0
ITAL 11B Continuation of Intermediate Conversational Italian .................. 3.0
ITAL 15A Advanced Conversational Italian .................... 3.0
ITAL 15B Advanced Conversational Italian .................... 3.0
Total: .................................................................. 15.0

Italian Certificate
The Certificate of Accomplishment in Italian provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in Italian.

Learning Outcomes
Upon completion of this program, students will be able to:
- Interpret the main points of standard spoken and written Italian relating to everyday matters.
- Communicate in spoken Italian using a range of vocabulary, language functions, and sentence structures.
- Write simple connected text using a range of intermediate Italian vocabulary, grammar and sentence structures.
- Compare aspects of Italian culture and society.

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 Italian
Course ......................................................... Units
Choose 9 units from the following core courses:
ITAL 1 Elementary Italian .................................. 5.0
or ITAL 1A Elementary Italian .................................. 3.0
and ITAL 1B Elementary Italian ................................ 3.0
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 6 units from the following elective courses:
ITAL 10A Beginning Conversational 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 11A Continuation of Intermediate Conversational Italian .................. 3.0
ITAL 11B Continuation of Intermediate Conversational Italian .................. 3.0
ITAL 15A Advanced Conversational Italian .................... 3.0
ITAL 15B Advanced Conversational Italian .................... 3.0
Total: .................................................................. 18.0

Announcement of Courses
Students of beginning Italian are directed to consider Italian 1, 1A and 10A.

Credit, Degree Applicable Courses:
ITAL 1. Elementary Italian (5)
Lec-87.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or any City College or University foreign language course or readiness for college-level English
Beginners course. Grammar, composition and reading. Practice in speaking and understanding Italian. UC/CSU
ITAL 1A + 1B = ITAL 1
ITAL 1B. Elementary Italian (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or any City College or University foreign language course or readiness for college-level English
Grammar, composition and reading. Practice in speaking and understanding Italian. UC/CSU
ITAL 1A + 1B = ITAL 1
ITAL 2. Continuation of Elementary Italian (5)
Lec-87.5 P/NP available
Prereq: ITAL 1A or demonstration of ITAL 1A exit skills.
Second semester course. Continuation of beginner's course in grammar, composition and reading. Practice in speaking and understanding Italian. UC/CSU
ITAL 2A + 2B = ITAL 2
ITAL 2A. Continuation of Elementary Italian (3)
Lec-52.5 P/NP available
Prereq: ITAL 1 or 1B or demonstration of ITAL 1/1B 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
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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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. Continuation of Intermediate Conversational Italian (3)
Lec-52.5, field trips  P/NP available
Recommended Prep: ITAL 10D or ITAL 2 or (ITAL 2A and ITAL 2B)
Continuation of extensive oral training of advanced structures and vocabulary of spoken intermediate Italian. The major difference between Italian 11A and 11B is in reading and oral assignments. The courses focus on specific topics (literature, fine arts, and current affairs) but also include different grammar topics. CSU
NOT RECOMMENDED FOR NATIVE SPEAKERS OF ITALIAN.
OFFERED ON OCCASION

ITAL 11B. Continuation of Intermediate Conversational Italian (3)
Lec-52.5, field trips  P/NP available
Recommended Prep: ITAL 10D or ITAL 2 or (ITAL 2A and ITAL 2B)
Continuation of extensive oral training of advanced structures and vocabulary of spoken intermediate Italian. The major difference between Italian 11A and 11B is in reading and oral assignments. The courses focus on specific topics (literature, fine arts, and current affairs) but also include different grammar topics. CSU
ITAL 11A NOT PREREQUISITE TO 11B
OFFERED ON OCCASION

ITAL 15A. Advanced Conversational Italian (3)
Lec-52.5  P/NP available
Recommended Prep: 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 Italian 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
Recommended Prep: 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 Italian 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
Office: Art 202
Phone Number: (415) 239-3223
Web Site: www.ccsf.edu/forlang

Announcement of Curricula
Japanese Major (AA)

The Japanese program provides instruction in developing a student's ability to communicate in Japanese, both written and oral, through the intermediate level and to gain a knowledge of Japanese culture. The
program is designed to meet transfer goals as well as personal development and career growth.

Degree Curriculum. The Degree Curriculum in Japanese is a two-year course of study designed to build a strong language foundation as well as expose students to Japanese cultural content and some literature. Students who complete the curriculum are better prepared to transfer to the CSU and UC systems as well as other universities with the intent of majoring or minoring in Japanese.

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

- Demonstrate fluency to interact in Japanese in a normal and spontaneous fashion at an intermediate level.
- Understand and analyze publications as well as media.
- Display understanding of geography and cultural differences in the Japanese speaking world.
- Display an intermediate level of proficiency in speaking, understanding, reading and writing in Japanese to perform successfully in upper division course work. Display sensitivity to different styles of speech. (familiar and formal).

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 Degree in Japanese

Course ................................................. Units
Choose 15 units from the following core courses:
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
or 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 an additional 3 units from the following courses:
JAPA 1 Elementary Japanese .............................................. 5.0
or JAPA 1A Elementary Japanese ........................................ 3.0
and JAPA 1B Elementary 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: ........................................................................... 18.0

Japanese Certificate

The Certificate of Accomplishment in Japanese provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language.

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

- Interpret the main points of standard spoken and written Japanese relating to everyday matters.
- Communicate in spoken Japanese by using a range of vocabulary, language functions, and sentence structures.
- Write simple connected text on familiar topics by using a range of intermediate Japanese vocabulary, grammar, and sentence structures.
- Analyze aspects of Japanese culture and society.

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
or 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 (5)
Lec-87.5 P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English or completion of a community college or university foreign language course
Introductory course in Japanese language. Elementary level of four language skills (listening, speaking, reading and writing) will be developed. The course also will introduce cultural aspects of Japan. Mastering of two of the Japanese syllabic writing systems, hiragana and katakana is required. The simple kanji (Chinese characters) will also be introduced. UC/CSU
JAPA 1 = JAPA 1A + JAPA 1B

JAPA 1A. Elementary Japanese (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or any City College or University foreign language course or readiness for college-level English
Beginner’s course in grammar, composition, and reading. Practice in speaking and understanding Japanese. UC/CSU
JAPA 1A + JAPA 1B = 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
JAPA 1A + 1B = JAPA 1

JAPA 2. Continuation of Elementary Japanese (5)
Lec-87.5 P/NP available
Prereq: JAPA 1 or JAPA 1B or Demonstration of exit skills
Second semester course. The course enhances students’ abilities in reading, writing, speaking, listening and understanding of Japanese culture. UC/CSU
JAPA 2A + 2B = JAPA 2

JAPA 2A. Continuation of Elementary Japanese (3)
Lec-52.5 P/NP available
Prereq: JAPA 1 or JAPA 1B or Demonstration of exit skills
The first half of second semester course. The course enhances students’ abilities in reading, writing, speaking, listening and understanding of Japanese culture. 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 exit skills
The latter half of second semester course. The course enhances students’ abilities in reading, writing, speaking, listening and understanding of Japanese culture. UC/CSU

JAPA 3. Intermediate Japanese (5)
Lec-87.5 P/NP available
Prereq: JAPA 2 or JAPA 2B or Demonstration of exit skills
Third semester course. The course, which is conducted in Japanese, enhances students’ abilities on reading, writing, speaking, listening and understanding of Japanese culture. UC/CSU
JAPA 3A + 3B = JAPA 3

JAPA 3A. Intermediate Japanese (3)
Lec-52.5 P/NP available
Prereq: JAPA 2 or JAPA 2B or Demonstration of exit skills
The first half of third semester course. The course, which is conducted in Japanese, enhances students’ abilities in reading, writing, speaking, listening and understanding of Japanese culture. UC/CSU
JAPA 3A + 3B = JAPA 3

JAPA 3B. Intermediate Japanese (3)
Lec-52.5 P/NP available
Prereq: JAPA 2A or Demonstration of exit skills
The second half of third semester course. The course, which is conducted in Japanese, enhances students’ abilities in reading, writing, speaking, listening and understanding of Japanese culture. UC/CSU
JAPA 3A + 3B = JAPA 3

JAPA 4. Continuation of Intermediate Japanese (5)
Lec-87.5 P/NP available
Prereq: JAPA 3 or JAPA 3B or Demonstration of exit skills
Fourth semester course. The course, which is conducted in Japanese, enhances students’ abilities in reading, writing, speaking, listening and understanding of Japanese culture. UC/CSU
Offered Spring semesters

JAPA 4A. Continuation of Intermediate Japanese (3)
Lec-52.5 P/NP available
Prereq: JAPA 3 or JAPA 3B or Demonstration of 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 P/NP available
Prereq: JAPA 4A or Demonstration of 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 P/NP available
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.
Offered Spring semesters

JAPA 10B. Beginning Conversational Japanese (3)
Lec-52.5 P/NP available
Recommended Prep: 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 P/NP available
Recommended Prep: 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 P/NP available
Recommended Prep: JAPA 1 or 1B or Demonstration of 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 P/NP available
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

JAPA 18. Intermediate Kanji for Reading and Writing (3)
Lec-52.5 P/NP available
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 P/NP available
Intensive study of the second level of intermediate Kanji characters to increase competence in reading and writing Japanese and in understanding authentic materials. UC/CSU
Offered on occasion

JAPA 20. Continuation of Intermediate and Advanced Kanji for Reading and Writing (3)
Lec-52.5 P/NP available
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English.
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 classes are credit classes 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 professionalism 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 IGTC 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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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>
</tr>
<tr>
<td>Choose one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>JOUR 26 Fundamentals of Public Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 35 Internet Journalism</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 36 Investigative Reporting</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 37 Introduction to Photojournalism</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose two of the following courses:</td>
<td></td>
</tr>
<tr>
<td>BCST 110 Introduction to Writing for Electronic Media</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 1 Principles of Macroeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>or ECON 3 Principles of Microeconomics</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>5.0</td>
</tr>
<tr>
<td>or PSYC 5 Statistics for Behavioral Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>ENGL 1B Writing about Literature</td>
<td>4.0</td>
</tr>
<tr>
<td>or ENGL 1C Writing about Nonfiction</td>
<td>4.0</td>
</tr>
<tr>
<td>or CMST 2 Introduction to Rhetorical Criticism</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 22 Feature Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 23 Copy Editing</td>
<td>3.0</td>
</tr>
<tr>
<td>PHIL 40 Introduction to Logic: Critical Thinking</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 1 American Government</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 2 Comparative Government</td>
<td>3.0</td>
</tr>
<tr>
<td>CMST 3 Argumentation and Debate</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 8 Filipino American Community</td>
<td>3.0</td>
</tr>
<tr>
<td>or ASAM 20 Asian American Experience Since 1820</td>
<td>3.0</td>
</tr>
<tr>
<td>or BCST 104 Race and Media</td>
<td>3.0</td>
</tr>
<tr>
<td>or HIST 41A The African American in the United States From the Colonial Era to the Civil War</td>
<td>3.0</td>
</tr>
<tr>
<td>or HIST 41B The African American in the United States From the Reconstruction to the Present</td>
<td>3.0</td>
</tr>
<tr>
<td>or LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States</td>
<td>3.0</td>
</tr>
<tr>
<td>or LGBT 15 From Greece to Stonewall: Global LGBT Literature, Art and Culture</td>
<td>3.0</td>
</tr>
<tr>
<td>or LGBT 50 Lesbian/Gay/Bisexual/Transgender/Communities of Color in the U.S.</td>
<td>3.0</td>
</tr>
<tr>
<td>or WGST 25 Introduction to Women’s Studies: Feminism Demystified</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>18.0 – 22.0</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<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>
</tr>
<tr>
<td>VMD 105 Visual Media Digital Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>LIBR 51 Introduction to Libraries and Library Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 22 Feature Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 35 Internet Journalism</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 37 Introduction to Photojournalism</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 100 Orientation to Visual Media Design</td>
<td>1.0</td>
</tr>
<tr>
<td>JOUR 23 Copy Editing</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 24 Newspaper Laboratory</td>
<td>4.0</td>
</tr>
<tr>
<td>JOUR 38 Intermediate Photojournalism</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 110 Introduction to Writing for Electronic Media</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 29A Introduction to Magazine Editing and Production</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 25 Editorial Management</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 26 Fundamentals of Public Relations</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 135 Audio for the Web</td>
<td>1.0</td>
</tr>
<tr>
<td>CINE 20A Film History: Evolution of Film Expression</td>
<td>3.0</td>
</tr>
<tr>
<td>CINE 20B Film History: Contemporary Film Expression</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 44A Survey of World Literature, Part I: Ancient, Medieval, and Early Modern</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL 44B Survey of World Literature, Part II: Early Modern to the Present</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 122 Graphic Design II</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST 1 The United States Since 1900</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 37 Introduction to Ethnic Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 191 Social Media for Professionals</td>
<td>1.0</td>
</tr>
<tr>
<td>MRKT 170 Advertising and Integrated Marketing Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 57 Photography for the Web</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 102B Documentary/News Photography</td>
<td>2.0</td>
</tr>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 32 Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>44.0</td>
</tr>
</tbody>
</table>

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>
</tr>
</thead>
<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>
</tr>
<tr>
<td>VMD 105 Visual Media Digital Skills</td>
<td>3.0</td>
</tr>
<tr>
<td>LIBR 51 Introduction to Libraries and Library Resources</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 22 Feature Writing</td>
<td>3.0</td>
</tr>
<tr>
<td>LIBR 56 Computers in Libraries</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 100 Orientation to Visual Media Design</td>
<td>1.0</td>
</tr>
<tr>
<td>JOUR 23 Copy Editing</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 25 Editorial Management</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 26 Fundamentals of Public Relations</td>
<td>3.0</td>
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<tr>
<td>Total:</td>
<td>44.0</td>
</tr>
</tbody>
</table>

Second Semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 24 Newspaper Laboratory</td>
<td>4.0</td>
</tr>
<tr>
<td>VMD 122 Graphic Design II</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 25 Editorial Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Third Semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 122 Graphic Design II</td>
<td>3.0</td>
</tr>
<tr>
<td>JOUR 23 Copy Editing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Fourth Semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR 24 Newspaper Laboratory</td>
<td>4.0</td>
</tr>
</tbody>
</table>
JOUR 26. Fundamentals of Public Relations ........ 3.0
BCST 110. Introduction to Writing for Electronic Media ........ 3.0
Total: ........................................ 42.0

**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**

**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
LIBR 56. Computers in Libraries ............. 3.0
LIBR 57. Internet Research Strategies ........ 2.0
Third Semester:  
BCST 110. Introduction to Writing for Electronic Media ........................................ 3.0
JOUR 24. Newspaper Laboratory ............. 4.0
JOUR 23. 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
The courses 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Fundamentals in feature writing for magazines and newspapers with special emphasis on profile and interpretive news features. This course provides practical experience in interview and in-depth research techniques. Training in how to write a freelance story for publication. CSU

JOUR 23. Copy Editing (3)
P/NP available
Prereq: JOUR 21
This course is for writers, working editors, and those considering a career in editing or copy editing. Students learn to edit newspapers, magazines and web sites 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)
P/NP available
Prereq: JOUR 21
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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 and 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 29B. Intermediate Magazine Editing and Production (3)  
Lec-35, Lab-52.5, field trips  
Prereq: JOUR 29 OR JOUR 29A  
An intermediate exploration into the process of creating a magazine publication. Students work as editors focusing on editing content suitable for publication in the campus magazine. They participate in the editorial and production process and develop the skills required for publishing a campus magazine. Appropriate for students interested in editing and production who have completed an introductory campus magazine publishing class. CSU  

JOUR 29C. Advanced Magazine Editing and Production (3)  
Lec-35, Lab-52.5, field trips  
Prereq: JOUR 29B  
An advanced exploration into the process of creating a magazine publication. Students work in management positions focusing on leading a staff in producing content suitable for publication in the campus magazine. They facilitate the editorial and production process and develop the skills required to manage the publication of a campus magazine. Appropriate for students interested in editing and production who have completed an intermediate level campus magazine publishing class. CSU  

JOUR 31. Internship Experience (2)  
Lec-17.5, work-60 to 75 (total)  
Recommended Prep: 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 him/her self 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  
Recommended Prep: 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. Investigative Reporting (3)  
Lec-52.5  
Recommended Prep: JOUR 21  
The course provides 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  
Recommended Prep: 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 a level appropriate for publication such as in campus publications. Access to Single Lens Reflex (SLR) digital or film camera required. CSU  

JOUR 38. Intermediate Photojournalism (3)  
Lec-52.5  
Prereq: JOUR 37  
Recommended Prep: 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) 239-3200  
Web Site: www.ccsf.edu/labr  

Announcement of Curricula  
Degree Curriculum  
The Labor and Community Studies Department offers a two-year transfer degree program in Social Justice with an area of emphasis in labor and community advocacy. 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 LGBTQ people. It gives a thorough grounding in the rights of employees, including union rights, through a course of study that examines class history, economics, politics, art, and social change. It offers specialized instruction in the history and current status of movements for social change and prepares students to transfer into a variety of CSU majors in social sciences, behavioral science, and ethnic studies, among others.  

Social Justice Studies: General - Labor and Community Studies Major (AA-T)  
The Associate of Arts in Social Justice: Labor and Community Studies for Transfer prepares students to pursue studies in working class history and workplace justice, and for careers in labor and community advocacy. The Social Justice Transfer Model Curriculum (TMC) is an “area of emphasis” (AOE) and has specifically been designed to prepare students for transfer into a variety of CSU Majors, such as African American Studies  
Africana Studies  
American Indian Studies  
American Studies
Arabic Language, Literature and Culture
Asian American Studies
Chicano/Chicana Studies
Ethnic Studies
Gender Studies
Labor and Employment Studies
Labor Studies
Latin American Studies
Liberal Studies w/Option in Interdisciplinary Studies in Culture & Society
Liberal Studies Border Studies w/Option in Mexican-American Studies
Modern Jewish Studies
Negotiation, Conflict Resolution and Peace building
Sociology with a concentration in Critical Race Studies
Sociology with a concentration Race, Class, and Gender
Sociology with Inequalities and Diversity Option
Social Science with Emphasis in Islamic and Arabic Studies
Women, Gender, and Sexuality Studies
Women’s Studies
and many other possible CSU majors.

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:

- Analyze how economic and political power is exercised in the United States.
- Assess the effectiveness of working class movements for social and/or racial justice.
- Analyze the relative merits of various organizing strategies for building labor and/or community power.

Students who wish to earn the Associate of Arts in Social Justice: Labor and Community 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.

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 Social Justice Studies: General - Labor and Community Studies

Course ................................................. Units

Required core courses:
LBCS 70A Who Built America? From the Colonial Era to the Civil War and Reconstruction .................. 3.0
or LBCS 70B Who Built America? From Reconstruction to the Present ........................................... 3.0
WGST 25 Introduction to Women's Studies: Feminism Demystified ............................................. 3.0
IDST 37 Introduction to Ethnic Studies ......................... 3.0

Select 3 courses from at least two of the following areas:
Area 1: History and Government
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 88 California Labor History .................................. 3.0

Area 2: Arts and Humanities
LBCS 104A Work Tales- Beginning Performance .......... 3.0
AFAM 60 African American Women in the US ............... 3.0
LGBT 55 Contemporary Global LGBT Art and Culture ................................................................. 3.0
ENGL 57 Survey of Women's Literature ........................ 3.0

Area 3: Social Science
ASAM 22 Community Issues & Leadership .................. 3.0
LBCS 15/LALS 15 Latin American Workers in the Americas ....................................................... 3.0
LBCS 96C Labor Relations in the Modern American .... 3.0
ECON 25 Women in the Economy ............................. 3.0

Area 4: Quantity Reasoning and Research Methods
LALS 5 Introduction to Statistical Methods in Latin American and Latino/a Studies .......................... 5.0

* Course may be used to satisfy this area if not used to meet the Core Course requirement.

Total: .................................................. 18.0 – 20.0

Announcement of Courses

Credit, Degree Applicable Courses:
LBCS 15. Latin American Workers in the Americas (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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 15=LALS 15

LBCS 70A. Who Built America? From the Colonial Era to the Civil War and Reconstruction (3)
Lec-52.5
P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English

LBCS 70B. Who Built America? From Reconstruction to the Present (3)
Lec-52.5, field trips
A multicultural, post-Civil War history of the United States from the perspective of its working people. Native Americans, Africans and Europeans. Territorial expansion, Unions, the Progressive Movement, World War I, The Depression, the New Deal, World War II, Cold War, Civil Rights, the Sixties and the global economy today. UC/CSU
LBCS 81. Organizing for Economic and Social Justice (3)
Lec-52.5 P/NP available
The class will examine the strategies and tactics of organizing for economic, racial and social justice in various settings. Workplace and community organizing. Unions and workers’ centers. Labor-community coalition building. The effectiveness of different approaches to building labor and community power in the current historical context. UC/CSU
LBCS 98C = MUS 48C

LBCS 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

Noncredit Courses:
LACR 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.

LACR 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.

LACR 9806. Workers’ Advocacy Training (3 hrs)

LACR 9815. Labor and Community Activist Training (18 hrs)
Prepares students to advocate for improvements in their wages, working and living conditions in a variety of settings. Includes identifying issues, planning and campaign evaluation. Preparation for volunteer and paid work in union, community, and electoral activism.

Latin American and Latino/a Studies
Office: Science 186
Phone Number: (415) 239-3126
Web Site: www.ccsf.edu/lals

Announcement of Curricula

Social Justice Studies: General - Latin American and Latino/a Studies Major (AA-T)
The Associate of Arts in Social Justice: Latin American and Latino/a Studies for transfer is designed to prepare students who wish to transfer to pursue studies in social justice with an emphasis in Latin American and/or Latino studies.
The Social Justice Transfer Model Curriculum (TMC) is an "area of emphasis" (AOE) and has specifically been designed to prepare students for transfer into a variety of CSU majors such as Latin American Studies, Latino/a Studies, Chicano/a studies, Mexican American Studies, Central American Studies, Border Studies, African American Studies, Africana Studies, American Indian Studies, American Studies, Asian American Studies, Ethnic Studies, Islamic Studies, Gender Studies, Labor and Employment Studies, and many other possible CSU majors.

It is advised that potential majors meet with an affiliated counselor or department chair to discuss education goals, course options and transfer issues.

Learning Outcomes

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

- Apply intersectionality to analyze the different power relations that have shaped the lives of Latinas/os in the United States and Latin America
- Apply appropriate methods of inquiry for Latin American and Latino/a Studies
- Analyze the national and/or transnational experiences of Latinos in the United States and Latin America

Students who wish to earn the Associate in Arts in Social Justice Studies: Latin American and Latino/a Studies for transfer (AA-T) degree must complete 60 CSU-transferable units with at least a 2.0 grade point average. This must include 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 “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 a transfer-level math and English eligibility, the minimum time for completion is 4 semesters. Completion time will vary based on student preparation and numbers of units completed per semester.

Courses Required for the AA-T in Social Justice Studies: General - Latin American and Latino/a Studies

Course ........................................ Units
Core required courses:
LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States ...................... 3.0
IDST 37 Introduction to Ethnic Studies .................. 3.0
WGST 25 Introduction to Women's Studies: Feminism Demystified .................. 3.0
LALS 14 Diego Rivera; Art and Social Change in Latin America .................. 3.0
Select two courses from at least two areas for a minimum of 6 units:

Area 1: History and Government
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
LALS 11 Drug Wars in the Americas .................. 3.0
LALS 13 Latin American & Latino/a Cross-Border Social Movements .......... 3.0
POLS 18 Government & Politics of Latin America ...... 3.0

Area 2: Arts and Humanities
ART 105 Ancient Art and Architecture of Latin America .................. 3.0
ART 106 Latin American Art History .................. 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
LALS 21 History of the Mexican American/Chicano ...... 3.0

Area 3: Social Science
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
LALS 15/LBCS 15 Latin American Workers in the Americas .................. 3.0
POLS 18 Government & Politics of Latin America ...... 3.0
ANTH 11 Latin American Cultures and Societies ........ 3.0

Area 4: Quantitative Reasoning & Research Methods
LALS 5 Introduction to Statistical Methods in Latin American and Latino/a Studies .................. 5.0

Total: ........................................ 18.0 – 20.0

Latin American & Latino/a Studies Major (AA)

The Latin American and Latino/a Studies major is an inter-disciplinary program that studies the history, economy, culture, and politics of Latin America and Latinos in the United States.

Using an interdisciplinary approach, Latin American and Latino/a Studies graduates are active in the examination of the multiple and diverse realities of peoples of Latin America and of Latinos in the United States.

The degree in Latin American and Latino/a studies provides a basis for students pursuing further education toward careers in: non-profit program management, public sector, private sector, international development, labor and community organizing, policy analysis, education, journalism, among others.

Learning Outcomes

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

- Analyze the national and transnational experiences of Latinos/as in the Americas
- Examine the political, social, cultural and economic realities of Latin America and its people.
- Evaluate the intersectionality of distinct forms of oppression within Latina/o experience in the Americas
- Apply theories and methodologies in Latin American and Latino Studies
The Latin American and Latino/a Studies degree offers courses in different areas of graduation at CCSF: Humanities, Ethnic 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. In order to complete the major you need to take a total of 21 units: Twelve (12) core units and nine (9) 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 the electives, students can choose a focus by selecting from our program’s specialized courses; allowing them to craft a major that reflects the 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 and for many professional careers.

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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 10 Latinas in the U.S./VOCES</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 11 Latin American Cultures and Societies</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following History of Latin America courses:</td>
<td></td>
</tr>
<tr>
<td>HIST 18A The Colonial History of Latin America</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST 18B History of Latin America</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose 9 units from the following courses in either Latin American &amp; Latino/a Studies, Social Science, or Humanities</td>
<td></td>
</tr>
<tr>
<td>LALS 14 Diego Rivera; Art and Social Change in Latin America</td>
<td>3.0</td>
</tr>
<tr>
<td>One of the History of Latin America courses not completed above.</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 70 Individual Study in Latin American and Latino/a Studies</td>
<td>1.0-3.0</td>
</tr>
<tr>
<td>MUS 25 Music of Latin America and the Caribbean</td>
<td>3.0</td>
</tr>
<tr>
<td>DANC 155A Beginning Salsa and Other Latin Dances</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 155B Intermediate Salsa and Other Latin Dances</td>
<td>1.0</td>
</tr>
<tr>
<td>LALS 9/LGBT 9 The Latin American and Latina/o LGBT Experience</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 11 Drug Wars in the Americas</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 13 Latin American &amp; Latino/a Cross-Border Social Movements</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 15/LBCS 15 Latin American Workers in the Americas</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST 20 History of Mexico</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST 21 History of the Mexican American/Chicano</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 18 Government &amp; Politics of Latin America</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 106 Latin American Art History</td>
<td>3.0</td>
</tr>
<tr>
<td>Maximum 3 units of Spanish Language Courses</td>
<td></td>
</tr>
<tr>
<td>Any course can be selected (Maximum 3 units)</td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td>21.0</td>
</tr>
</tbody>
</table>

**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 State. 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:

- Analyze and interpret 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>
</tr>
</thead>
<tbody>
<tr>
<td>Required course:</td>
<td></td>
</tr>
<tr>
<td>LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose 9 units from the following courses:</td>
<td></td>
</tr>
<tr>
<td>LALS 9/LGBT 9 The Latin American and Latina/o LGBT Experience</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 10 Latinas in the U.S./VOCES</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 11 Drug Wars in the Americas</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 13 Latin American &amp; Latino/a Cross-Border Social Movements</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 14 Diego Rivera; Art and Social Change in Latin America</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 15/LBCS 15 Latin American Workers in the Americas</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 106 Latin American Art History</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 11 Latin American Cultures and Societies</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST 21 History of the Mexican American/Chicano</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS 25 Music of Latin America and the Caribbean</td>
<td>3.0</td>
</tr>
<tr>
<td>HIST 18B History of Latin America</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>12.0</td>
</tr>
</tbody>
</table>

**Announcement of Courses**

**Credit, Degree Applicable Courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LALS 1. Latino/a Diaspora: The Impact of Latinos Living in the United States (3)</td>
<td>3.0</td>
</tr>
<tr>
<td>Lec-52.5</td>
<td>P/NP available</td>
</tr>
<tr>
<td><strong>Recommended Prep:</strong> ENGL 88 or ESL 188 or readiness for college-level English</td>
<td></td>
</tr>
<tr>
<td>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</td>
<td></td>
</tr>
<tr>
<td>LALS 5. Introduction to Statistical Methods in Latin American and Latino/a Studies (5)</td>
<td>5.0</td>
</tr>
<tr>
<td>Lec-87.5</td>
<td>P/NP available</td>
</tr>
<tr>
<td><strong>Prereq:</strong> MATH 92 or MATH 60 or placement in MATH 90</td>
<td></td>
</tr>
<tr>
<td><strong>Recommended Prep:</strong> ENGL 88 or ESL 188 or readiness for college-level English</td>
<td></td>
</tr>
<tr>
<td>Emphasis is on the application of statistical methods to measure, analyze, interpret and report findings related to issues in Latin American and U.S. Latino Studies and other disciplines. Analyses include</td>
<td></td>
</tr>
</tbody>
</table>
LALS 15=LBCS 15

LALS 15. Latin American Workers in the Americas (3)
Lec-52.5 P/NP available
A survey of the labor experiences of Latin American and Latino/a workers and the ways in which politics, economics and social movements shape their experiences. UC/CSU
LALS 15=LBCS 15

LALS 13=POLS 13

LALS 13. Latin American & Latino/a Cross-Border Social Movements (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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 13=POLS 13

LALS 9=LGBT 9

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

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 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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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
Recommended Prep: Any LALS course, including any cross-listed Social or Behavioral Science course
Supervised individual or group study on topics and issues in Latin American & Latino/a Studies using an interdisciplinary approach. CSU UC upon review

ANTH 11. Latin American Cultures and Societies (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

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 NOT PREREQUISITE TO 18B

HIST 18B. History of Latin America (3)
Lec-52.5 P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
Survey of Latin American history from independence in the 19th century to the present. UC/CSU
HIST 18B 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
LBCS 15. Latin American Workers in the Americas (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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 15=LALS 15

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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
An introductory survey of 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

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

Spanish 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. Students will learn best practices, techniques, and strategies for effective tutoring. Areas covered will include, but not be limited to: the tutor role and responsibility, the tutor-tutee relationship, the tutoring cycle, strategies and techniques to implement when tutoring students of various backgrounds, learning preferences, academic abilities and specific strategies for tutoring in identified subject-specific areas. CSU

LERN 12. Tutoring/Mentoring Work Experience (1-3)
Work-60-225 P/NP only
Recommended Prep: 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 only
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 strategies, 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, library notetaking, accessing campus resources, textbook studying and test taking. CSU
Offered on occasion

LERN 52A. Study Strategies: Discipline Specific (1)
Lec-17.5 P/NP only
This brief intensive course increases student success by introducing content-specific study strategies particular to a targeted academic discipline, course or section within a discipline. Study strategies are unique to the discipline to assist students with assigned content. CSU
Offered on occasion

LERN 53A. Test Prep for CBEST Basic Skills Test-English (.5)
Lec-9 P/NP only
Recommended Prep: ENGL 88 or ENGL 88B or readiness for college-level English
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-Math (.5)
Lec-9 P/NP only
This short-term course is designed to prepare students for the mathematics section of the CBEST, standardized, timed test. This course covers formatting, scoring standards, test-taking and study strategies and specific content. This is the standardized exam that future K-12 teachers must pass prior to being hired as a teacher. CSU

LERN 53C. Test Prep: Standardized Exams: CSET (.5)
Lec-9 P/NP only
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
This short-term course is designed to prepare students for the English section of the CSET Multiple Subjects standardized test. This course covers formatting, scoring standards, test-taking and study strategies and specific content related to the Reading, Language, and Literature sections of Subtest 1 of the CSET Multiple Subjects Exam. CSU

LERN 53D. Test Prep for CSET Multiple Subjects Exam: Math (.5)
Lec-9 P/NP only
Recommended Prep: 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
Master successful online learning in 6 weeks. Gain proficiency using Canvas as a holistic learning environment: access instructions and course materials; participate in community; complete assignments, and receive help from the instructor. Implement behaviors conducive to successful online learning: time management, goal setting, and self-motivation. Apply study strategies to reading e-books, and create study tools for an e-portfolio. For students new to, or seeking to master online learning. 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

Social Justice Studies: General - Feminist, Queer, and Trans Studies Major (AA-T)

Associate in Arts in Social Justice Studies: Feminist, Queer, and Trans Studies for Transfer is a joint program between the Women's and Gender Studies and the LGBT Studies Departments. This AA-T offers students breadth of knowledge through a set of introductory courses addressing gender, sexuality, race, ethnicity, class, ability and depth of knowledge through courses that focus on intersecting identities within feminism, queer, and trans theories. We aim to understand and dismantle cultural and institutionalized oppressions like sexism, heterosexism, homophobia, cissexism, transphobia, racism, classism, ableism, and ageism. 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, LGBT Studies, Queer 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:

- Analyze the social, political, and historical contexts of Feminist, Queer, and Transgender Studies.
- Apply an intersectional framework to feminist, queer, trans, ethnic, racial theories, and/or socio-economic theories.
- Examine gender identities, gender expressions, and sexual orientation across cultures historically and/or in a contemporary context.
- Identify the role of art and creativity in various global cultural contexts in relation to gender and sexuality.

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 SocialJustice Studies: General - Feminist, Queer, and Trans Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>ASAM 35 Asian American Women</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 31 Women and Gender in the Middle East</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 9/LGBT 9 The Latin American and Latina/o LGBT Experience</td>
<td>3.0</td>
</tr>
<tr>
<td>LGBT 10 LGBT Culture &amp; Society</td>
<td>3.0</td>
</tr>
<tr>
<td>LGBT 21 Issues in Lesbian Relationships</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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 or Government
HIST 12A United States Women's History: Pre-colonial Through 1880s | 3.0 |
HIST 12B United States Women's History: 1890-1945 | 3.0 |
HIST 45 LGBT American History | 3.0 |

Area 2: History or Government
LGBT 15 From Greece to Stonewall: Global LGBT Literature, Art and Culture | 3.0 |
LGBT 18 Transgender Lives, Culture and Art | 3.0 |
LGBT 20 LGBT U.S. Art and Culture | 3.0 |
LGBT 55 Contemporary Global LGBT Art and Culture | 3.0 |

Area 3: History or Government
LGBT 21 Issues in Lesbian Relationships | 3.0 |
LGBT 22 Issues in Queer Studies | 3.0 |
ASAM 35 Asian American Women | 3.0 |
ENGL 57 Survey of Women's Literature | 3.0 |
ENGL 58 Contemporary Women's Writing | 3.0 |

Announcement of Curricula

Social Justice Studies: General - Feminist, Queer, and Trans Studies Major (AA-T)

Associate in Arts in Social Justice Studies: Feminist, Queer, and Trans Studies for Transfer is a joint program between the Women's and Gender Studies and the LGBT Studies Departments. This AA-T offers...
LGBT 24 Intimacy and Relationships between Men 3
LGBT 50 Lesbian/Gay/Bisexual/Transgender/Communities of Color in the U.S. 3
WGST 54 The Politics of Sexual Violence 3
AFAM 60 African American Women in the US 3
ANTH 20 Lesbian Gay Bisexual Transgender Anthropology 3
ANTH 25 Culture, Gender and Sexuality 3
ASAM 35 Asian American Women 3
BCST 105 Gender & Mass Media 3
ECON 20 LGBT Economics 3
HIST 12A United States Women's History: Pre-colonial Through 1880s 3
HIST 12B United States Women's History: 1890-Present 3
HIST 45 LGBT American History 3
IDST 17 Human Sexuality 3
IDST 31 Women and Gender in the Middle East 3
LALS 10 Latinas in the U.S./VOCES 3
PSYC 25 Psychology of Gender 3
SOC 25 Sex and Gender in American Society 3
Total: 18.0

Lesbian, Gay, Bisexual and Transgender Studies Major (AA)

The LGBT Studies Major offers a multidisciplinary and multicultural approach to the study of Lesbian, Gay, Bisexual, Transgender, Queer and Intersex identities, culture, art, literature, politics, history and society both globally and domestically. Through the Arts, Humanities, Social Sciences and Behavioral Sciences, the LGBT Studies Major incorporates queer theory, theories of race and ethnicity, feminist theory, and the study of comparative social and political movements to examine the ways that we currently understand and have historically understood various constructions of sexuality, gender identity and behavior depending upon historic time and global location. To support this multidisciplinary approach, the LGBT Studies Department offers course that cover literature, film, art, ethnic studies, history, anthropology, psychology, politics, religion and health. While the LGBT Studies major at City College of San Francisco offers a full and array of General Education and Diversity requirements, it will also prepare students for transfer to numerous LGBT/Queer Studies baccalaureate programs in the United States and Canada.

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

- Research and analyze key issues in Lesbian, Gay, Bisexual, Transgender, Queer and Intersex histories and the intersectionality of LGBTQ+ people.
- Analyze key issues concerning LGBTQ+ people in various regions of the world with a focus on cultural identity as informed by issues of politics, religion and colonial histories.

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
LGBT 5 Introduction to Lesbian, Bisexual, Gay, and Transgender Studies ................. 3
LGBT 15 From Greece to Stonewall: Global LGBT Literature, Art and Culture ......................... 3

Choose 3 units from these Arts courses:
LGBT 20 LGBT U.S. Art and Culture ......................... 3
LGBT 55 Contemporary Global LGBT Art and Culture 3
FASH 55 Icons of Contemporary Fashion .................. 3
MUS 27Q Music and Queer Identity ......................... 3

Choose 3 units from these Humanities courses:
LGBT 11 Film Expression: History of Queer Film ............. 3
LGBT 12 Contemporary LGBTQ Film ........................ 3
LGBT 18 Transgender Lives, Culture and Art .................. 3
LGBT 75 Queer Cinema in the 1970s .......................... 3

Choose 6 units from these Social and Behavioral Sciences courses:
LGBT 9/LALS 9 The Latin American and Latina/o LGBT Experience .......................... 3
LGBT 10 LGBT Culture & Society ............................. 3
LGBT 50 Lesbian/Gay/Bisexual/Transgender/Communities of Color in the U.S. .............. 3
ANTH 20 Lesbian Gay Bisexual Transgender Anthropology ............................. 3
ECON 20 LGBT Economics ............................. 3
HIST 45 LGBT American History ............................. 3
PSYC 24 Queer Psychology ............................. 3

Choose 3 units from the following course electives:
LGBT 21 Issues in Lesbian Relationships ........................ 3
LGBT 24 Intimacy and Relationships between Men ............ 3
CDEV 76 Supporting LGBT Families in Educational Settings .......................... 3
HLTH 67 HIV and Hepatitis Navigation Skills .................. 3
IDST 17 Human Sexuality ............................. 3
IDST 16 Poetry for the People ............................. 3
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
WGST 10 Women and Film ................................ 3
WGST 54 The Politics of Sexual Violence ........................ 3
WGST 55 Ending Sexual Violence: Peer Education .................. 3
Any Arts and Humanities or Social and Behavioral course listed above, if not already taken ................. 3
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
C-ID SJS 130

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

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

LGBT 11. Film Expression: History of Queer Film (3)
Lec-52.5, field trips  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

LGBT 12. Contemporary LGBTQ Film (3)
Lec-52.5  P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
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

LGBT 13. 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
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
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 then will move to explore modern and contemporary views of Trans gender and 'gender variant' people within various cultures including LGBT+ politics, art and culture. UC/CSU

LGBT 20. LGBT U.S. Art and Culture (3)
Lec-52.5  P/NP available
LGBT, 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

Offered on occasion

LGBT 24. Intimacy and Relationships between Men (3)
Lec-52.5  P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

**CDEV 76. Supporting LGBT Families in Educational Settings (3)**
Lec-52.5
Recommended Prep: 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

**C-ID PSY 130**

**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 (LGBT) families in educational settings and exploration of the role of educators and educational programs in creating inclusive environments. UC/CSU

**IDST 17. Human Sexuality (3)**
Lec-52.5  P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 188 or readiness for college-level English
A human sexuality course that integrates content and methodology from the disciplines of anthropology, biology, ethics, health education, history, jurisprudence, and psychology. UC/CSU

**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 80A. Diversity and Social Justice: Racism (.5)**
Lec-9  P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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**
**Recommended Prep:** ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level ENGLISH

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 Fall semesters**

### IDST 80F. Diversity and Social Justice: Class and Classism (.5)
**Lec-9**  
**P/NP available**

**Recommended Prep:** ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level ENGLISH

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**

**Recommended Prep:** ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level ENGLISH

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**

**Recommended Prep:** ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level ENGLISH

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**

### 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 25. Psychology of Gender (3)
**Lec-52.5**  
**P/NP available**

This course is an analysis of theories and research on how behavioral, cognitive, and emotional processes are impacted by gender. It includes an intersectional critique of biological, psychological, sociocultural ideas of gender, gender continuums from cis to transgender and addresses topics such as stereotypes, relationships, violence, sexuality, work and academics from various perspectives. Included is a focus on experiences of, and responses to, oppression. 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**

### WGST 10. Women and Film (3)
**Lec-52.5**  
**P/NP available**

**Recommended Prep:** ENGL 88 or ESL 188 or readiness for college-level ENGLISH

Feminist film studies. Uses an intersectional lens to analyze women's roles in cinema as filmmakers and actors from its origins to the present. UC/CSU

**Formerly WOMN 10**  
**Offered on occasion**

### WGST 54. The Politics of Sexual Violence (3)
**Lec-52.5**  
**P/NP available**

An examination of the political, social, and psychological causes of sexual violence, its connections to other hate crimes, and strategies for transforming a rape culture through prevention education. Includes a special emphasis on the healing function of creative expression, especially writing. Field project required. CSU

**Formerly WOMN 54**

### WGST 55. Ending Sexual Violence: Peer Education (3)
**Lec-52.5**  
**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 classes and volunteer work in community based organizations. Field project required. CSU

**Formerly WOMN 55**
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 flexibility for students to satisfy both general education and lower division major requirements for specific universities while meeting associate degree requirements at the same time. For more detailed information on transfer requirements, students should speak with a counselor and refer to www.ASSIST.org.

To complete the requirements for the Associate in Arts or Associate in Science for 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 outlined below.
  
  Each course used to meet this “area of emphasis” requirement must be completed with a grade of “C” or higher (or “Credit” or “Pass” if the course was taken on a “credit/no credit” or “pass/no pass” basis). Where appropriate, courses in the “area of emphasis” may also be counted for a General Education area.

- Complete all other 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 semesters. 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 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 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 creative 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.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete 18 units from the following courses (at least one course from Arts, and one from Humanities):</td>
<td></td>
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<tr>
<td>ARTS: CHOOSE AT LEAST ONE OF THE FOLLOWING COURSES:</td>
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<tr>
<td>AFAM 55 From Funk to Hip Hop</td>
<td>3.0</td>
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<tr>
<td>ARCH 31A History of Architecture</td>
<td>3.0</td>
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<tr>
<td>ARCH 31B History of Architecture</td>
<td>3.0</td>
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<tr>
<td>ARCH 32 Bay Region Architectural History</td>
<td>3.0</td>
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<tr>
<td>ARCH 102 Architecture Design Studio II</td>
<td>3.0</td>
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<tr>
<td>ARCH 134 History and Theory of Modern Architecture</td>
<td>3.0</td>
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<tr>
<td>ART 101 Western Art History</td>
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<tr>
<td>ART 102 Western Art History</td>
<td>3.0</td>
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<tr>
<td>ART 103 History of Modern Art</td>
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<td>ART 104 Asian Art History</td>
<td>3.0</td>
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<tr>
<td>ART 105 Ancient Art and Architecture of Latin America</td>
<td>3.0</td>
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<tr>
<td>ART 106 Latin American Art History</td>
<td>3.0</td>
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<tr>
<td>ART 107 African-American Art History</td>
<td>3.0</td>
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<tr>
<td>ART 108 Women Through Art History</td>
<td>3.0</td>
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<tr>
<td>ART 109 History of Contemporary Art</td>
<td>3.0</td>
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<td>ART 118 American Art</td>
<td>3.0</td>
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<tr>
<td>ART 122A Russian Art at the Legion</td>
<td>3.0</td>
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<tr>
<td>ART 123Q Baroque Masters of Light</td>
<td>3.0</td>
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<td>ART 123U 18th c. French Art at the Legion</td>
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<tr>
<td>ART 123V Renaissance Art at the Legion</td>
<td>3.0</td>
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<tr>
<td>ART 123W 19th c. Painting at the Legion</td>
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<tr>
<td>ART 125A Basic Design</td>
<td>3.0</td>
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<td>ART 126 Color</td>
<td>3.0</td>
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<td>ART 130A Basic Drawing</td>
<td>3.0</td>
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<tr>
<td>ART 140A Beginning Painting</td>
<td>3.0</td>
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<tr>
<td>ART 146A Beginning Chinese Brush Painting</td>
<td>3.0</td>
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<tr>
<td>ART 146B Intermediate Chinese Brush Painting</td>
<td>3.0</td>
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<tr>
<td>ART 160A Beginning Ceramics</td>
<td>3.0</td>
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<tr>
<td>ART 170A Beginning Sculpture</td>
<td>3.0</td>
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<tr>
<td>ART 180A Beginning Jewelry/Metal Arts</td>
<td>3.0</td>
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<tr>
<td>ASIA 11 East Asian Calligraphy: An Introduction</td>
<td>3.0</td>
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<tr>
<td>CINE 18 American Cinema</td>
<td>3.0</td>
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<td>CINE 21 Introduction to Film Studies</td>
<td>3.0</td>
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<td>CINE 23A Films of Alfred Hitchcock</td>
<td>3.0</td>
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<td>CINE 23B Focus on Film Noir</td>
<td>3.0</td>
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<td>CMST 38 Forensics Competition</td>
<td>3.0</td>
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<td>DANC 30 Dance History Dance in Cultural Context</td>
<td>3.0</td>
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<td>DANC 32 Black Tradition in American Dance</td>
<td>3.0</td>
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<td>DANC 100A Beginning Dance Composition</td>
<td>3.0</td>
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<tr>
<td>DSGN 101/PHOT 100/VMD 101 Design Fundamentals</td>
<td>3.0</td>
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<tr>
<td>DSGN 105 Design Thinking</td>
<td>1.5</td>
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<tr>
<td>DSGN 110/VMD 112 Design Drawing Techniques</td>
<td>1.5</td>
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<tr>
<td>FASH 23 Fashion History</td>
<td>3.0</td>
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<tr>
<td>FASH 55 Icons of Contemporary Fashion</td>
<td>3.0</td>
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<tr>
<td>INTD 138 Global History of Interior Design</td>
<td>3.0</td>
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<tr>
<td>LALS 14 Diego Rivera; Art and Social Change in Latin America</td>
<td>3.0</td>
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<tr>
<td>LBCS 104A Work Tales- Beginning Performance</td>
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<td>Course Code</td>
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<tr>
<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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<tr>
<td>MUS 3A</td>
<td>Diatonic Harmony</td>
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<tr>
<td>MUS 3B</td>
<td>Chromatic Harmony</td>
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<tr>
<td>MUS 5A</td>
<td>Introduction to Composition</td>
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<tr>
<td>MUS 5B</td>
<td>Music Composition</td>
</tr>
<tr>
<td>MUS 9A</td>
<td>Beginning Piano</td>
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<tr>
<td>MUS 21</td>
<td>Traditional African Music</td>
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**HUMANITIES: CHOOSE AT LEAST ONE OF THE FOLLOWING COURSES:**

- 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   |
- AMS 5 Comics, Power and Society                              | 3.0   |
- AMSL 2A Continuation of Elementary American Sign Language    | 3.0   |
- ASAM 6 Asian American Issues through Literature              | 3.0   |
- ASAM 10 Asian American Popular Culture                      | 3.0   |
- ASAM 20 Asian American Experience Since 1820                | 3.0   |
- ASAM 30 Asian American Issues Through Film                  | 3.0   |
- ASAM 35 Asian American Women                                | 3.0   |
- ASIA 15 Asian Societies and Cultures through Film           | 3.0   |
- ASIA 30 Manga and Anime                                     | 3.0   |
- BCST 103 Mass Media and Society                             | 3.0   |
- CHIN 1A Elementary Chinese                                 | 5.0   |
- CHIN 1B Elementary Chinese                                 | 5.0   |
- CHIN 2 Continuation of Elementary Chinese                   | 5.0   |
- CHIN 2A Continuation of Elementary Chinese                  | 3.0   |
- CHIN 2B Continuation of Elementary Chinese                  | 3.0   |
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- 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   |
- CHIN 10A Beginning Conversational Cantonese                 | 3.0   |
- CHIN 10B Continuation of Beginning Conversational Cantonese | 3.0   |
- CHIN 10C Intermediate Conversational Cantonese              | 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 14A Conversational Mandarin for 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 30A Advanced Intermediate Chinese                      | 3.0   |
- CHIN 30B Continuation of Advanced Intermediate Chinese      | 3.0   |
- CHIN 30C Advanced Intermediate Chinese                      | 3.0   |
- CHIN 31A Intermediate Mandarin Chinese for Bilingual Students | 3.0   |
- CHIN 31B Continuation of Intermediate Mandarin Chinese for Bilinguals | 3.0   |
- CHIN 21 Introduction to Film Studies                        | 3.0   |
- CINE 22 The Documentary Tradition                           | 3.0   |
- CMST 5 Intercultural Communication                         | 3.0   |
- CMST 8 Rhetoric of Popular Culture                         | 3.0   |
- ENGL 1B Writing about Literature                           | 4.0   |
- ENGL 30A American Literature, Beginnings to Civil War      | 3.0   |
- ENGL 30B American Literature, 1865-present                 | 3.0   |
- ENGL 35A Introduction to Writing Fiction                   | 3.0   |
- ENGL 35B Intermediate Fiction Writing                      | 3.0   |
- ENGL 35C Introduction to Writing Poetry                    | 3.0   |
- ENGL 35D Intermediate Poetry Writing                       | 3.0   |
- ENGL 35G Introduction to Writing Creative Nonfiction       | 3.0   |
- ENGL 35H Intermediate Creative Nonfiction Writing          | 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 III: Mid-Nineteenth through the Twentieth Century | 3.0   |
- ENGL 48C Science Fiction and Fantasy                       | 3.0   |
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JAPA 16 Beginning Kanji for Reading and Writing ......................................................... 3.0
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LALS 1 Latino/a Diaspora: The Impact of Latinos Living in the United States ............ 3.0
LGBT 11 Film Expression: History of Queer Film ......................................................... 3.0
LGBT 15 From Greece to Stonewall: Global LGBT Literature, Art and Culture ........... 3.0
LGBT 18 Transgender Lives, Culture and Art ............................................................. 3.0
LGBT 75 Queer Cinema in the 1970s ............................................................................. 3.0
PHIL 2 Morality and Politics ......................................................................................... 3.0
PHIL 4 Knowledge and Its Limits ................................................................................ 3.0
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PIL 10B Conversational Filipino (Tagalog) ................................................................. 3.0
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RUSS 16B Advanced Conversation through Contemporary Russian Cinema ............. 3.0
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SPAN 41 Culture and Civilization of Spain ................................................................. 3.0
WGST 10 Women and Film ......................................................................................... 3.0
WORL 100 Introduction to Intercultural Communication and Language Learning ...... 3.0

Total: ....................................................................................................................... 18.0

**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.

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

Course ........................................... Units
Complete 18 units from the following courses:
CMST 1A Elements of Public Speaking ............ 3.0
CMST 2 Introduction to Rhetorical Criticism ......... 3.0
CMST 3 Argumentation and Debate ................. 3.0
CMST 4 Group Communication .................... 3.0
CMST 6 Workplace Communication ................. 3.0
CMST 11 Basic Public Speaking .................... 3.0
CMST 12 Fundamentals of Oral Communication .... 3.0
CMST 20 Interpersonal Communication ............ 3.0
ENGL 1A University-Parallel Reading and Composition ........................................... 4.0
ENGL 1B Writing about Literature ................. 4.0
ENGL 1C Writing about Nonfiction ............... 4.0
ESL 79 Advanced Speaking and Pronunciation .... 3.0
PHIL 2 Morality and Politics ..................... 3.0
PHIL 4 Knowledge and Its Limits .................. 3.0
PHIL 40 Introduction to Logic: Critical Thinking ... 3.0
Total ............................................. 18.0

Science and Mathematics Emphasis (AS)
Associate in Science in Science and Mathematics

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.

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

Course ........................................... Units
Complete 18 units from the following courses (at least one each from Science and Math options):

SCIENCE COURSES: CHOOSE AT LEAST ONE:
ANTH 1 Biological Anthropology .................. 3.0
ASTR 1 Cosmic Evolution .......................... 3.0
ASTR 4 Life in the Universe ....................... 3.0
ASTR 16 Observational Astronomy ............... 1.0
ASTR 17 Planets .................................. 3.0
ASTR 18 Stars ..................................... 3.0
ASTR 19 Galaxies and the Universe ............... 3.0
BIO 9 Human Biology ............................ 4.0
BIO 10 Animal Biology ............................ 4.0
BIO 11 Science of Living Organisms .............. 4.0
BIO 12 Plant Biology ............................. 4.0
BIO 14 Plant Ecology ............................. 4.0
BIO 15 Biology of HIV ............................ 3.0
BIO 19 Ecology .................................. 4.0
BIO 20 Introduction to Ecology .................... 3.0
BIO 31/GEOG 31/SUST 31 Introduction to Environmental Science ......................... 3.0
BIO 31L/GEOG 31L/SUST 31L Environmental Science Laboratory ........................... 1.0
BIO 32 Marine Biology ............................ 3.0
BIO 32L Marine Biology Laboratory ............... 1.0
BIO 33 Introduction to Conservation Biology .... 3.0
BIO 40 Plants and Animals of California .......... 3.0
BIO 51 Introduction to Genetics ................... 3.0
BIO 61 The Biology of Cancer ..................... 3.0
BIO 100A General Biology ....................... 5.0
BIO 100B General Biology ....................... 5.0
BIO 106 Introduction to Human Anatomy and Physiology ........................................... 4.0
BIO 108 General Human Anatomy ................. 4.0
BIO 111 Human Physiology ....................... 5.0
BIO 112 Introduction to Human Physiology ...... 4.0
BIO 114 Exploring Neuroscience: An introduction to the Brain .............................. 3.0
BIO 119 Emerging Diseases ......................... 3.0
BIO 120 Introduction to Microbiology ............. 4.0
BIO 121 Sanitation Principles and Practices ...... 4.0
BIO 130 Nutrition and Culinary Arts .......... 2.0
BIO 132 Introduction to Nutrition .................. 3.0
BIO 134 Introduction to Nutrition for Health Sciences ................................... 3.0
BTEC 115 Recombinant DNA Biotechnology ...... 5.0
BTEC 120 Cell Biotechnology ...................... 5.0
CHEM 32 Introduction to Medical Chemistry ..... 4.0
CHEM 40 Introduction to Chemical Principles ... 5.0
MATH COURSES: CHOOSE AT LEAST ONE:
ECON 5 Introductory Statistics for Economics, Business and Social Sciences. ................................. 5.0
ET 50 Technical Mathematics ........................................................................................................... 4.0
LALS 5 Introduction to Statistical Methods in Latin American and Latino/a Studies .................. 5.0
MATH 70 Liberal Arts Math ............................................................................................................. 3.0
MATH 75 Mathematical Analysis for Business .............................................................................. 3.0
MATH 80 Probability and Statistics ................................................................................................. 5.0
MATH 90 Precalculus Algebra ............................................................................................................ 5.0
MATH 92 College Algebra .................................................................................................................. 5.0
MATH 95 Trigonometry ...................................................................................................................... 3.0
MATH 100A Short Calculus I ............................................................................................................. 3.0
MATH 100B Short Calculus II ............................................................................................................. 3.0
MATH 110A Calculus I ....................................................................................................................... 5.0
MATH 110B Calculus II ..................................................................................................................... 5.0
MATH 110C Calculus III ..................................................................................................................... 5.0
MATH 115 Discrete Mathematics ....................................................................................................... 3.0
MATH 120 Linear Algebra .................................................................................................................. 3.0
MATH 125 Differential Equations ...................................................................................................... 3.0
MATH 130 Linear Algebra and Differential Equations ................................................................. 5.0
PHIL 12A Symbolic Logic .................................................................................................................. 5.0
PSYC 5 Statistics for Behavioral Sciences .......................................................................................... 5.0

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.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete 18 units from the following courses (at least one course from Behavioral Sciences and one from Social Sciences):</td>
<td></td>
</tr>
<tr>
<td><strong>BEHAVIORAL SCIENCES: CHOOSE AT LEAST ONE OF THE FOLLOWING COURSES:</strong></td>
<td></td>
</tr>
<tr>
<td>AAPS 100 Achieving an Academic Attitude</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 59 Organized Crime</td>
<td>3.0</td>
</tr>
<tr>
<td>ADMJ 67 Terrorism and Counterterrorism</td>
<td>3.0</td>
</tr>
<tr>
<td>AFAM 30 African American Consciousness</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 2 Archaeology and Prehistory</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 3 Introduction to Social and Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 4 Introduction to Linguistic Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 8 Magic, Witchcraft, and Religion</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 11 Latin American Cultures and Societies</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 12 North American Indian Cultures</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 15 Philippine Culture and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 20 Lesbian Gay Bisexual Transgender Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 25 Culture, Gender and Sexuality</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 8 Filipino American Community</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 27 Asian American Race Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 35 Asian American Women</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 40 Chinese American Community</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 42 Southeast Asians in the U.S.</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 61 Asian American Community Field Study</td>
<td>2.0–4.0</td>
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<tr>
<td>ASAM 63 Asian American Community Field Study</td>
<td>4.0</td>
</tr>
<tr>
<td>BCST 103 Mass Media and Society</td>
<td>3.0</td>
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<tr>
<td>BCST 105 Gender &amp; Mass Media</td>
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<tr>
<td>CDEV 53 Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 67 Child, Family, and Community</td>
<td>3.0</td>
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<tr>
<td>CDEV 68 Interactions with Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CDEV 97 School Age Growth &amp; Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CMST 5 Intercultural Communication</td>
<td>3.0</td>
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<tr>
<td>FASH 28 The Social Meaning of Clothing</td>
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<tr>
<td>HLTH 6 End of Life Issues in the U.S.</td>
<td>3.0</td>
</tr>
<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>
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<tr>
<td>HLTH 54 Introduction to Public Health</td>
<td>3.0</td>
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<tr>
<td>HLTH 79 Stress and Resilience</td>
<td>3.0</td>
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<tr>
<td>HLTH 221 Health and Social Justice</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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<tr>
<td>IDST 40 Contemporary Issues in the Filipino Community</td>
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<tr>
<td>IDST 45 Pacific Islanders in the U.S.</td>
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<tr>
<td>IDST 80A Diversity and Social Justice: Racism</td>
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<tr>
<td>IDST 80C Diversity and Social Justice: Sexism</td>
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<tr>
<td>IDST 80D Diversity and Social Justice: Heterosexism</td>
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<tr>
<td>IDST 80E Diversity and Social Justice: Ableism</td>
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<tr>
<td>IDST 80J Diversity and Social Justice: Class and Classism</td>
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<tr>
<td>IDST 80G Diversity and Social Justice: Transphobia</td>
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</tr>
<tr>
<td>IDST 81B Diversity and Social Justice: Anti-Semitism/ Anti-Arabism</td>
<td>1.0</td>
</tr>
<tr>
<td>LALS 10 Latinas in the U.S./VOCES</td>
<td>3.0</td>
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<tr>
<td>LGBT 5 Introduction to Lesbian, Bisexual, Gay, and Transgender Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>LGBT 10 LGBT Culture &amp; Society</td>
<td>3.0</td>
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<tr>
<td>LGBT 21 Issues in Lesbian Relationships</td>
<td>3.0</td>
</tr>
<tr>
<td>LGBT 24 Intimacy and Relationships between Men</td>
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<tr>
<td>LGBT 50 Lesbian/Gay/Bisexual/Transgender/Communities of Color in the U.S.</td>
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<tr>
<td>PE 13 Sport and Society</td>
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</tr>
<tr>
<td>PHST 20 The Filipino Family</td>
<td>3.0</td>
</tr>
<tr>
<td>PHST 30 Philippine Society and Culture Through Film</td>
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</tr>
<tr>
<td>PSYC 1 General Psychology</td>
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<tr>
<td>PSYC 2 Research Methods</td>
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<tr>
<td>PSYC 4 Forensic Psychology</td>
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<tr>
<td>PSYC 10 Abnormal Psychology</td>
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<tr>
<td>PSYC 11 Theories of Personality</td>
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<tr>
<td>PSYC 14 Psychology of Shyness and Self-esteem</td>
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<tr>
<td>PSYC 15 Assertive Behavior</td>
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<tr>
<td>PSYC 17 Psychology of Eating, Food, and Weight</td>
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<tr>
<td>PSYC 21 Lifespan Development</td>
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<tr>
<td>PSYC 23 Psychology of Race and Ethnic Relations</td>
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<tr>
<td>PSYC 25 Psychology of Gender</td>
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<tr>
<td>PSYC 26 Applied Psychology</td>
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<tr>
<td>PSYC 32 Social Psychology</td>
<td>3.0</td>
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<tr>
<td>PSYC 40 Child and Adolescent Psychology</td>
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<tr>
<td>SOC 1 Introduction to Sociology</td>
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<tr>
<td>SOC 2 Social Deviance</td>
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<tr>
<td>SOC 3 Social Problems</td>
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<tr>
<td>SOC 21 Introduction to Research Methods</td>
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<tr>
<td>SOC 25 Sex and Gender in American Society</td>
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<tr>
<td>SOC 35 Sex, Marriage and Family Relationships</td>
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<tr>
<td>WGST 25 Introduction to Women's Studies: Feminism Demystified</td>
<td>3.0</td>
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<tr>
<td>WGST 54 The Politics of Sexual Violence</td>
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</tbody>
</table>

### SOCIAL SCIENCES: CHOOSE AT LEAST ONE OF THE FOLLOWING COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ADMJ 57 Introduction to Administration of Justice</td>
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<tr>
<td>ADMJ 67 Terrorism and Counterterrorism</td>
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<tr>
<td>AFAM 40 The Black Experience in California</td>
<td>3.0</td>
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<tr>
<td>AFAM 42 The Origins and History of Race Theory and Modern Racism</td>
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<tr>
<td>AFAM 55 From Funk to Hip Hop</td>
<td>3.0</td>
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<tr>
<td>AFAM 60 African American Women in the U.S.</td>
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<tr>
<td>AMS 5 Comics, Power and Society</td>
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<tr>
<td>ASAM 20 Asian American Experience Since 1820</td>
<td>3.0</td>
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<tr>
<td>ASAM 22 Community Issues &amp; Leadership</td>
<td>3.0</td>
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<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>
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<tr>
<td>ASAM 35 Asian American Women</td>
<td>3.0</td>
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<tr>
<td>BCST 104 Race and Media</td>
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<td>ECON 1 Principles of Macroeconomics</td>
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<tr>
<td>ECON 3 Principles of Microeconomics</td>
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<tr>
<td>ECON 6 International Economics</td>
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<tr>
<td>ECON 15 Political Economy</td>
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<tr>
<td>ECON 20 LGBT Economics</td>
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<tr>
<td>ECON 25 Women in the Economy</td>
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<tr>
<td>ECON 30 Economics of the African American Community</td>
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<tr>
<td>GEG 3 World Regional Geography</td>
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<td>GEG 4 Cultural Geography</td>
<td>3.0</td>
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<tr>
<td>GEG 7 Economic Geography</td>
<td>3.0</td>
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<tr>
<td>HIST 1 The United States Since 1900</td>
<td>3.0</td>
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<tr>
<td>HIST 4A Western Civilization</td>
<td>3.0</td>
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<tr>
<td>HIST 4B Western Civilization</td>
<td>3.0</td>
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<tr>
<td>HIST 5 Europe Since 1900</td>
<td>3.0</td>
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</table>
POLS 4 The Politics of Globalization .......................... 3.0
POLS 5 International Relations .................................. 3.0
POLS 12 Ethnic Politics in the United States ................. 3.0
POLS 18 Government & Politics of Latin America ............ 3.0
POLS 22 Environmental Politics and Policy .................. 3.0
POLS 43 The Constitution and Individual Rights ............. 3.0
POLS 45 Governments and Politics of Middle East ..., 3.0
WGST 25 Introduction to Women's Studies: Feminism Demystified .............................................. 3.0

Total: .................................................................... 18.0

Note: See online catalog for an updated list of courses.

Library Information Technology

Office: Rosenberg 517
Phone Number: (415) 452-5519
Web Site: www.ccsf.edu/libintec

Announcement of Curricula

General Information
The curricula in Library Information Technology aims to meet the needs of individuals seeking paraprofessional employment or advancement in a library or related information service agency; or those seeking an introduction to libraries and information services in anticipation of further study in library science.

The associate degree major complements requirements for graduation from the college, while the program leading to a certificate is designed for individuals transferring to a senior college or already possessing an academic degree.

Admission. Enrollment is open to all interested students.

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 degree.

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 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

Course .................................................. Units

Required courses:
LIBR 51 Introduction to Libraries and Library Resources 3.0
LIBR 53 Library Public Services for Library Technicians 3.0
LIBR 55A Cataloging and Classification ................. 3.0
LIBR 55B Technical and Access Services for Library Technicians ................. 3.0
LIBR 56 Computers in Libraries ......................... 3.0

Choose 4 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 WOPR, MABS, CNIT, VMD, and CS; or for sophistication in the arts, social sciences and humanities.

Total: ............................................. 19.0

Announcement of Courses

Credit, Degree Applicable Courses:

LIBR 51. Introduction to Libraries and Library Resources (3)
Lec-52.5, field trips ........................................ P/NP available
Recommended Prep: 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 52. Library Public Services for Library Technicians (3)
Lec-52.5, field trips ........................................ P/NP available
Recommended Prep: LIBR 51
Provides an introduction to public services in all library types. Overview of the types of positions and career opportunities available in this area to Library Technicians. Focus includes reference, programming, and most public-facing library services. CSU
Offered Fall semesters

LIBR 55A. Cataloging and Classification (3)
Lec-52.5, field trips ........................................ P/NP available
Prereq: LIBR 51
Recommended Prep: MABS 60
Repeat: Repeate up to 8.00 Units
Addresses major cataloging and technology competencies for library support staff. Emphasizes current tools and techniques for description and classification in a modern library, explores theory evolving from emerging technologies. CSU
Offered Spring semesters

LIBR 55B. Technical and Access Services for Library Technicians (3)
Lec-52.5, field trips ........................................ P/NP available
Recommended Prep: LIBR 51
Provides an overview of the paraprofessional's role in the library technical and access services units of a library. Surveys the philosophy of practice, service functions and personnel categories employed in cataloging, acquisitions, serials, systems, and access (circulation) services. Focuses on technical skills needed to work in these library departments in a paraprofessional capacity and on current trends and issues. CSU
Offered Spring semesters

LIBR 56. Computers in Libraries (3)
Lec-52.5, field trips ........................................ P/NP available
Recommended Prep: 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
Offered Fall semesters

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
Offered Fall semesters

LIBR 58A. Legal Resources and Libraries (1)
Lec-17.5
Recommended Prep: (ESL 188 or ENGL 88 or Readiness for College-Level English) and MABS 60
This course introduces the law library -- its organization and its contents. There are also an overview of the different sources of law (both in print and online) and training in a legal research database. Students will be asked to locate and examine each source of law. CSU
Offered only in Summer semesters
Library Information Skills

Office: Rosenberg 413
Phone Number: (415) 452-5571
Web Site: https://library.ccsf.edu/research/

Credit, Degree Applicable Course:
LI S 10. Use of Information Resources (1)
Lec-18, field trips P/NP available
Recommended Prep: ESL 186 or placement in ESL 188
Students develop skills using a range of information services and tools, 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core courses:</td>
<td></td>
</tr>
<tr>
<td>DSGN 105 Design Thinking</td>
<td>1.5</td>
</tr>
<tr>
<td>DSGN 101/PHOT 100/VMD 101 Design Fundamentals</td>
<td>3.0</td>
</tr>
<tr>
<td>DSGN 110/VMD 112 Design Drawing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>DSGN 150/VMD 118 Color in Design</td>
<td>3.0</td>
</tr>
<tr>
<td>CMST 4 Group Communication</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Choose 2 units from the following elective courses:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 125A Basic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 126 Color</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 130A Basic Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 132A Beginning Figure Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 36A Fashion Design I</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 42 Introduction to the Fashion Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 46 Fashion Merchandising</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 3 Introduction to Museum Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 50B History &amp; Aesthetics Since 1945</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 50A History &amp; Aesthetics Pre-1945</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 51 Beginning Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 57 Photography for the Web</td>
<td>3.0</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>
<tr>
<td>PHOT 101C Self Portraiture</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 101D Landscape Photography</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 101G Pinhole Photography</td>
<td>1.0</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>
</tr>
<tr>
<td>Total:</td>
<td>14.0</td>
</tr>
</tbody>
</table>

Maker Studies Certificate
The Maker Studies Certificate Program is designed for students who wish to learn and apply maker approaches, tools and techniques to their educational pathways and careers. Students will learn through "making," the iterative process of tinkering and problem solving, in college tool shops, studios, labs and makerspace settings across disciplines in the areas of art and design, engineering and construction,
technology, information research, work-based learning, and with other
departments.

Learning Outcomes
Upon completion of this program, students will be able to:
- Utilize a variety of technology and tools in an iterative process
- Employ design thinking in digital and analog fabrication
- Apply critical thinking and analysis to a variety of making
  activities
- Explore the philosophy of making and connections to cultural
  diversity

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 Achievement in Maker Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required core courses:</td>
<td></td>
</tr>
<tr>
<td>MAKR 100 Introduction to History, Culture and Practices of Making</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 112/DSGN 110 Design Drawing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>DSGN 105 Design Thinking</td>
<td>1.5</td>
</tr>
<tr>
<td>Choose at least one course from each technical skill area</td>
<td></td>
</tr>
<tr>
<td>AREA ONE: 3D Building and Construction</td>
<td></td>
</tr>
<tr>
<td>ART 170A Beginning Sculpture</td>
<td>3.0</td>
</tr>
<tr>
<td>CAD 99A 3D Printing &amp; Solid Modeling</td>
<td>1.0</td>
</tr>
<tr>
<td>CNST 100 Introduction to Construction Applications</td>
<td>3.0</td>
</tr>
<tr>
<td>CNST 116 Furniture Making &amp; Woodworking</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 15A Apparel Construction 1</td>
<td>3.0</td>
</tr>
<tr>
<td>FASH 11A Beginning Leather and Heavy Textiles</td>
<td>1.0</td>
</tr>
<tr>
<td>FASH 71 Creating &amp; Upcycling Wearable Art</td>
<td>3.0</td>
</tr>
<tr>
<td>TH A 60 Stagecraft</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 140 Manufacturing Processes</td>
<td>3.0</td>
</tr>
<tr>
<td>WELD 144A Survey of Welding Processes</td>
<td>2.0</td>
</tr>
<tr>
<td>AREA TWO: Technology, Coding and Applications</td>
<td></td>
</tr>
<tr>
<td>ARCH 218 Fundamentals of Rhino 3D</td>
<td>3.0</td>
</tr>
<tr>
<td>CNIT 214 Internet of Things</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS 29 Electronic Music 1</td>
<td>3.0</td>
</tr>
<tr>
<td>AREA THREE: Design and Prototyping</td>
<td></td>
</tr>
<tr>
<td>ART 125B Advanced Design: 3D</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 156A Beginning Mixed Media</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGN 48L Introduction to Engineering and Technology</td>
<td></td>
</tr>
<tr>
<td>Laboratory</td>
<td>1.0</td>
</tr>
<tr>
<td>FASH 64 Textile Design Printing Techniques</td>
<td>3.0</td>
</tr>
<tr>
<td>TH A 71 Intro to Make-up &amp; Costume Design</td>
<td>3.0</td>
</tr>
<tr>
<td>Required capstone course:</td>
<td></td>
</tr>
<tr>
<td>MAKR 400 Maker Capstone</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose one of the following project- or work-based learning courses:</td>
<td></td>
</tr>
<tr>
<td>LI S 10 Use of Information Resources</td>
<td>1.0</td>
</tr>
<tr>
<td>CS 198 Industry Internship</td>
<td>1.0-2.0</td>
</tr>
<tr>
<td>FASH 63 Fashion Design &amp; Production Internship</td>
<td>2.0</td>
</tr>
<tr>
<td>TH A 61 Technical Theatre Production</td>
<td>1.0-2.0</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>
<tr>
<td>Total: 18.0 – 19.0</td>
<td></td>
</tr>
</tbody>
</table>

Announcement of Courses
Credit, Degree Applicable Courses:

MAKR 33. Making and Makerspaces for Teachers (1)
Lec-17.5, field trips
Teacher preparation for making and makerspaces in educational
settings. Topics include experiential learning and other applicable
learning frameworks, facilitation strategies for making and makers-
spaces, learning activities and curriculum, and equipment, tools and
supplies found in makerspaces. CSU

MAKR 100. Introduction to History, Culture and Practices of
Making (3)
Lec-52.5, field trips
Recommended Prep: ESL 184 or ENGL 88 or Placement in ESL 186
or readiness for college-level English
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 tradi-
tionally 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 math-
ematical 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 dif-
erential 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

Choose one course or course combination from the following:
MATH 80 Probability and Statistics .............. 5.0
MATH 115 Discrete Mathematics ..................... 3.0
CS 110A Intro to Programming ........................ 4.0
PHYC 4A Classical Mechanics for Scientists and Engineers .......................... 3.0
and PHYC 4AL Mechanics Laboratory for Scientists and Engineers .................. 1.0

OPTION 3:
MATH 130 Linear Algebra and Differential Equations ... 5.0

Choose one course or course combination from the following:
MATH 115 Discrete Mathematics ..................... 3.0
CS 110A Intro to Programming ........................ 4.0
PHYC 4A Classical Mechanics for Scientists and Engineers .......................... 3.0
and PHYC 4AL Mechanics Laboratory for Scientists and Engineers .................. 1.0

Total: ........................................... 21.0 – 24.0

Announcement of Courses

For “Business Mathematics” see “Business”.

CCSF Math assessment and placement is required prior to enrollment in Math courses. For more information, please see “Matriculation Steps for Enrollment in Credit Courses” in the “Admission to the College” section of this Catalog or 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 P/NP available

Addition, subtraction, multiplication and division of signed numbers. Number fluency with conversions between fractions, decimals and percents. Order of operations, natural number exponents, and square roots. Simplifying and evaluating algebraic expressions and solving single-variable linear equations. Applications involving measurements, rates, ratios, proportions, percents, perimeter, and area.

MATH 35. Prealgebra (5)
Lec-87.5
Prereq: MATH 30
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.
Formerly MATH 835. Recommended for students who need additional preparation before taking MATH 40 or introductory courses in chemistry, physics, engineering technology, economics, or business.
Offered on occasion

MATH 80S. Support for Probability and Statistics (2)
Lec-35 P/NP only
Coreq: MATH 80
Support for students who are concurrently enrolled in MATH 80, Probability and Statistics. Topics include concepts and skills from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Concepts are taught in the context of the linked Math 80 course.

MATH 90S. Support for Precalculus Algebra (3)
Lec-52.5 P/NP only
Coreq: MATH 90
Support for students who are concurrently enrolled in MATH 90, Precalculus Algebra. Topics include concepts and skills from elementary and intermediate algebra that are needed to understand the basics of precalculus algebra. Concepts are taught in the context of the linked Math 90 course.

Credit, Degree Applicable Courses:
MATH 40. Elementary Algebra (5)
Lec-87.5
Prereq: MATH 30 or MATH 35
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 30 or MATH 35

MATH 45. Preparation for Statistics (6)
Lec-105
Prereq: MATH 30 or MATH 35
Accelerated preparation for transfer-level statistics. Algebra necessary for college-level statistics, including variables, formulas, and linear equations. Ratios, rates, 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 30 or MATH 35
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
Recommended Prep: MATH 55
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 70. Liberal Arts Math (3)**
Lec-52.5
Prereq: MATH 43 or MATH 60 or placement in 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
Recommended Prep: MATH 55
Polynomials and rational expressions; solving linear, 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 (5)**
Lec-87.5
Prereq: MATH 45 or MATH 60 or MATH 92
Descriptive statistics: organization of data, sample surveys, experiments and observational studies, measures of central tendency and dispersion, correlation, regression lines, and analysis of variance (ANOVA). 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
Recommended Prep: MATH 55
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

*Not recommended for students who have passed MATH 92.*

**MATH 92. College Algebra (5)**
Lec-87.5
Prereq: MATH 40 or placement in MATH 92
Recommended Prep: 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

*Recommended for students with strong mathematical background and performance. Not recommended for students who have passed MATH 90.*

**MATH 95. Trigonometry (3)**
Lec-52.5
Prereq: MATH 60 or MATH 92
Recommended Prep: MATH 90 and MATH 55
Trigonometric functions and their graphs; trigonometric identities and equations; inverse trigonometric functions; solving triangles; complex numbers. CSU

**MATH 100A. Short Calculus I (3)**
Lec-52.5
Prereq: 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

The calculus sequence of MATH 100A-100B is intended for students majoring in Business, Technology, Social Sciences, or Life Sciences.

**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

The calculus sequence of MATH 100A-100B is intended for students majoring in Business, Technology, Social Sciences, or Life Sciences.

**MATH 110A. Calculus I (5)**
Lec-87.5
Prereq: (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 110A 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 MATH 110A
Recommended Prep: CS 110B or CS 111B
Set theory, logic, proof techniques, mathematical induction, relations and functions, recursion, combinatorics, elementary number theory, trees and graphs, analysis of algorithms. 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 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 100 Music Fundamentals .......................... 3.0
MUS 29 Electronic Music I ............................... 3.0
MUS 30 Electronic Music II .................................. 3.0
CS 177 Software Engineering.................................. 3.0

Choose one of the following:
CNIT 133 JavaScript, jQuery, AJAX .......................... 3.0
CS 131B Programming Fundamentals: Python ........... 4.0
CS 110A Intro to Programming ............................... 4.0

Total: .................................................. 15.0 – 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 har-
mony 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 P/NP available
Referred Prep: MUS 100
Development of beginning skills in rhythmic and melodic dictation and
sight-singing of diatonic music through the use of solfège in scales,
intervals, triads, and seventh chords. The course teaches aural and ana-
lytical 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 P/NP available
Prereq: MUS 1A
Development of intermediate skills in rhythmic, melodic, harmonic
dictation and sight-singing, through the visual and aural analysis of
functional and non-functional chromaticism, including altered chords
and modulations. It teaches aural and visual analytical skills necessary
for all musicians and fulfills the second semester Musicianship require-
ment for music majors and minors. UC/CSU

MUS 3A. Diatonic Harmony (3)
Lec-52.5 P/NP available
Referred Prep: MUS 100
Intensive study of common-practice diatonic harmony through the
writing of four-part chorale harmonizations, figured bass realizations,
and linear and vertical analyses primarily of 18th-century music.
Fosters a technical understanding of the compositional process, greater
greatness in learning music involving chromaticism. UC/CSU

MUS 3B. Chromatic Harmony (3)
Lec-52.5 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 ver-
tical analyses primarily of 19th-century Western European music.
Fosters a technical understanding of the compositional process and a
greater facility in learning music involving chromaticism. UC/CSU

MUS 3A. Introduction to Composition (3)
Lec-52.5, field trips P/NP available
Referred Prep: MUS 100
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 on occasion

MUS 5B. Music Composition (3)
Lec-52.5, field trips P/NP available
Prereq: MUS 5A OR DEMONSTRATION OF EXIT SKILLS
Referred Prep: MUS 3A or MUS 8A or MUS 9C OR DEM-
ONSTRATION 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 on occasion

MUS 100. 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
Formerly MUS 4

Enrollment Limitations on Physical Education and Visual or
Performing Arts Courses
Per title 5 Section 55041, effective Fall 2013, students may not enroll
more than four times in “active participatory courses that are related
in content” in the areas of physical education or visual and perform-
ing arts, which includes art, dance, music, and theatre. This limitation
applies even if a student receives a substandard grade or “W” during one
or more of the enrollments in such a course or if the student petition for
repetition due to extenuating circumstances.

Music courses that are related in content are grouped together in “fami-
lies” 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
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
Prereq: MUS 6A or demonstration of exit skills
Individualized study of classical guitar theory, technique and reper-
toire 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
Prereq: MUS 6B or demonstration of exit skills
Individualized study of classical guitar theory, technique and repertoire at the intermediate level. The emphasis is on the development of intermediate skills needed for solo performance. UC/CSU

MUS 6D. Advanced Intermediate Classical Guitar (3)
Lec-52.5, field trips  P/NP available
Prereq: 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 7C2. Advanced Beginning Cello (3)
Lec-52.5, field trips  P/NP available
Prereq: 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
Prereq: 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
Prereq: 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  P/NP available
A practical introduction to percussion performance, students learn to play the instruments in the four families of percussion: Orchestral, Auxiliary, Latin, and Modern. 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 beginner 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 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: 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 violin 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 to a specific woodwind instrument, and individualized study of appropriate techniques and repertoire for that instrument. The emphasis is on the progressive development of skills needed for solo performance. 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 theory, technique and repertoire on the wood
winds: 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
Recommended Prep: 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
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. UC/CSU

MUS 9B. Intermediate Piano (3)
Lec-52.5, field trips P/NP available
Recommended Prep: 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
Recommended Prep: MUS 9A
The development of harmonic keyboard skills through the study and practice of chord structures, progressions, and sight reading techniques. UC/CSU
Offered Spring semesters

Applied Training: Voice
Music 10 Series
The Music Department recommends that students enrolling in the MUS 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
Recommended Prep: MUS 100 or demonstration of exit skills
Introduction to study of appropriate basic techniques and repertoire for beginning voice. Includes alignment, tone production, breathing, and musical skills in performing vocal music of various periods and styles. UC/CSU

MUS 10B. Advanced Beginning Voice (3)
Lec-52.5, field trips P/NP available
Prereq: MUS 10A or demonstration of exit skills
Study of appropriate techniques and repertoire for advanced beginning voice. Includes alignment, tone production, breathing and musical skills in performing vocal music of various periods and styles. UC/CSU

MUS 10C. Intermediate Voice (3)
Lec-52.5, field trips P/NP available
Prereq: MUS 10B or demonstration of exit skills
Study of appropriate techniques and repertoire for intermediate voice. Includes alignment, tone production, breathing and musical skills used to interpret vocal music of various periods and styles. UC/CSU

MUS 10D. Advanced Intermediate Voice (3)
Lec-52.5, field trips P/NP available
Prereq: MUS 10C or demonstration of exit skills
Study of appropriate techniques and repertoire for advanced intermediate voice. Includes alignment, tone production, breathing and musical skills in performing vocal music of various periods and styles. UC/CSU

Performance Courses

Ensemble: Guitar
MUS 11. Guitar Workshop (3)
Lec-52.5, field trips P/NP available
Recommended Prep: MUS 6A or demonstration of exit skills
Repeat: 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
Repeat: 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
Repeat: Students can repeat three times (total 4 enrollments)
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
MUS 48A = LBCS 98A
MUS 48B. 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
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
Repeat: 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

MUS 13B. Jazz/Rock Arranging and Composition Workshop (3)
Lec-52.5, field trips P/NP available
Recommended Prep: MUS 3A or Demonstration of exit skills
Study of a variety of jazz, rock, and blues styles. Emphasis on learning the techniques of arranging and composing. UC/CSU

Ensemble: Chorale
MUS 14. Chorale (3)
Lec-52.5, field trips P/NP available
Repeat: Students can repeat three times (total 4 enrollments)
The study, rehearsal and performance of choral literature appropriate for small ensembles, with an emphasis on skills development for performing with an ensemble. Highly recommended for intended music majors, both instrumental and vocal. UC/CSU

Ensemble: Large Traditional Instrumental
MUS 15. Orchestra (3)
Lec-52.5, field trips P/NP available
Repeat: Students can repeat three times (total 4 enrollments)
An opportunity for string, woodwind, brass and percussion players to rehearse and perform works selected from the standard repertory from the Baroque era through the present. UC/CSU

MUS 16. Concert Band (3)
Lec-52.5, field trips P/NP available
Repeat: Students can repeat three times (total 4 enrollments)
Performance of classical and marching band music for intermediate to advanced brass and woodwind students. The class will present a live concert at the conclusion of the semester. UC/CSU

Ensemble: Woodwind
MUS 17. Woodwind Ensemble (3)
Lec-52.5, field trips P/NP available
Repeat: Students can repeat three times (total 4 enrollments)
Intermediate to advanced woodwind students perform music in the classical and jazz idioms. The class will present a live concert at the conclusion of the semester. UC/CSU

Ensemble: Brass
MUS 18. Brass Ensemble (3)
Lec-52.5, field trips P/NP available
Repeat: Students can repeat three times (total 4 enrollments)
Preparation and performance of brass ensemble music of selected styles and historical periods from Baroque to the present day. Culmination is a public concert. UC/CSU

Ensemble: Piano
MUS 19. Piano Ensemble and Repertoire (3)
Lec-52.5, field trips P/NP available
Repeat: Students can repeat three times (total 4 enrollments)
Performance of four-hand, two-piano, and solo literature from all stylistic periods. Study of accompanying skills and use of these whenever possible in performances. Monthly public recitals. UC/CSU

Ensemble: Strings
MUS 20. String Ensemble (3)
Lec-52.5, field trips P/NP available
Recommended Prep: MUS 100 or Demonstration of exit skills
Repeat: Students can repeat three times (total 4 enrollments)
An exploration of techniques and ensemble literature appropriate for intermediate and advanced violinists, violists, cellists and string bassists. Concerts scheduled during the semester. 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
Recommended Prep: ENGL 88 or ESL 182 or Placement in ESL 184 or Readiness for College-Level English
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
Recommended Prep: ENGL 88 or ESL 182 or Placement in ESL 184 or Readiness for College-Level English
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. History of Jazz: Musical Traditions of the African-American (3)
Lec-52.5, field trips  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
An introductory survey of 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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
A survey of the music of America's diverse populations such as Native American, Anglo-American, African American, Cajun, Creole, Hawaiian and other styles and genres such as country, Tex-Mex, Klezmer and polka. UC/CSU

MUS 27A. Music Appreciation (3)
Lec-52.5, field trips  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: Completion of or concurrent enrollment in: ENGL 88 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
Recommended Prep: ESL 186 or ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 182 or placement in ESL 184 or readiness for college-level English
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 I (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 hardware and software synthesis, sampling, MIDI sequencing, audio processing, and multi-track audio recording. UC/CSU

MUS 30. Electronic Music II (3)
Lec-52.5  P/NP available
Prereq: MUS 29.
Explores intermediate/advanced concepts in electronic music composition and performance. MUS 30 expands on the foundational electronic music techniques from MUS 29, giving students access to multiple ways of making electronic music that will stand the test of time. UC/CSU

Other Music Performance Courses

Ensemble: African Drumming
MUS 41. African Drumming Ensemble (3)
Lec-52.5, field trips  P/NP available
Repeat: 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
Offered on occasion

MUS 42. Gospel Choir (3)
Lec-52.5, field trips  P/NP available
Repeat: 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
Repeat: 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
Repeat: 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

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 of San Francisco with the degree of Associate in Science. It is required that all students who wish to enroll in the Nursing Program complete the City College of San Francisco English or ESL and Mathematics assessment if required by the college.

Learning Outcomes
Upon completion of this program, students will be able to:
- Qualify to take the National Licensure Examination for Registered Nurses (NCLEX-RN)
- Qualify for entry level positions of R.N. in health facilities and agencies
- Identify as a member of the health team in rendering holistic care to patients, and provide support to patients’ families
- Utilize the Nursing process to formulate a plan of care and provide problem oriented individualized patient care
- Prioritize nursing care by application of Maslow’s hierarchy of needs theory
- Apply the principles of effective communication in the delivery of health care to the patient and with other health care professionals
- Apply physical or technical skills that promote patients’ health or welfare;
- Provide health education to individual patients, families, and the community at large
- Demonstrate competencies in basic health care informatics necessary to deliver safe and effective nursing care
- Exercise critical thinking skills when applying the nursing process to patient care
- 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
• 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
• Utilize the nursing process and evidenced based practice to facilitate optimal client outcomes for diverse cultures across the lifespan and in a variety of settings.

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. Applications will be accepted once a year, January 20 – February 20 for the fall and spring semester. Requests for information regarding enrollment:

• Can be found online: www.ccsf.edu/rn OR
• Nursing Department, C340
  City College of San Francisco
  50 Frida Kahlo Way
  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
      Biology 108 (formerly Anatomy 25)
      Biology 111 or 112 (formerly Physiology 1 or 12)
      Biology 120 (formerly Microbiology 12)
      English 1A
      Math 40 or higher level Algebra or Statistics course
      Science courses must have been completed within the last 7 years at the time of enrollment to the Nursing program.
   b. Must have an overall GPA of 2.5 in science and English 1A.
   2. An applicant can repeat only one of the science courses. More than one (1) repetition of any of the science courses will disqualify the applicant. Repetition of a science course is defined as repeating a course due to a previous grade of "D", "F" or "W". Students may satisfy the above course prerequisites at other institutions, but the courses and grades must be verified prior to consideration for enrollment.

3. File with the Office of Admissions and Records a completed application for admission to City College. No person may attend nursing classes unless he/she is properly admitted to the College.

4. English 1A and Math 40.
   a. If you have taken English 1A and Math 40 or higher at CCSF, you must submit official transcript with your application which includes your final grade in English 1A and Math 40 or higher.
   b. All applicants filing enrollment forms and have transcripts from other colleges or university with the pre-requisite English and Math course final grades must complete the CCSF English and Math Placement Testing Waiver form. Complete the form and submit with supporting documentation (exam results and or transcript) to the City College of San Francisco Matriculation Office in person located in Conlan Hall Room 204, Ocean Campus (415-239-3751), by FAX: 415-452-5127, or email prereq@ccsf.edu, for review of these courses to demonstrate their eligibility for CCSF English and Math courses and subsequent Waiver from taking the English and Math Placement Tests. The English and Math Placement Testing Waiver form (or copy of the waiver) must be completed, include signatures of the student and the Matriculation Office, include with completed enrollment form and the official college transcripts. Test waivers for English and mathematics if taken at other colleges or (SAT, AP) scores. Bring proof (test score or transcripts) to the Matriculation office, Conlan Hall, Rm. 204 to obtain the waiver. This waiver must accompany your Nursing application.

5. File a completed enrollment form for the Nursing Program. Contact Nursing Department for filing dates.

6. Official transcript in a sealed envelope must be submitted with the enrollment form.

7. ATI TEAS (or equivalent). ATI TEAS will also be administered to those selected for conditional enrollment.

Health and safety requirements. Nursing courses require students to practice nursing skills in the classroom and in cooperating clinical settings. For health and safety reasons, those accepted into the program must demonstrate through a recent, complete medical examination that they are able to participate in the program, have been tested for tuberculosis, and that they have received the following: rubella, varicella, mumps, hepatitis B vaccinations and antibody titers which demonstrates immunity to those diseases, current Tetanus/Diptheria/Pertussis, Seasonal Influenza vaccine.

Enrollees must also provide verification of cardiopulmonary resuscitation basic life support, Health Care Provider certification. Verification of these requirements must be received by the Nursing Department prior to the first day of class. Some hospitals may require students assigned to their hospital to submit to background check and drug screen.

Admission of LVNs, 30-unit option, transfer nursing students, graduates in nursing from a foreign school with Board of Registered Nursing deficiencies, and military trained healthcare personnel:

Advanced Placement LVN (Degree Option):

A. Licensed Vocational Nurses with a current and active California license may apply to the Nursing Program as "Advanced Placement" status. All of the academic and administrative prerequisites must be completed and the student
can apply during the regular enrollment time using the same application form as all other applicants.

B. These candidates may enter via Challenge Exam for Nursing Fundamentals. Challenge exams may consist of nursing theory, medical math calculations, and or clinical simulation. All candidates eligible for the challenge exam will be informed of the criteria for passing such exams. Those passing the Challenge Exam and will have waiver of the first semester Fundamentals of Nursing (Nursing 50) and Skills courses (Nursing 50L).

C. Entry to the nursing courses is based upon space availability. Students who qualify for this option should make an appointment with the Nursing Department Chairperson for additional information.

LVN 30 Unit Option (Non-Degree Option):
A. Licensed Vocational Nurses with a current active California license who wish to take the 30-Unit Option Program must complete different academic prerequisites.
B. Microbiology and Physiology may be taken without recency or repetition limits. The courses must have lecture and lab with a minimum of 4 semester units and be completed with a grade "C" or higher.
C. Submit the application during the enrollment period
D. Make an appointment with the Chairperson of the Nursing Department for more information and counseling. At the present time, the R.N. curriculum courses you will be taking will be Nursing 50A & 50B (Pharmacology in Nursing, Parts 1 and 2), Nursing 55 (Psychiatric Nursing), Nursing 56 (Advanced Medical-Surgical Nursing), and Nursing 58 (Trends and Issues in Nursing). Entry into these nursing courses is contingent upon space availability.

E. Passing the licensing exam under this 30-Unit Option Program will result in R.N. licensure for California as a “Non-Graduate”. There is no guarantee that the license is transferable to other states. It is up to the license holder to contact other states' Boards of Registered Nursing to inquire if the California 30-Unit Option Program R.N. license is accepted.

F. Students choosing the 30-unit option are enrolled on a space available basis only. Once enrolled in the 30-unit option the student can not decide to change to graduation track.

Military Trained Healthcare Personnel:
Military Personnel and Veterans may be eligible to apply for Advanced Placement in the Registered Nursing Program if they provide verifiable education and experience required to meet the equivalency for first semester coursework. Individuals who have held military healthcare occupations in the areas including, but not limited to Basic Medical Technician Corpsmen (Navy HM or Air Force), Army Health Care Specialist, or Air Force Independent Duty Medical Technician may fulfill these requirements. Admission into the Registered Nursing Program as a Military Advanced Placement student is contingent upon space availability. In order to receive credit and qualify for Military Advanced Placement the candidate must meet the following requirements:

1. Candidates must meet the same eligibility requirements and academic prerequisites (see Admission Requirements) of the CCSF Associate Degree Nursing Program as the generic applicants. This includes meeting the minimum passing score of the ATI Test of Essential Skills (TEAS) exam.
2. Must have proof of Honorable Discharge from the military or current active honorable service.
3. Education and experience within the last five years must meet the equivalency requirements for NURS 50 Fundamentals of Nursing, NURS 50A Pharmacology in Nursing Part I and NURS 50L Nursing Skills Lab coursework.
4. Military Challenge candidates must meet theory and clinical competency by successfully passing the following: Theory Challenge Exams (NURS 58 & NURS 50A) with 75% or greater; Medical-Math proficiency exam with 90% or greater; Successful passing of basic fundamental nursing skills competency evaluation. Individuals with Military Health Care Occupations who hold an active California LVN (Licensed Vocational Nurse) license either through challenge (BVNPT Method 4) or successful completion of an LVN program may apply as an Advanced Placement LVN.

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.

Courses Required for the Major in Registered Nursing

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

Transfer student from other accredited RN nursing program
a. Acceptance is based on equivalent professional nursing education, general education courses and space availability. Transfer students must meet the same enrollment requirements and nursing policies as all students entering the program.
b. All transfer applicants must have a letter from their previous school of nursing director that states that student was in good standing at the time of withdrawal.

g. Graduates in Nursing from a Foreign School with Board of Registered Nursing Deficiencies:
a. Nursing graduates from other countries who are deficient in nursing units as stipulated by the California BRN may apply to fulfill these deficiencies.
b. Applicants must complete the same enrollment form during the enrollment period and include a copy of the letter from the BRN with the requirements for class makeup.
c. Admission is based on space availability.
Second Semester:
NURS 50B Pharmacology in Nursing Part II ............ 2.0
NURS 51 Basic Medical-Surgical Nursing ............... 6.0
NURS 51L Intermediate Nursing Skills ................. 1.0

Third Semester:
NURS 53 Maternal Newborn Nursing .................... 6.0
NURS 55 Psychosocial Nursing ............................ 6.0

Fourth Semester:
NURS 54 Nursing of Children ............................ 6.0
NURS 56 Advanced Medical-Surgical Nursing .......... 6.0
NURS 58 Trends and Issues in Nursing .................. 1.0

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).

Choose one of the following additional courses required by the Board Of Registered Nursing:
CMST 1A Elements of Public Speaking .................... 3.0
CMST 4 Group Communication ............................. 3.0
CMST 11 Basic Public Speaking ............................ 3.0
CMST 12 Fundamentals of Oral Communication ........ 3.0
CMST 20 Interpersonal Communication .................. 3.0
ESL 79 Advanced Speaking and Pronunciation ........ 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).

Total: ...................................................... 52.0

Announcement of Courses
Credit, Degree Applicable Courses:
NURS 50. Fundamentals of Nursing (6)
Lec-52.5, Lab-157.5
Prereq: BIO 108; BIO 111 or BIO 112; BIO 120; ENGL 1A; MATH 40
Coreq: NURS 50L; NURS 50A

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 Offered Spring and Fall semesters

NURS 50A. Pharmacology in Nursing Part I (2)
Lec-35
Coreq: NURS 50; NURS 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 Offered Spring and Fall semesters

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 Offered Spring and Fall semesters

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 NURS 51L

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 Offered Spring and Fall semesters

NURS 51L. Intermediate Nursing Skills (1)
Lab-52.5 P/NP only
Prereq: (NURS 50; NURS 50L; NURS 50A) or current LVN license
Coreq: NURS 51; NURS 50B

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 Offered Spring and Fall semesters

NURS 53. Maternal Newborn Nursing (6)
Lec-52.5, Lab-157.5
Prereq: NURS 50B and NURS 51L and NURS 51
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. Offered Spring and Fall semesters

NURS 55. Psychosocial Nursing (6)
Lec-52.5, Lab-157.5
Prereq: NURS 51 and 51L
This course will lay the foundation for successive nursing courses. The sequence in which students will take these courses will be determined by the Nursing Department. Offered Spring and Fall semesters
NURS 54. Nursing of Children (6)
Lec-52.5, Lab-157.5
Prereq: NURS 55 and NURS 53
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 54 AND 56 ARE HALF-SEMESTER COURSES REQUIRED OF NURSING STUDENTS IN THE FOURTH SEMESTER OF THE PROGRAM. THE NURSING DEPARTMENT DETERMINES THE SEQUENCE IN WHICH STUDENTS WILL TAKE THESE COURSES.

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 experience will be in the acute care inpatient settings and in outpatient settings. CSU
OFFERED SPRING AND FALL SEMESTERS

NURS 56. Advanced Medical-Surgical Nursing (6)
Lec-52.5, Lab-157.5
Prereq: NURS 53 and NURS 55
Advanced medical-surgical nursing of adults, and leadership and management theories. Application of the nursing process in the care of adults with acute and chronic complex health impairment and illness. Clinical experience is planned at acute and non-acute hospitals, facilities, and out-patient sites. CSU
OFFERED SPRING AND FALL SEMESTERS

NURS 58. Trends and Issues in Nursing (1)
Lec-17.5
Coreq: Enrollment in the RN Program; NURS 54 or 56
Acquaints student with historical and current trends and issues in nursing practice, and the concept of professional development. Emphasis placed on legal and ethical aspects of nursing and the concept of professional development. Critical thinking concepts and principles will serve as a framework for studying the nursing and behavioral sciences within a health promotion/risk reduction, multicultural based curriculum.

Program Authorization. This program is approved by the California State Department of Health Services. Successful completion qualifies the graduate to: 1) take the Nurse Assistant Competency Examination to obtain State Certification for practice; 2) obtain Home Health Aide Certification without further examination.

NOTE. The Department of Health Services, Nurse Assistant Certification Division requires fingerprinting and disclosure of misdemeanor and felony convictions for all applicants.

Enrollment Procedure. Applicants must take a placement test, attend a program orientation, and meet all program prerequisites. Enrollees must be in good physical and mental health and be over 18 years of age.

Learning Outcomes
Upon completion of this program, students will be able to:
- Demonstrate the fundamental nursing skills instructed in the State approved nursing assistant/home health aide training program.
- Use effective communication skills as appropriate while delivering care to clients and families in various nursing practice settings, and in collaboration with the health care team.

Admission Requirements:
1. Completion of ESL 184 or ENGL 88 or readiness for college-level English
2. A physical examination
3. Immunizations: Hepatitis B, Rubella, Varicella, Mumps, and T.B.
4. Current CPR certification
5. DHS Application for Criminal Background Check

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 the 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. Completion of English 1A and MATH 40 or higher.
5. Have an overall GPA of 2.5 in Science and 2.0 in English 1A.
   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.
7. 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.
8. Complete the following prerequisites within 5 years prior to enrollment with a C or higher in each class starting with Fall Semester 2019: Anatomy and Physiology course 4 units (e.g. BIO 106, or BIO 108 and 112). VOCN 41D Pharmacology, and VOCN 42E Nutrition (or BIO 134), and VOCN 43F Child Growth and Development (or CDEV 53D).

Credit by Examination. Applicants who qualify for admission into the Vocational Program and who have had health training courses in the military, psychiatric technician and certified nurse assistants graduates from noncredit programs who wish to receive credit, or advanced placement should contact the vocational nursing office for additional information. Admission is based on space availability only.

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

Course .................................................. Units

First Semester:
VOCN 41A Fundamentals of Vocational Nursing ........ 4.0
VOCN 41B Basic Medical/Surgical Nursing .............. 8.0
VOCN 41C Basic Medical/Surgical Skills Lab ........... 0.5

Second Semester:
VOCN 42A Adult Medical Surgical Nursing I .......... 5.5
VOCN 42B Adult Medical Surgical Nursing II .......... 5.5
VOCN 42C Adult Medical/Surgical Skills Lab .......... 0.5
VOCN 42D Mental Health Nursing ...................... 2.0

Third Semester:
VOCN 43A Concepts in Community Health Nursing ... 2.5
VOCN 43B Maternity Nursing ............................ 4.5
VOCN 43C Pediatric Nursing ............................. 3.5
VOCN 43D Advanced Medical Surgical Nursing ...... 3.5
VOCN 43E Advanced Medical/Surgical Skills Lab .... 0.5

Total: .................................................. 40.5

Announcement of Courses

Credit, Degree Applicable Courses:

Some courses require an additional fee to cover the cost of background checks, testing, and fingerprinting.

VOCN 23. Nurse Assistant/Convalescent Care (7)
Lec-84, Lab-126
Prereq: Certification of Cardiopulmonary 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
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 41C
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. 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

VOCN 42A. Adult Medical Surgical Nursing I (5.5)
Lec-45, Lab-162
Prereq: VOCN 41A; VOCN 41B; VOCN 41C
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
Coreq: VOCN 42A and VOCN 42B
Provides an introduction to 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Introduction to community health nursing: home health care, long-term care, rehabilitative and hospice care, as well as disaster nursing. CSU

VOCN 43A. Concepts in Community Health Nursing (2.5)
Lec-30, Lab-60
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
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 43C. Pediatric Nursing (3.5)
Lec-40, Lab-72
Prereq: VOCN 43B; ENGL 1A
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 43D. Advanced Medical Surgical Nursing (3.5)
Lec-40, Lab-72
Prereq: VOCN 42D and VOCN 42B and VOCN 42C and VOCN 43E
Coreq: VOCN 43E
This course presents theory content with concurrent clinical practice with a focus on current therapeutic treatment modalities and nursing management for advanced medical/surgical patients. Core concepts include: care of the following patients; the burn patient; the patient in renal failure; the patient in shock; the patient with tumors of the neurological system; the patient with upper and lower airway disorders; the patient with tumors of the neurological system; the patient in renal failure; leadership and management. CSU

VOCN 43E. Advanced Medical/Surgical Skills Lab (.5)
Lab-35
Prereq: VOCN 42 C
Coreq: VOCN 43A; VOCN 43B; VOCN 43C; VOCN 43D
Presents the nursing skills commonly practiced in maternity and pediatric nursing as well as the client with advanced medical-surgical disorders. CSU
OLAD 7005. Body Dynamics and the Aging Process I (6 hrs)
Through lecture, demonstration and practice learn techniques that
reduce the risk of falling through lecture, discussion, demonstration,
and practice based on Tai Chi Chuan.

OLAD 7202. Principles of Balance (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 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.

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 func-
tions. Students will devise their own strategies to maintain or improve
their brain health and their ability to retain and retrieve information.

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...
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 Fall semesters_

OLAD 7212. 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 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)
The course is for older adults who are interested in learning to make art in a relaxed, non-credit environment. This course develops formal artistic skills and techniques through drawing and painting for beginning to advanced students. Individual and group instruction includes composition, color mixing, perspective, proper use of brushes and mediums, working with paper and canvas.

OLAD 7301. Arts and Crafts for Older Adults (45 hrs)
The course is for older adults who are interested in learning about various arts and crafts projects in a relaxed, non-credit environment. 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 7302. Art for Older Adults (45 hrs)
In a supportive studio atmosphere, older students learn and gain proficiency in making ceramic art with basic methods of construction, glaze application and kiln-firing processes; sharing their work and criticizing that of their peers.

OLAD 7303. Figure Drawing- Older Adults (54 hrs)
The course is for older adults who are interested in learning to make art in a relaxed, non-credit environment. The studio class is in drawing the human figure from a life model. Media used includes pencil, charcoal, ink, and varieties of paint such as watercolor, acrylic, and oil. All skill levels are welcome.

OLAD 7304. Art-Painting and Drawing (15 hrs)
Using acrylic, oil, watercolor and graphite, beginning and advance students will study and develop art techniques through drawing and painting exercises. Individual and group instruction includes the basic elements of composition, color values and the proper use of drawing and painting tools.
_Offered only in Summer semesters_

OLAD 7305. Arts and Crafts (15 hrs)
Skills related to stitchery and textile arts include patchwork, quilting, applique, trapunto, and embroidery stitches. Small projects to learn basic techniques for beginning students and individual or group projects for advanced students.

OLAD 7306. 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 7307. 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 7303. Music Appreciation for Older Adults (36 hrs)
The course is for older adults who are interested in learning about music in a relaxed, non-credit environment. Study of and familiarization with the music of the world today. Introduction to various genres of music including western classical, jazz, folk, and music of other cultures. Other genres may include symphonies, concertos, operas, chamber, oratorio, ballet, or choral music.

OLAD 7304. 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)
Recommended Prep: 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)
Recommended Prep: 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 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.

OLAD 7510. Independent Study (1-3)
Recommended Prep: ENGL 1A and (PHST 20 or PHST 30)
Lab-52.5 to 157.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Independent Study allows individual students to explore academic interests in Philippine Studies through guided research projects. Students are required to either write a research paper or give a presentation on their work. CSU UC Transferable upon review

PHST 20. The Filipino Family (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
This course examines traditional and contemporary characteristics of the Filipino family with an emphasis on the impact of colonialism on family dynamics in the Philippines and Filipino communities in the diaspora. Other issues to be discussed in the context of the Filipino family include emigration and immigration, belief systems and faith, the evolution of cultural values, intergenerational conflict, colonial mentality, colorism, sexuality, gender identities, and transnationalism. UC/CSU

PHST 30. Philippine Society and Culture Through Film (3)
Lec-52.5 P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
This course examines various cultural themes, sociopolitical, geographical, and historical factors of Philippine culture and society
through cinema. Various cultural themes and sociopolitical influences on the Filipino experience through time discussed in this course include, but are not limited to the following: images of Filipinos, language distribution, interpersonal relations, ideas of self, belief systems, indigeneity, sex roles, the “Filipino Dream”, immigration, and alienation. UC/CSU

ANTH 15. Philippine Culture and Society (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
The course introduces students to the peoples and cultures of the Philippines and the impact of Eastern and Western civilizations on the development of its peoples; emphasis on the ways of life in Philippine rural and urban areas and the cultures of its diverse ethnolinguistic communities. UC/CSU

ANTH 15 Studies the development of Philippine peoples and culture using the perspective of anthropology and its sub-disciplines in archeology, linguistics, and geography, and the influence of colonialism on the science of anthropology and on country’s cultural development. Offered on occasion

ASAM 8. Filipino American Community (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 Offered Fall semesters

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 23. Introduction to Philippine Studies (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
An interdisciplinary survey of literary and cinematic works of fiction, drama, non-fiction and poetry that investigates unity in diversity in the shifting trajectories of American identities and interrelationships. Groups featured to assess their interactive contributions to American cultures include Native-, European-, African-, Latin-, Asian-Americans, and Pacific Islanders. 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

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 U.S. (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
This course examines Pacific Islander migrations to the United States mainland including the history, culture, and politics of Hawai‘i and U.S. Pacific territories. It explores indigenous cultures and American experiences of Pacific Islanders from Guam, American Samoa, Palau, Marshall Islands, Fiji, Samoa, Tonga, Tahiti, New Zealand, and Australia. UC/CSU

IDST 46. Fa’a Pasefika: Interdisciplinary Cultural Expressions of Oceania (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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
PHIL 25A. Ancient Philosophy (3)
Lec-52.5
Offered Fall semesters
C-ID PHIL 130

PHIL 25C. Modern Philosophy through Kant (3)
Lec-52.5
Offered Spring semesters
C-ID PHIL 140

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

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](http://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

<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 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 80 Outdoor &amp; Ambient Lighting</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 85B Advanced Studio Lighting Tech</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 90 Portraiture</td>
<td>4.0</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>

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 |

### 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
- Apply design concepts inspired by the aesthetics and history of architecture
- Apply the techniques and aesthetics of light to the requirements of photography
- Apply digital hardware and software technologies used in the field of photography

Students must complete 5 of 7 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 Achievement in Architectural Photography

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 102A Architectural Photography</td>
<td>2.0</td>
</tr>
<tr>
<td>DSGN 105 Design Thinking</td>
<td>1.5</td>
</tr>
<tr>
<td>DSGN 110/VMD 112 Design Drawing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>DSGN 150/VMD 118 Color in Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 44.0 – 46.0
Black and White Darkroom Photography 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. This certificate prepares students for transfer to 4-year programs of study in the arts, particularly at fine arts colleges. Students completing this certificate program will be qualified to work in custom photography labs, operate a darkroom facility and to work for professional fine-artists.

Learning Outcomes

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

- Use the traditional tools and techniques of black and white print photography.
- Apply design concepts to create and evaluate black and white photographic images using iterative processes.
- Analyze the characteristics of various films, papers and chemicals and how they may react to different light and development techniques in black and white print photography.
- Process black and white photographic prints and negatives according to existing archival standards.
- Produce a portfolio of high quality black and white prints.

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 Achievement in Black and White Darkroom Photography

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 57 Photography for the Web</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 130 Portfolio Production</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 81B Advanced Black &amp; White Darkroom</td>
<td>4.0</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>
<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 81A Intermediate Photo: B&amp;W Film/Darkroom</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 67 Digital Negatives for Darkroom Printing</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 80A Beginning Photoshop</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Recommended additional coursework:

- PHOT 52 Photographers and Their Images
- PHOT 99 Business Practices of Photography
- PHOT 85A Beginning Lighting Techniques
- PHOT 80 Outdoor & Ambient Lighting
- PHOT 67 Digital Negatives for Darkroom Printing
- PHOT 80A Beginning Photoshop

Total: 19.0

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.
- Apply digital hardware and software technologies used in the field of photography.

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 Achievement in Digital Photography

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHOT 99 Business Practices of Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 85A Beginning Lighting Techniques</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 80 Outdoor &amp; Ambient Lighting</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 75 Photography for the Web</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 60B Intermediate Photoshop</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 60A Beginning Photoshop</td>
<td>2.0</td>
</tr>
<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 57 Photography for the Web</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 85A Beginning Lighting Techniques</td>
<td>4.0</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>

Recommended additional coursework:

- PHOT 51 Beginning Photography
- 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: 18.0

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.

Recommended Preparation: ENGL 88 or ESL 188 or readiness for college-level English
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>PHOT 80 Outdoor &amp; Ambient Lighting</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 141 Field Video Production</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 144 Digital Video Editing: FCP &amp; Premiere</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 52 Photographers and Their Images</td>
<td>1.0</td>
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</tbody>
</table>
* Students may challenge this requirement by showing a college transcript or passing a challenge test.

**Recommended additional coursework:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCST 119 Digital Media Skills</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:** 14.0

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**Motion Photography Studio Certificate**

This certificate provides hands-on instruction in motion and still photography using cameras with video capability in the studio emphasizing artificial lighting. 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 areas emphasizing studio skills: wedding and event photography, real estate, advertising, public relations, corporate presentations, product and food photography, or as a photography assistant.

**Learning Outcomes**

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

- Use the techniques of studio-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 studio 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.

**Recommended Preparation:** ENGL 88 or ESL 188 or readiness for college-level English

Students must complete at least 4 of the required courses listed below 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 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>
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</tbody>
</table>

**Recommended Additional Coursework**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOT 50A History &amp; Aesthetics Pre-1945</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 50B 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>ENGL 1A University-Parallel Reading and Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>LI S 10 Use of Information Resources</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Total:** 14.0

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**Photography Studio Practice Certificate**

This certificate provides hands-on instruction in large format cameras, electronic strobe equipment and lighting techniques as applied to photography using cameras with video capability in the studio emphasizing artificial lighting. 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 areas emphasizing studio skills: wedding and event photography, real estate, advertising, public relations, corporate presentations, product and food photography, or as a photography assistant.

**Learning Outcomes**

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

- Relate photographic movements and achievements to other visual media and to society.
- Analyze and critique a structure for evaluating visual images.
- Compose research-based, organized essays that are driven by an arguable thesis and that employ critical thinking as they pertain to photographic criticism.
- Critically evaluate the authority and relevance of information sources as they pertain to photographic images.

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 Photography Criticism**

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>PHOT 50A History &amp; Aesthetics Pre-1945</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 50B 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>ENGL 1A University-Parallel Reading and Composition</td>
<td>4.0</td>
</tr>
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**Recommended Additional Coursework**

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<tr>
<td>PHOT 85A Beginning Lighting Techniques</td>
<td>4.0</td>
</tr>
<tr>
<td>BCST 140 Studio Video Production</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 144 Digital Video Editing: FCP &amp; Premiere</td>
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**Total:** 14.0

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**Photography Studio Practice Certificate**

This certificate provides hands-on instruction in large format cameras, electronic strobe equipment and lighting techniques as applied to photography using cameras with video capability in the studio emphasizing artificial lighting. 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 areas emphasizing studio skills: wedding and event photography, real estate, advertising, public relations, corporate presentations, product and food photography, or as a photography assistant.

**Learning Outcomes**

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

- Relate photographic movements and achievements to other visual media and to society.
- Analyze and critique a structure for evaluating visual images.
- Compose research-based, organized essays that are driven by an arguable thesis and that employ critical thinking as they pertain to photographic criticism.
- Critically evaluate the authority and relevance of information sources as they pertain to photographic images.

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 Photography Criticism**

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</tbody>
</table>

**Total:** 14.0
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 studio photography.
- Apply the techniques and aesthetics of light to studio photography.
- Apply corrective camera movements to achieve control over the photographic process.

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 Achievement in Photography Studio Practice

<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 85A Beginning Lighting Techniques</td>
<td>4.0</td>
</tr>
<tr>
<td>Choose one of the following required courses:</td>
<td></td>
</tr>
<tr>
<td>PHOT 102C Phase One Capture One</td>
<td>2.0</td>
</tr>
<tr>
<td>PHOT 83 View Camera Techniques</td>
<td>2.0</td>
</tr>
<tr>
<td>Choose one of these electives:</td>
<td></td>
</tr>
<tr>
<td>PHOT 85B Advanced Studio Lighting Tech.</td>
<td>4.0</td>
</tr>
<tr>
<td>PHOT 90 Portraiture</td>
<td>4.0</td>
</tr>
<tr>
<td>Recommended additional coursework:</td>
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</tr>
<tr>
<td>PHOT 99 Business Practices of Photography</td>
<td>3.0</td>
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<tr>
<td>PHOT 81D Intermediate Photo: Digital</td>
<td>4.0</td>
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<tr>
<td>PHOT 60A Beginning Photoshop</td>
<td>2.0</td>
</tr>
<tr>
<td>PHOT 60B Intermediate Photoshop</td>
<td>3.0</td>
</tr>
<tr>
<td>PHOT 130 Portfolio Production</td>
<td>3.0</td>
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<tr>
<td>Total:</td>
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</tbody>
</table>

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.
- Apply portrait lighting design concepts and principles to photographic images using iterative processes.
- Apply the proper use of the techniques and aesthetics of light to the requirements of portrait photography.
- Apply techniques for portraiture posing, 3-light settings and lighting ratios.

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 Achievement in Portrait Lighting

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<tr>
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<tr>
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<tr>
<td>PHOT 100/DSGN 101/VMD 101 Design Fundamentals</td>
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</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>
<tr>
<td>Recommended additional coursework:</td>
<td></td>
</tr>
<tr>
<td>PHOT 101E Environmental Portraiture</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 93 Editorial Photography</td>
<td>2.0</td>
</tr>
<tr>
<td>PHOT 101C Self Portraiture</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 52 Photographers and Their Images</td>
<td>1.0</td>
</tr>
<tr>
<td>PHOT 130 Portfolio Production</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>17.0</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.
- Apply aesthetics and principles of design in an iterative process.
- Apply the techniques and aesthetics of light to reportage photography.
- Create successful visual storytelling.
- Apply specific photographic business practices.

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 Achievement in Reportage Photography

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>PHOT 51 Beginning Photography</td>
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<td>2.0</td>
</tr>
<tr>
<td>PHOT 102B Documentary/News Photography</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Photography

Recommended additional coursework:
PHOT 52 Photographers and Their Images. ................. 1.0
PHOT 130 Portfolio Production .......................... 3.0
PHOT 101E Environmental Portraiture ...................... 1.0
JOUR 37 Introduction to Photojournalism .................. 3.0
JOUR 38 Intermediate Photojournalism ..................... 3.0
Total: .................................................................. 17.0

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 a variety of lighting and design positions 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.
- Apply design concepts using iterative processes to create and evaluate photographic images.
- Apply the proper use of the techniques and aesthetics of light to the requirements of photography.
- Apply specific photographic business practices to determine fees and licensing.

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 Achievement in Studio Lighting

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<tr>
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<td>PHOT 85A Beginning Lighting Techniques</td>
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<td>4.0</td>
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<td>3.0</td>
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</tbody>
</table>

Recommended additional coursework:
PHOT 52 Photographers and Their Images. .......... 1.0
PHOT 80 Outdoor & Ambient Lighting .............. 3.0
PHOT 90 Portraiture ............................... 4.0
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 40. Photography as Activism (3)
Lec-52.5, Lab-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English

Photography can be used as a powerful tool for social change. This course examines the historic and contemporary role that photography has played in activist activities throughout the United States and abroad. CSU

PHOT 50A. History & Aesthetics Pre-1945 (4)
Lec-70, field trips P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
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 the time. Students visit museums to view photographs and participate in class discussions. UC/CSU

PHOT 50B. History and Aesthetics of Photography Since 1945 (4)
Lec-70, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
This course examines the historic and contemporary role that photography has played in activist activities throughout the United States and abroad. CSU

PHOT 51. Beginning Photography (3)
Lec-35, Lab-70, field trips P/NP available
Recommended Prep: ESL 188 or ENGL 88 or readiness for college-level English
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

PHOT 52. Photographers and Their Images (1)
Lec-17.5 P/NP available
Professional photographers present and discuss their work in technical and aesthetic terms, a unique opportunity for photography students to be exposed to 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
Recommended Prep: VMD 105 and 140; and PHOT100/VMD 101/DGN 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
Recommended Prep: CNIT 100M or PHOT 51
An introductory Photoshop course that emphasizes the technical aspects of digital post production workflow in photography. UC/CSU

Offered on occasion
PHOT 60B. Intermediate Photoshop (3)
Lec-35, Lab-70
Prereq: PHOT 60A or PHOT 81D or VMD 154
Recommended Prep: PHOT 51; (PHOT 100 or VMD 101 or 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 Spring 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
Recommended Prep: 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. UC/CSU
Offered on occasion

PHOT 80. Outdoor & Ambient Lighting (3)
Lec-52.5, Lab-17.5, field trips  P/NP available
Prereq: PHOT 51
Recommended Prep: 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
Offered Fall and Spring Semesters

PHOT 81A. Intermediate Photo: B & W Film/Darkroom (4)
Lec-52.5, Lab-52.5  P/NP available
Prereq: PHOT 51
Recommended Prep: 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
Offered Fall Semesters

PHOT 81B. Advanced Black & White Darkroom (4)
Lec-52.5, Lab-52.5, field trips  P/NP available
Prereq: PHOT 81A AND (PHOT 100 or VMD 101 or 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
Recommended Prep: PHOT 100, ENGL 88 or ESL 188 or readiness for college-level English
A digital photography course advancing the technical and creative concepts introduced in Beginning Photography. Topics include: Digital camera configurations, exposure control, workflow management, non-destructive editing, image manipulation and enhancement, archiving, printing options, and presentation. Discussions on visual literacy and contemporary photography as well as review of student work are integral. CSU
Offered Fall Semesters

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 on occasion

PHOT 83. View Camera Techniques (2)
Lec-35, Lab-17.5, field trips  P/NP available
Prereq: PHOT 51 OR demonstration of exit skills.
Recommended Prep: 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 on occasion

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.
Recommended Prep: 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
Offered Fall and Spring Semesters

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
Recommended Prep: 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
Recommended Prep: 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 on occasion
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 92. Fashion Photography (4)
Lec-52.5, Lab-52.5, field trips P/NP available
Prereq: PHOT 85A
A hands-on photography course exploring the technical and aesthetic components of fashion photography that include posing, composition and lighting. Emphasis on camera handling as well as fashion dress, makeup and hairstyling. CSU
Offered on occasion

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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Offered Fall and Spring Semesters

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
Recommended Prep: 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 Fall semesters

PHOT 101P. Plastic Camera Photography (1)
Lec-17.5, field trips P/NP available
This course is a hands-on exploration of creating photographic images with plastic/toy cameras. Students will learn the differences between various models of plastic cameras, how to modify their cameras for optimum results, color and black and white films, working with limited exposure controls and both natural light and flash. The history of plastic cameras and examples of many artists’ work in the medium will also be covered. CSU

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
Offered on occasion

PHOT 102A. Architectural Photography (2)
Lec-35, Lab-17.5 P/NP available
Prereq: PHOT 85A or DEMONSTRATION OF EXIT SKILLS.
Recommended Prep: PHOT 83.
Commercial and fine art applications specifically related to issues of architectural perspective control, lighting, various camera formats, and camera accessories. CSU
Offered Spring Semesters

PHOT 102B. Documentary/News Photography (2)
Lec-35, Lab-17.5 P/NP available
Prereq: PHOT 80 or PHOT 85A
Recommended Prep: 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
Recommended Prep: 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
Offered Fall and Spring Semesters

PHOT 102D. Beginning Drone Piloting and Imaging (2)
Lec-35, field trips P/NP available
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.
Offered on occasion

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 portfolio presentation 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
Offered Fall and Spring Semesters

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
Offered on occasion

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
Offered on occasion

Noncredit Course:
PHOT 1001. Using Your Digital Camera (16 hrs)
Focus is on fundamentals of digital capture and camera operation functions such as ISO, shutter speed, and aperture control. Students will also learn the foundations of aesthetics and composition for image-making.

PHOT 1002. Beginning B/W Photography (35 hrs)
Focus is on the fundamentals of film camera operation, black & white film processing and darkroom printing. Foundations of aesthetics and composition for black and white film image-making will be explored. The course includes open lab time to process and print black and white film.

PHOT 1003. Lightroom 1: Library & Develop (18 hrs)
Focus is on the fundamentals of Adobe Lightroom's Library and Develop Module and instruction on how to professionally develop and organize digital images. Setup, workflow, organization, image management, rating, editing, non-destructive image processing, and delivery of images regardless of output type will be explored. The course includes open lab time to work on images.

Physical Education and Dance
Office: Wellness113
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**

<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>DANC 100A Beginning Dance Composition</td>
<td>3.0</td>
</tr>
<tr>
<td>DANC 102A Beginning CC SF Repertory Dance Company Local Theatre</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 119B Advanced Beginning African Haitian</td>
<td>1.0</td>
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<tr>
<td>DANC 121A Beginning Tap Dance</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>First Semester: Choose one of the following modern dance courses:</strong></td>
<td></td>
</tr>
<tr>
<td>DANC 124C Intermediate Modern Dance</td>
<td>1.0</td>
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<tr>
<td>DANC 126B Intensive Modern Dance</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>First Semester: Choose one unit from the following electives:</strong></td>
<td></td>
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<tr>
<td>DANC 122A Beginning Tap Dance</td>
<td>1.0</td>
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<tr>
<td>DANC 127A Dance Improvisation: Group</td>
<td>1.0</td>
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<tr>
<td>DANC 127B Dance Improvisation: Solo and Duet</td>
<td>1.0</td>
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<tr>
<td>DANC 134A Advanced Beginning Tap Dance</td>
<td>1.0</td>
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<tr>
<td>DANC 134C Intermediate Tap Dance</td>
<td>1.0</td>
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<tr>
<td>DANC 134D Advanced Intermediate Tap Dance</td>
<td>1.0</td>
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<tr>
<td>DANC 138D Advanced Hip Hop Dance</td>
<td>1.0</td>
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<tr>
<td>DANC 145A Beginning Ballroom Dance</td>
<td>1.0</td>
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<tr>
<td>DANC 150A Beginning Swing Dance</td>
<td>1.0</td>
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<tr>
<td>DANC 155A Beginning Salsa and Other Latin Dances</td>
<td>1.0</td>
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<tr>
<td>DANC 151A Beginning Lindy Hop</td>
<td>1.0</td>
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<tr>
<td>DANC 160A Beginning Argentine Tango</td>
<td>1.0</td>
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<tr>
<td>DANC 172A Zumba: Latin Style Dance Forms</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 172B Zumba: Street Style Dance Forms</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 173 Yoga Movement</td>
<td>1.0</td>
</tr>
<tr>
<td>PE 223A Feldenkrais, Level 1</td>
<td>1.0</td>
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<tr>
<td><strong>Second Semester Required Courses:</strong></td>
<td></td>
</tr>
<tr>
<td>DANC 30 Dance History Dance in Cultural Context</td>
<td>3.0</td>
</tr>
<tr>
<td>DANC 133C Intermediate African-Haitian Dance</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Second Semester: Choose one of the following ballet courses:</strong></td>
<td></td>
</tr>
<tr>
<td>DANC 119C Intermediate Ballet</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 121B Intensive Ballet</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Second Semester: Choose one of the following hip hop courses:</strong></td>
<td></td>
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<tr>
<td>DANC 138B Advanced Beginning Hip Hop Dance</td>
<td>1.0</td>
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<tr>
<td>DANC 138C Intermediate Hip Hop Dance</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Second Semester: Choose one of the following nutrition courses:</strong></td>
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<tr>
<td>BIO 132 Introduction to Nutrition</td>
<td>3.0</td>
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<tr>
<td>HLTH 176/PE 20 Sports Nutrition</td>
<td>3.0</td>
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<tr>
<td><strong>Third Semester Required Courses:</strong></td>
<td></td>
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<tr>
<td>DANC 32 Black Tradition in American Dance</td>
<td>3.0</td>
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<tr>
<td>DANC 37 Feldenkrais for Dance and Performing Arts</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 19D Advanced Intermediate Ballet</td>
<td>2.0</td>
</tr>
<tr>
<td>DANC 129C Intermediate Jazz Dance</td>
<td>1.0</td>
</tr>
<tr>
<td>DANC 100B Intermediate Dance Composition</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Fourth Semester Required Courses:</strong></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>
<tr>
<td>DANC 102B CC SF Repertory Dance Company Local and Touring</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>36.0 – 40.0</td>
</tr>
</tbody>
</table>

**Certificate Curricula**

**Dance**

The curriculum for the Certificate of Accomplishment in Dance will allow students to develop the required skills to pursue careers in dance performance and dance education. The Dance Program provides comprehensive studies including history and theory, choreography, and technique and performance. To meet diverse students' needs various options are available. All students need to meet with a faculty member or file a dance program application and select a program of course totaling 17 units. Each course needs to be completed with a C or higher grade. At least 12 units need to be completed at CCSF. Students wishing to use equivalent courses from other colleges are responsible for providing supporting documentation in a timely manner. For further information call 452-5697, or visit the website at www.ccsf.edu (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.

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.

**Classical Dance Certificate**

The curriculum for this certificate will allow students to develop the skills required to pursue careers in 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.

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 Classical Dance

Course .......................................................... Units
Required Workshop and Theory courses:
DANC 100A Beginning Dance Composition ............. 1.0
DANC 30 Dance History in Cultural Context ............ 1.0
DANC 34A Dance Conditioning ............................ 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 Intermediate 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 2 units from the following elective courses:
DANC 37 Feldenkrais for Dance and Performing Arts . . 1.0
DANC 101A Dance Performance Production ............... 1.0
DANC 102A Beginning CCSF Repertory Dance Company 
Local Theatre ............................................... 1.0
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
Total: ........................................................... 15.0

African Heritage Dance Certificate

The curriculum for this certificate will allow students to develop the skills required to pursue careers in dance. The African Heritage Dance certificate 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.

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 Dance

Course .......................................................... Units
Required Workshop and Theory courses:
DANC 100A Beginning Dance Composition ............. 3.0
DANC 32 Black Tradition in American Dance ............ 3.0
DANC 34A Dance Conditioning ............................ 1.0

Choose 6 units from the following technique electives:
DANC 129C Intermediate Jazz Dance ..................... 1.0
DANC 129D Advanced Jazz Dance .......................... 1.0
DANC 133B Advanced Beginning African Haitian ....... 1.0
DANC 133C Intermediate African-Haitian Dance .......... 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 138C Intermediate Hip Hop Dance .................. 1.0
DANC 138D Advanced Hip Hop Dance ..................... 1.0

Choose 2 units from the following elective courses (if not already taken to meet requirement above):
DANC 37 Feldenkrais for Dance and Performing Arts . . 1.0
DANC 101A Dance Performance Production ............... 1.0
DANC 102A Beginning CCSF Repertory Dance Company 
Local Theatre ............................................... 1.0
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
Total: ........................................................... 15.0

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.

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

Course .......................................................... Units
Choose 5 units from the following core courses:
DANC 34A Dance Conditioning ............................. 1.0
PE 8 Intro to Fitness and Training ......................... 3.0
PE 9 Fitness, Food, Managing Weight: Navigating 
Wellness ................................................... 2.0
PE 14 Toward Living Long & Strong: A New Fitness 
Paradigm .................................................. 2.0
PE 20/HLTH 176 Sports Nutrition ....................... 3.0
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
* 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
PE 219B Intermediate Yoga .................................. 1.0
DANC 173 Yoga Movement .................................. 1.0
PE 222 Introduction to Feldenkrais ........................ 1.0

Choose 4 units from the following fitness courses:
PE 200B Fitness Center Super Circuit ..................... 1.0
PE 200C Fitness Center Super Circuit ..................... 2.0
PE 204A Beginning Physical Fitness ........................ 1.0
PE 204B Intermediate Physical Fitness ..................... 1.0
PE 207A Boot Camp Fitness .................................. 1.0
PE 208A Beginning Aerobic Fitness ........................ 1.0
PE 208B Intermediate Aerobic Fitness ..................... 1.0
PE 210A Beginning Boxercise .............................. 1.0
PE 210B Intermediate Boxercise ............................ 1.0
PE 215A Beginning Strength and Interval Training ....... 1.0
PE 216A Beginning Body Sculpting ........................ 1.0
PE 216B Intermediate Body Sculpting ..................... 1.0
Total: .................................................................. 15.0

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.

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 Social Dance

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 145A Beginning Ballroom Dance</td>
<td>1.0</td>
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</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 recommended preparation: 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 15 units. 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
Course ............................................ Units
First semester:
PE 219B Intermediate Yoga .......................... 1.0
Choose one of the following anatomy or physiology courses:
BIO 106 Introduction to Human Anatomy and Physiology .......................... 4.0
BIO 108 General Human Anatomy .................. 4.0
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 1 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
WKEX 333 General Work Experience ................ 1.0
Choose at least 1 unit from Elective Course List below ...................... 1.0
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 1 ........................ 1.0
PE 14 Toward Living Long & Strong: A New Fitness Paradigm ................... 2.0
PE 20/HLTH 176 Sports Nutrition .................... 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: ............................................. 15.0

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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 implementation 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
Recommended Prep: 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 182 or ENGL 88 or placement in ESL 184 or readiness for college-level English
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
Recommended Prep: PE 222 or demo of exit skills; ESL 186 or ENGL 88 or placement in ESL 184 or ENGL 1A
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
Recommended Prep: PE 223A or demo of exit skills; ESL 186 or ENGL 88 or placement in ESL 184 or ENGL 1A
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
Dance Composition: Choreographic Tools to Create Dance
DANC 100A. Beginning Dance Composition (3)
Lab-105 P/NP available
Recommended Prep: 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 (3)
Lab-105, field trips
Recommended Prep: DANC 100A or DANC 119C or DANC 126B or DANC 133A
This is a self-directed, cumulative 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

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 101’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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: DANC 119A or DANC 124A
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
Recommended Prep: DANC 119A or DANC 124A
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
Recommended Prep: 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
Recommended Prep: 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 626B

DANC 122. Beginning Pointe Technique (1)
Lab-35 P/NP available
Recommended Prep: DANC 119C or demonstration of 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 pointe 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
Recommended Prep: DANC 124A or demonstration of exit skills
Advanced 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
Recommended Prep: DANC 124B or demo of 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
Recommended Prep: DANC 124C or demo of 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
Recommended Prep: 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 DANC 604B

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
Recommended Prep: DANC 129A or demo of 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
Recommended Prep: 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
Recommended Prep: 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

Dance Theater
DANC 131A. Introduction to Dance Theater (1)
Lab-35 P/NP available
Introduction to Dance Theater introduces the technical and choreographic style of dance performed in Musical Theater productions. This course is designed to adapt dance to various styles of musical theater accompaniment and explore how dance can non-verbally support the story-telling of plays and musicals. CSU

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 musicality. 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

DANC 133C. Intermediate African-Haitian Dance (1)
Lab-35 P/NP available
Recommended Prep: 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 move-
ments, Dunham technique, dance patterns, styles, and musicality.
Historical and cultural elements will be explored through lectures,
films, research, and discussions. Creative expression will be encour-
aged through group choreographic activities and individual projects.
UC/CSU
Formerly DANC 132B

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 vocabu-
larv in rhythmic drills and dance phrases. UC/CSU
Formerly DANC 135A

DANC 134B. Advanced Beginning Tap Dance (1)
Lab-35 P/NP available
Recommended Prep: 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 rhyth-
mic accuracy in more complex combinations. UC/CSU

DANC 134C. Intermediate Tap Dance (1)
Lab-35 P/NP available
Recommended Prep: 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 interme-
diate level tap vocabulary and technique. UC/CSU
Formerly DANC 135B

DANC 134D. Advanced Intermediate Tap Dance (1)
Lab-35 P/NP available
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Formerly DANC 137B

DANC 138D. Advanced Hip Hop Dance (1)
Lab-35 P/NP available
Recommended Prep: 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 equiv-
alent skills
Students will have the opportunity to learn and perform intermedi-
ate-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
step patterns and dance positions appropriate within and between the
nations that comprise the European Union and diaspora. UC/CSU
Offered Fall semesters

DANC 140B. Intermediate European Folk Dance (1)
Lab-35 P/NP available
Recommended Prep: 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 prac-
tice. Emphasis will be on step patterns and dance positions appropriate
within and between the nations that comprise the European Union
and diaspora. Emphasis will be on expanding the dance repertoire,
including more complex step patterns, rhythms, and structures. 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

Ballroom Dance: A Survey of Dances Done in Informal Social Settings
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
Recommended Prep: 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 148A. Beginning Smooth Ballroom Dance (1) Lab-35 P/NP available
Beginning smooth ballroom dance with emphasis on step patterns from the bronze level American Smooth syllabus. The class will include a selection from Waltz, Foxtrot, American Tango and Viennese Waltz. UC/CSU
Offered on occasion

DANC 148B. Intermediate Smooth Ballroom Dance (1) Lab-35 P/NP available
Recommended Prep: DANC 148A or demo of exit skills
Intermediate 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

DANC 149A. Beginning International Latin Dance (1) Lab-35 P/NP available
Beginning international Latin dance with emphasis on step patterns from the bronze level international Latin syllabus. The class will include a selection from Cha Cha, Rumba, Paso Doble, Samba and Jive. CSU

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
Recommended Prep: 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

DANC 150C. Advanced Swing Dance (1) Lab-35 P/NP available
Recommended Prep: 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
Offered Spring semesters

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
Recommended Prep: 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

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
Recommended Prep: 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 155A. Beginning Salsa and other Latin Dances (1)
Lab-35 P/NP available
Explorations of various Latin-American dance forms with emphasis on Salsa. Students will learn to execute beginning dance steps in Salsa and other Latin dance forms. Emphasis will be on social dances. UC/CSU
Formerly PE 560A

DANC 155B. Intermediate Salsa and Other Latin Dances (1)
Lab-35 P/NP available
Recommended Prep: DANC 155A or demonstration of exit skills
Explorations of various Latin-American dance forms with emphasis on Salsa. Students will learn to execute intermediate dance steps in Salsa and other Latin dance forms. Emphasis will be on social dances. UC/CSU
Formerly PE 560B

DANC 155C. Advanced Salsa and Other Latin Dances (1)
Lab-35 P/NP available
Recommended Prep: DANC 155B or demonstration of exit skills
Explorations of various Latin-American dance forms with emphasis on Salsa. Students will learn to execute advanced dance steps in Salsa and other Latin dance forms. Emphasis will be on social dances. UC/CSU

DANC 156A. Beginning Argentine Tango (1)
Lab-35 P/NP available
Introductory movement foundation in the social, improvisational form of Argentine Tango grounded in an exploration of its culture and history. The course teaches students to converse in the lead-follow language of this richly layered partner dance. UC/CSU

DANC 156B. Intermediate Argentine Tango (1)
Lab-35 P/NP available
Recommended Prep: DANC 156A
Intermediate Argentine Tango builds upon the social, improvisational 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 156C. Advanced Argentine Tango (1)
Lab-35 P/NP available
Recommended Prep: DANC 156B
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 161. Follower’s Technique for Argentine Tango (1)
Lab-35 P/NP available
Recommended Prep: DANC 160A
Refinement of placement, styling, adornments, lead/follow and musicality in Argentine Tango through exercises done at the barre and on the center with and without partners. Focus on the role of the follower in the tango. Course highlights the contribution of women in the construction of tango culture past and present. Open to students of all genders. UC/CSU

Integrated Styles and Technique

DANC 123A. Contemporary Dance I (1)
Lab-35 P/NP available
Recommended Prep: DANC 119B or DANC 124B or DANC 129B or demonstration of exit skills
A fusion of different contemporary dance techniques and genres embracing a variety of movement skills, dance vocabulary, and current trends in dance. CSU

DANC 173. Yoga Movement (1)
Lab-35 P/NP available
Recommended Prep: 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
Formerly PE 553, PE 221

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 skill 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. Fitness, Food, Managing Weight: Navigating Wellness (2)
Lec-35 P/NP available
Discussion of current weight loss methods, obesity theories, and the importance of physical activity and exercise. Analysis of how nutritional choices and exercise determine changes in body composition, body weight, and personal health and fitness levels. Students will create a personal program with short-term and long-term goals utilizing current technologies and motivational strategies toward fitness and nutrition that benefit healthy body composition and a wellness lifestyle. CSU
Formerly PE 9A
Offered Fall semesters

PE 13. Sport and Society (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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. Toward Living Long & Strong: A New Fitness Paradigm (2)
Lec-35
P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Investigation of the new paradigm which recognizes the revolutionary impact fitness makes on living with vitality, energy, and health from youth onward. Body image, gender similarities and differences, and how our bodies respond to living an active, fit lifestyle will be analyzed. Also covered will be specific benefits cardiovascular exercise & strength training make to brain health & learning what daily choices our cells expect us to make because of our evolutionary biology. UC/CSU
Offered Spring semesters

PE 20. 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, nutritional ergogenics. UC/CSU
PE 20=HLTH 176
Offered Spring semesters

PE 26. Introduction to Kinesiology (3)
Lec-52.5
P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Introduction to Kinesiology and the various subdisciplines related to the study of human movement. An overview of kinesiology: physical education, principles of physical activity and fitness and professional career options will be examined. This course is of interest to anyone exploring career opportunities in the fields of kinesiology, physical education, 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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. UC/CSU

PE 41. Appreciation and Analyses of Baseball (2)
Lec-35
P/NP available
The mechanics, appreciation and analysis of individual and team play, strategy, rules, training programs, organizational methods, and mental aspects of the game. Course is designed for spectators as well as coaches and participants. UC/CSU
Formerly PE 10B
Offered Spring semesters

PE 42. Appreciation and Analysis of Basketball (2)
Lec-35
P/NP available
This course will build an emphasis on systems of play, strategy, rules, training programs, organization procedures, and background for both spectators and participates for the sport of Basketball. UC/CSU
Formerly PE 10C
Offered Spring semesters

PE 43. Appreciation and Analysis of Football (3)
Lec-52.5
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

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 554C

PE 222. Introduction to Feldenkrais (1)
Lab-35
P/NP available
Recommended Prep: ESL 186 or ENGL 88 or placement in ESL 188 or ENGL 1A
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

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
Prereq: 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
Prereq: PE 255D or demonstration of American Red Cross prerequisites
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. Not intended for students who have completed PE 200C
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; Not intended for students who have completed PE 200B

PE 200D. Super Cardio Circuit (2)
Lab-70 P/NP only
Prereq: PE 200B or PE 200C
The super cardio circuit located in the Fitness/Wellness Center utilizes an interactive fitness network system providing feedback to the user with an emphasis on aerobic and anaerobic cardiovascular fitness programs to promote advanced cardiac fitness. UC/CSU

PE 200E. Super Strength Circuit (2)
Lab-70 P/NP only
Prereq: PE 200A or PE 200B or PE 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
Recommended Prep: 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
Recommended Prep: 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
Physical Education and Dance

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 do not have extensive movement experience. UC/CSU

PE 205B. Intermediate Running and Conditioning (1)
Lab-35  P/NP available
Recommended Prep: PE 205A or demonstration 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
Recommended Prep: PE 205B or demonstration 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 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
Recommended Prep: PE 206A or demonstration of exit skills
An introduction to power walking and the next level of strength building. The course will expand cardiovascular health parameters, walking speed, and distances. It is designed to be the next wellness step for students already familiar with introductory exercise walking and physical activity benefits. UC/CSU

PE 206C. Advanced Walking for Wellness (1)
Lab-35  P/NP available
Recommended Prep: PE 206B or demonstration of exit skills
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

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

DANC 172B. Zumba: Street Style Dance Forms (1)
Lab-35  P/NP available
Recommended Prep: DANC 172A
A dance aerobic fitness class using Latin American and Hip Hop dance steps and music. It builds upon the skills learned in Zumba: Latin Style Dance Forms with an emphasis on increased technique, coordination, and increased movement vocabulary related to rhythm and musicality. UC/CSU

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 558A
Offered on occasion

PE 208B. Intermediate Aerobic Fitness (1)
Lab-35  P/NP available
Recommended Prep: 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 558B
Offered on occasion

PE 208C. Advanced Aerobic Fitness (1)
Lab-35  P/NP available
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: PE 210A or demo of exit skills
Intermediate boxercise builds up 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
Prereq: PE 212B
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
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
Recommended Prep: 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

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
Recommended Prep: 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
Recommended Prep: PE 216A
An intermediate level of the principles and practices of body sculpting utilizing utilizing specific equipment as well as cardiovascular fitness through circuits and interval training. 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 and Flexibility Development (1)
Lab-35  P/NP available
Recommended Prep: PE 217A or demonstration 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, and 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
Recommended Prep: 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
Recommended Prep: 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

PE 220. Intensive Yoga (2)
Lab-70  P/NP available
Recommended Prep: PE 219B or demonstration of exit skills
Intensive yoga offers further practice and refinement of intermediate
level yoga postures, breathing and meditation techniques. A continuation of yoga history, philosophy, and current trends will be presented. There is an emphasis on alignment techniques and practical application of yoga principles in daily life. 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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. Singles and doubles footwork progressions, 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
Recommended Prep: PE 231B or demonstration of exit skills
A review of intermediate badminton techniques and an introduction to more advanced badminton court skills and strokes. Rotation systems for doubles and increasingly complex game strategies will also be covered. The course is designed for students who want to continue developing into more 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
Recommended Prep: 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
Recommended Prep: 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 involved in learning the advanced level of fundamental skills in 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
Recommended Prep: 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
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
Recommended Prep: PE 233A or demonstration of exit skills
This course will emphasize intermediate levels of skill, agility, body
conditioning and endurance as required to play basketball at an intermediate level. UC/CSU
Formerly PE 506B

PE 233C. Advanced Basketball (1)
Lab-35 P/NP available
Recommended Prep: PE 233B or demonstration 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
Recommended Prep: 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
Recommended Prep: PE 235B or demo of exit skills
Emphasis on advanced systems of play, strategy, rules and training programs. 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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

PE 240B. Intermediate Tennis (1)
Lab-35 P/NP available
Recommended Prep: PE 240A demo of exit skills
The intermediate course will review rules, etiquette, basic skills, strokes and footwork, scoring and strategy. Emphasis will be on shot placement and use of spins in fundamental strokes. UC/CSU
Formerly PE 542B

PE 240C. Advanced Tennis (1)
Lab-35 P/NP available
Recommended Prep: PE 240B or demo of exit skills
Review the basics; rules, etiquette, basic skills, strokes and footwork, scoring and strategy. Emphasis on spins and placement and advanced strategies. UC/CSU
Formerly PE 542C

PE 243A. Cardio Tennis (1)
Lab-35 P/NP available
Combines tennis skills and drills with high energy fitness activity
Emphasis of the class is to train for tennis and burn calories. Students will engage in tennis specific activities, drills, movements, designed to keep the heart rate in the training zone. UC/CSU
Offered only in Summer semesters

PE 244A. Competitive Tennis Doubles (1)
Lab-35 P/NP available
Prereq: PE 240A or demonstration of exit skills
Emphasis of this class will be on doubles strategies and tactics during competition. Ball drills will be used to enhance competitive play. Movement specific to doubles and conditioning will also be emphasized. UC/CSU
Offered only in Summer semesters

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

**Recommended Prep: 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 service, multiple offenses and center back defense. Volleyball falls within the Volleyball family. UC/CSU

**Formerly PE 545C**

**Aquatics Exercise**

**PE 173A. Aqua Zumba (1)**
Lab-35  P/N 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

**Recommended Prep: PE 252A or demonstration 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 aerobic 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

**Recommended Prep: 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

**Recommended Prep: PE 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

**Recommended Prep: PE 254 or demonstration of exit skills**
A course designed for the non-swimmer, providing instruction in fundamental swimming and personal water safety skills. UC/CSU

**PE 255B. Advanced Beginning Swimming (1)**
Lab-35  P/NP available

**Recommended Prep: PE 255A or demonstration of exit skills**
A course designed to support students in improving fundamental aquatic skills and provide 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

**Recommended Prep: PE 255B or demonstration 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

**Recommended Prep: PE 255C or demonstration 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

**Recommended Prep: 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

**Recommended Prep: PE 254C or demonstration 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

**Recommended Prep: PE 256A or demonstration 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Recommended Prep: 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
Prerequisite: PE 258B or Demonstration of PE 258B 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
Prerequisite: 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

**Alternative Racket Sports**

**PE 260A. Beginning Pickleball (1)**
Lab-35 P/NP available
This course will cover the beginning skills of pickleball. Emphasis on fundamental strokes, rules, terminology, and etiquette. CSU

**PE 260B. Intermediate Pickleball (1)**
Lab-35 P/NP available
Recommended Prep: PE 260A
This course will cover the intermediate aspects of pickleball. Emphasis on strokes, strategies, spins, and shot placement. CSU

**Judo**

**PE 271A. Beginning Judo (1)**
Lab-35 P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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

**PE 271B. Intermediate Judo (1)**
Lab-35 P/NP available
Recommended Prep: PE 271A or demonstration of exit skills; ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
In addition to new skills and techniques, students will be required to demonstrate greater proficiency in basic skills and techniques covered in the introductory course. Students will be eligible to test for the next judo belt rank during the semester. UC/CSU

**PE 271C. Advanced Judo (1)**
Lab-35 P/NP available
Recommended Prep: PE 271B or demonstration of exit skills; ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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

**PE 271D. Competition Judo (1)**
Lab-35 P/NP available
Recommended Prep: PE 271C or demonstration of exit skills; ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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

**Jujitsu**

**PE 274A. Beginning Jiu-jitsu (1)**
Lab-35 P/NP available
Recommended Prep: PE 285A
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
PE 274B. Intermediate Jiu-jitsu (1)
Lab-35, P/NP available
Recommended Prep: PE 274A or demonstration of exit skills
Provides students the opportunity to continue their study of Brazilian jiu-jitsu, to develop greater self-confidence with social and leadership skills. In addition to intermediate skills sets, students will be required to demonstrate greater proficiency in basic skills and techniques covered in the introductory course. UC/CSU
Offered Spring semesters

PE 274C. Intermediate Jiu-jitsu (1)
Lab-35, P/NP available
Recommended Prep: PE 274B or demonstration of exit skills
Intermediate and advanced skill sets. The student will be encouraged to develop their own competitive style. Competition strategies and tactics will be covered in detail. 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
Recommended Prep: PE 276A or demonstration of exit skills
Intermediate and advanced 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 CACC and medical clearance verified by a physician)
Repeat: Students can repeat three times (total 4 enrollments)
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, P/NP available
Prereq: Athletic clearance (eligible by rules governed by the CCCAA and medical clearance verified by a physician)
Repeat: 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: Students can repeat three times (total 4 enrollments)
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 Colleges Athletic Association (CCCAA). UC/CSU
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: Students can repeat three times (total 4 enrollments)
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
Prereq: CCCAA athletic and academic eligibility standards
Satisfactory physical examination by a physician (medical doctor) approved by City College of San Francisco
Repeat: Students can repeat three times (total 4 enrollments)
Instruction for competition and participation in Women’s Intercollegiate Basketball in the Coast Conference -North Division of the California Community College Athletic Association UC/CSU
Formerly PE 455
Offered Fall semesters
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Offered</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE A 66</td>
<td>Intercollegiate Track &amp; Field for Women (3)</td>
<td>Fall</td>
<td>Lab-175, Prereq: Athletic clearance and medical clearance verified by a physician. Repeat: Students can repeat three times (total 4 enrollments) 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 Fall semesters.</td>
</tr>
<tr>
<td>PE A 67</td>
<td>Intercollegiate Softball for Women (3)</td>
<td>On Occasion</td>
<td>Lab-175, P/NP available, Prereq: Athletic clearance and medical clearance verified by a physician. Repeat: Students can repeat three times (total 4 enrollments) 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.</td>
</tr>
<tr>
<td>PE A 68</td>
<td>Intercollegiate Women's Volleyball (3)</td>
<td>Fall</td>
<td>Lab-175, field trips, P/NP available, Prereq: Athletic clearance and medical clearance verified by a physician. Repeat: Students can repeat three times (total 4 enrollments) Instruction and scheduled competitions for participation in Intercollegiate Volleyball representing City College of San Francisco. Student-athletes must meet eligibility requirements as designed by the State Athletic Code. UC/CSU Formerly PE 458 Offered Fall semesters.</td>
</tr>
<tr>
<td>PE A 69</td>
<td>Intercollegiate Cross-country for Women (3)</td>
<td>Fall</td>
<td>Lab-175, Prereq: Athletic clearance and medical clearance verified by a physician. Repeat: Students can repeat three times (total 4 enrollments) 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.</td>
</tr>
<tr>
<td>PE A 70</td>
<td>Intercollegiate Baseball for Men (3)</td>
<td>Fall</td>
<td>Lab-175, P/NP available, Prereq: Athletic clearance and medical clearance verified by a physician. Repeat: Students can repeat three times (total 4 enrollments) Instruction for competition and participation in Intercollegiate Baseball in the Coast Conference of the California Association of Community Colleges. UC/CSU Formerly PE 460 Offered Fall semesters.</td>
</tr>
<tr>
<td>PE A 80</td>
<td>Intercollegiate Men's Basketball (3)</td>
<td>Fall</td>
<td>Lab-175, field trips, P/NP available, Prereq: Athletic clearance and medical clearance verified by a physician. Repeat: Students can repeat three times (total 4 enrollments) 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 407 Offered Fall semesters.</td>
</tr>
<tr>
<td>PE A 81</td>
<td>Women's Intercollegiate Water Polo (3)</td>
<td>Spring</td>
<td>Lab-175, P/NP available, Prereq: Athletic clearance and medical clearance verified by a physician. Repeat: Students can repeat three times (total 4 enrollments) Instruction and scheduled competitions for participation in Women's Intercollegiate Water Polo representing City College of San Francisco. Student-athletes must meet eligibility requirements as designated by the California Colleges Athletic Association (CCCAA). UC/CSU Offered Fall semesters.</td>
</tr>
</tbody>
</table>
PE A 96. Intensive Intercollegiate Physical Preparation (.5)
Lab-26.25 P/NP available
Recommended Prep: 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 97. Special Physical Preparation for Intercollegiate Sport (1)
Lab-52.5 P/NP available
Recommended Prep: PE A 98
Repeat: Students can repeat twice (total 3 enrollments)
Special Physical Preparation for Intercollegiate Sport emphasizes speed and agility development training to reduce risk of physical injury, increase athleticism and by improving body mechanics. This class will focus on enhancing each individual's speed, quickness, agility and body control relative to sport performance. UC/CSU
Offered only in Summer semesters

PE A 98. General Physical Preparation for Intercollegiate Sport (2)
Lab-105 P/NP available
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. Intercolligate Sport Development (3)
Lab-175 P/NP available
Repeat: Students can repeat three times (total 4 enrollments)
Students will be instructed in sport specific strength and conditioning protocols related to improving muscular strength, power, agility, and speed. Principles of sport specific technique 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 Courses
Credit, Degree Applicable Courses:

PHYC 2A. Introductory Physics (3)
Lec-52.5, Lab-17.5
Prereq: MATH 95
Recommended Prep: PHYC 40 and completion of or concurrent enrollment in PHYC 2AL
First course in a two semester sequence required of most premedical, biology, veterinary, physical therapy, and architecture degrees. Core topics include kinematics, dynamics, work and energy, momentum, rotations, simple harmonic motion, fluids, heat and thermodynamics. UC/CSU
C-ID PHYS 1005 (PHYC 2A + PHYC 2AL + PHYC 2B + PHYC 2BL);
C-ID PHYS 105 (PHYC 2A + PHYC 2AL)
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  
PHYC 2AC expands on topics covered in PHYC 2A, with applications of calculus to problems in physics. Together with PHYC 2A and 2AL, PHYC 2AC may meet lower division requirements for life science majors at various universities. UC/CSU

PHYC 2AL. Introductory Physics Laboratory (1)  
Lab-52.5  
Prereq: MATH 95; Completion of or concurrent enrollment in: PHYC 2A  
Recommended Prep: PHYC 40  
First laboratory course in an algebra-based two semester sequence. Core topics include experiments in kinematics, dynamics, energy, momentum, rotation, oscillations, fluids, and thermodynamics. UC/CSU  
C-ID PHYS 100S (PHYC 2A + PHYC 2AL + PHYC 2B + PHYC 2BL);  
C-ID PHYS 105 (PHYC 2A + PHYC 2AL)  
Required of premedical, biology, and some architecture students.

PHYC 2B. Introductory Physics (3)  
Lec-52.5, Lab-17.5  
Prereq: PHYC 2A.  
Recommended Prep: Completion of or concurrent enrollment in: PHYC 2B  
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 110 (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  
PHYC 2BC expands on topics covered in PHYC 2B with applications of calculus to problems in physics. Together with PHYC 2B and 2BL, PHYC 2BC may meet lower division requirements for life science majors at various universities. UC/CSU  
Offered spring semesters

PHYC 2BL. Introductory Physics Laboratory (1)  
Lab-52.5  
Prereq: PHYC 2A and PHYC 2AL; Completion of or concurrent enrollment in: PHYC 2B  
Second laboratory course in an algebra-based two semester sequence. Core topics include experiments in electricity & magnetism, electric circuits, light, and radioactivity. UC/CSU  
C-ID PHYS 100S (PHYC 2A + PHYC 2AL + PHYC 2B + PHYC 2BL);  
C-ID PHYS 110 (PHYC 2B + PHYC 2BL)  
Required of premedical, biology, and architecture students.

PHYC 4A. Classical Mechanics for Scientists and Engineers (3)  
Lec-52.5, Lab-17.5  
Prereq: MATH 110A and PHYC 41 or high school physics  
Coreq: MATH 110B  
Recommended Prep: Completion of or concurrent enrollment in: PHYC 4AL  
This is the first course in a calculus-based four semester sequence.

PHYC 4AL. Mechanics Laboratory for Scientists and Engineers (1)  
Lab-52.5  
Prereq: MATH 110A  
Coreq: PHYC 4A  
Required Prep: 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 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  
Coreq: MATH 110C  
Recommended Prep: 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  
Recommended Prep: 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  
Recommended Prep: Completion of or concurrent enrollment in: PHYC 4CL  
This is the third course in a calculus-based four semester sequence.

Core topics include kinematics, dynamics, energy, momentum, rotation, gravitation, oscillations, and fluids. 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 University of California, Berkeley, or into other engineering or physical science transfer programs.
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)
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
Recommended Prep: 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, or into other engineering/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
Recommended Prep: 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
Recommended Prep: 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, or into other engineering or physical science transfer programs. Offered Spring semesters.

PHYC 10. Conceptual Physics (3)
Lec-52.5
Recommended Prep: 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 Laboratory 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
Recommended Prep: 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 prepares 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
Recommended Prep: 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

Credit, Degree Applicable Course:
P SC 11. Physical Science (3)
Lec-52.5, Lab-17.5
Recommended Prep: 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 Not recommended to students who have completed a college-level course in physics, physical science, chemistry, geology, or astronomy with a final grade of “C” or higher.

P SC 11L. Physical Science Laboratory (1)
Lab-52.5
Prereq: Completion of or concurrent enrollment in: P SC 11
Recommended Prep: 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
Announcement of Curricula

Filipino (Tagalog) Certificate

The Certificate of Accomplishment in Pilipino provides students, prospective employers, and others with documented evidence of persistence and academic accomplishment in Pilipino (Tagalog). It prepares students for health interpreter and nonprofit positions.

Learning Outcomes

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

- Interpret Filipino (Tagalog) oral and written texts in familiar contexts.
- Communicate in Filipino (Tagalog) orally and in writing in familiar contexts using appropriate expressions of respect or formality.
- Examine Philippine literature in relation to historical, social, and cultural influences.
- Explain aspects of Philippine culture.

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 Filipino (Tagalog)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIL 1 Elementary Filipino (Tagalog)</td>
<td>5.0</td>
</tr>
<tr>
<td>PIL 2 Continuation of Elementary Pilipino</td>
<td>5.0</td>
</tr>
<tr>
<td>Choose at least 5 units from the following elective courses:</td>
<td></td>
</tr>
<tr>
<td>PIL 10A Conversational Filipino (Tagalog)</td>
<td>3.0</td>
</tr>
<tr>
<td>PIL 10B Conversational Filipino (Tagalog)</td>
<td>3.0</td>
</tr>
<tr>
<td>PIL 10C Intermediate Conversational Pilipino</td>
<td>3.0</td>
</tr>
<tr>
<td>PIL 39A Philippine Literature in Translation: Philippine Literature to 1940</td>
<td>3.0</td>
</tr>
<tr>
<td>PIL 39B Philippine Literature in Translation: Literature from 1940 to the Present</td>
<td>3.0</td>
</tr>
<tr>
<td>PHST 10 Independent Study</td>
<td>1.0-3.0</td>
</tr>
<tr>
<td>Total</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Announcement of Courses

Credit, Degree Applicable Courses:

PIL 1. Elementary Filipino (Tagalog) (5)
Lec-87.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or completion of any City College or university foreign language course.
Introductory course in Filipino (Tagalog) grammar, composition, and reading. Practice in speaking and understanding Filipino (Tagalog). 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, compo...
Learning Outcomes
Upon completion of this program, students will be able to:

- Identify and explain American political principles.
- Analyze and critique current political topics and issues.
- Assess the forms and processes of political participation at the local, state, national, and/or international levels.
- Evaluate and compare the structure and function of different political systems in the world, as well as the international system itself.
- Analyze different political theories, especially liberalism and conservatism.
- Analyze the historical and philosophical foundations of the United States and California constitutions.
- Examine complex political issues by selecting and using appropriate social science methodologies and approaches, including the analysis of primary sources and the development, evaluation and testing of 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-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 at least 6 units from the following elective courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 5 Introductory Statistics for Economics, Business and Social Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>or PSYC 5 Statistics for Behavioral Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>POLS 4 The Politics of Globalization</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 18 Government &amp; Politics of Latin America</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 22 Environmental Politics and Policy</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 43 The Constitution and Individual Rights</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 45 Governments and Politics of Middle East</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 41 Independent Studies in Political Science</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Total: ............................................. 18.0 – 20.0

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
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 186 or readiness for college-level English
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, Asian 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>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>
</tbody>
</table>

Choose one of the following statistics courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 5 Statistics for Behavioral Sciences</td>
<td>5.0</td>
</tr>
<tr>
<td>MATH 80 Probability and Statistics</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Choose one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>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>4.0</td>
</tr>
<tr>
<td>ENGL 1C Writing about Nonfiction</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Choose one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 4 Forensic Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSYC 9 Psychology of Stress</td>
<td>3.0</td>
</tr>
<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 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 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>PSYC 32 Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 1 Biological Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 3 Introduction to Social and Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>POLS 9 American Government</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 21.0

Announcement of Courses

Credit, Degree Applicable Courses:

PSYC 1. General Psychology (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
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
including the ways in which personality is explained, the dynamics

An introduction to the theoretical constructs describing personality, for college-level English

Lec-52.5 P/NP available

C-ID PSY 200

Primerly for psychology majors, related majors, and students interested in the scientific method.

PSYC 4. Forensic Psychology (3)

Lec-52.5 P/NP available

Recommended Prep: PSYC 1; ENGL 88 or ESL 188 or readiness for college-level English

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

Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English

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

Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English

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 10. Abnormal Psychology (3)

Lec-52.5 P/NP available

Recommended Prep: PSYC 1

An introduction to the symptoms, prevalence, causes and treatments of disturbances in mental, emotional, and behavioral functioning. Methods of assessment, classification, current diagnostic criteria, and theoretical models for understanding these disorders are discussed in-depth. UC/CSU

C-ID PSY 120

PSYC 11. Theories of Personality (3)

Lec-52.5 P/NP available

Recommended Prep: PSYC 1; ENGL 88 or ESL 188 or readiness for college-level English

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 research, theory and applied psychological science related to the cognitions, behaviors, and emotions of eating, food, and weight. Includes a critical look at common myths and realities regarding weight and health, eating disorders, and the sociocultural pressures related to food choices and body size. CSU

PSYC 21. Lifespan Development (3)

Lec-52.5 P/NP available

Recommended Prep: PSYC 1; ENGL 88 or ESL 188 or readiness for college-level English

The multidisciplinary study of human development from conception through death. Examination of current research and theories with an emphasis on the ways that biological, psychological, sociocultural, and environmental forces and their interactions impact development throughout the lifespan. UC/CSU

C-ID PSY 180

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

Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English

Examines 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. UC/CSU
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:
   - MATH 40 or 840 (Elementary Algebra) or placement in MATH 60 or 860
   - CHEM 32 or CHEM 40
   - PHYC 10 and 10L
   - BIO 108 (formerly ANAT 25)
   - ENGL 1A
   - 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 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 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 in Radiologic Technology ............ 3.0
EMT 14 Advanced First Aid and Basic Life Support ........ 2.0
First Semester: choose one of the following speech 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 Physics and Equipment .............. 2.5
DMI 51A Radiographic Anatomy and Positioning ............ 7.0
DMI 51B 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 ....................... 5.0
Third Semester:
DMI 55 Skull Radiography .................................... 2.0
DMI 57 Multiplanar Imaging in Radiologic Sciences ....... 3.0
DMI 63 Intermediate Diagnostic Procedures ............... 2.0
DMI 64 Clinical Education in DMI II ....................... 5.0
Fourth Semester:
DMI 57 Multiplanar Imaging in Radiologic Sciences ....... 3.0
DMI 54 Vascular and Interventional Procedures ............ 2.0
DMI 65 Advanced Imaging Procedures ..................... 2.0
DMI 66 Clinical Education in DMI III ...................... 5.0
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 ................. 13.0
DMI 69 Clinical Education Internship Summer Bridge .6.0
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 Personal and Community Health ............... 3.0
HLTH 64 Health Education Training: Skills and 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: .................................................. 79.5

Announcement of Courses
Credit, Degree Applicable Courses:
DMI 49. Introduction to Radiologic Technology (3)
Lec-52.5, field trips
Prereq: Completion of or concurrent enrollment in: HIT 50A
History of radiologic technology, imaging equipment, procedures, patient care, radiation safety, ethics, and professional organizations. CSU Open to all students interested in the radiologic technology profession.

DMI 50A. Introduction to Medical Radiography (3)
Lec-35, Lab-52.5
Prereq: Admission to the Diagnostic Medical Imaging Program; Completion of or concurrent enrollment in: DMI 49
Introduction to radiation physics, x-ray equipment, and imaging factors governing image receptor exposure, processing and quality. CSU

DMI 50B. Radiologic Physics and Equipment (2.5)
Lec-35, Lab-35, field trips
Prereq: DMI 50A
This course studies the physics of the field of radiologic technology and fluoroscopy and the interaction of ionizing radiation with matter. Included is an examination and application of radiology equipment and radiation protection as well as the study of x-ray circuitry as it pertains to the equipment used in the field. CSU

DMI 51A. Radiographic Anatomy and Positioning (7)
Lec-105, Lab-52.5
Prereq: DMI 49 and DMI 50A and DMI 52; Completion of or concurrent enrollment in: EMT 14 and HIT 50B
Anatomy and positioning of the axial and appendicular skeleton (except skull) and internal organs. Preliminary steps in radiographic positioning and equipment, radiation protection, patient relations, first aid and standard 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
Prereq: DMI 50A
Coreq: DMI 51A and DMI 50B
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 in Radiologic Technology (3)
Lec-52.5, field trips
Prereq: ENGL 1A; Completion of or concurrent enrollment in: PSYC 1 and EMT 14 and HIT 50B
Coreq: DMI 50A
Introduction to patient care to include patient and staff communication skills, body mechanics for safe patient transfer and radiation
safety as it applies to the basics of time, distance, and shielding. Emphasis on ethical decision making, confidentiality, age and cultural specific differences, as applied to the responsibilities of the Radiologic Technologist. CSU

DMI 54. Vascular and Interventional Procedures (2)
Lec-35, field trips
COREQ: DMI 65 AND 66
Emphasis on vascular imaging trends, related equipment considerations, anatomy, patient care, and interventional radiography. CSU **OPEN ONLY TO STUDENTS THAT HAVE BEEN ACCEPTED INTO THE DMI PROGRAM.**

DMI 55. Skull Radiography (2)
Lec-35
PREREQ: DMI 51A
COREQ: DMI 63 and (DMI 62 OR DMI 64)
Anatomy of the skull and facial bones, topical landmarks, radiographic positioning and technical factors, radiographic equipment and usage. CSU

DMI 56. Radiographic Pathology (3)
Lec-52.5
COREQ: DMI 64 or DMI 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 **OPEN TO ADVANCED RADIOLOGIC TECHNOLOGY STUDENTS ONLY WHO HAVE BEEN ACCEPTED INTO THE DMI PROGRAM.**

DMI 57. Multiplanar Imaging in Radiologic Sciences (3)
Lec-52.5, field trips
PREREQ: ANAT 25 or BIO 108
COREQ: DMI 63
Anatomy from multiplanar perspectives as visualized on Computed Tomography, Magnetic Resonance Imaging, and other imaging modalities. CSU

DMI 62. Clinical Education in DMI I (5)
Lab-280
PREREQ: CMST 1A or ESL 79
First semester of clinical education experience in a hospital radiology department. Placement is determined by the Program Officials. Regular meetings with CCSF faculty at the hospital to ensure appropriate progress in the clinical environment. DMI faculty will oversee all student activities at the clinical site. CSU **OFFERED SPRING AND SUMMER SEMESTERS**

DMI 63. Intermediate Diagnostic Procedures (2)
Lec-35, Lab-17.5
PREREQ: DMI 51A
Basic theories underlying intermediate diagnostic imaging procedures. Relationships of clinical indications, patient demographics, special precautions, accessory equipment, and patient positioning. CSU

DMI 64. Clinical Education in DMI II (5)
Lab-280
PREREQ: DMI 62; COMPLETION OF OR CONCURRENT ENROLLMENT IN: DMI 55; DMI 63
Second semester of clinical education in a hospital radiology department. Placement is determined by the Program Officials. On-site meetings with CCSF faculty. CSU

DMI 65. Advanced Imaging Procedures (2)
Lec-35, field trips
COREQ: DMI 66
Fundamentals of Computed Tomography and Magnetic Resonance Imaging. Emphasis on physics, patient care and professionalism. CSU

DMI 66. Clinical Education in DMI III (5)
Lab-280
PREREQ: DMI 64
COREQ: DMI 54 AND DMI 65
Third semester of clinical education in a newly assigned hospital radiology department. Placement is determined by the Program Officials. On-site meetings with CCSF faculty. CSU

DMI 68. Clinical Education in DMI IV (13)
Lab-700
PREREQ: DMI 66
COREQ: DMI 54 AND DMI 65
Third semester of clinical education in a newly assigned hospital radiology department. Placement is determined by the Program Officials. On-site meetings with CCSF faculty. CSU

DMI 69. Clinical Education Internship Summer Bridge (6)
Lab-340
PREREQ: DMI 66
Summer bridge internship semester of clinical education in a hospital radiology department. Placement is determined by the Program Officials. Performance of clinical internship competencies including those not completed in DMI 69. On-site meetings with CCSF faculty. CSU **OFFERED THROUGHOUT THE YEAR**

DMI 70. Radiation Protection (2)
Lec-35, Lab-17.5
COREQ: DMI 66
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

DMI 100. Registry Examination and Career Preparation (1)
Lec-17.5, field trips
COREQ: DMI 68
Consolidation of Diagnostic Medical Imaging topics designed to prepare students for the certification examination in Radiography administered by the American Registry of Radiologic Technologists. CSU

**Russian Certificate**
The Certificate of Accomplishment in Russian provides students, prospective employers and others with documented evidence of per
sistence and academic accomplishment in Russian.

Learning Outcomes

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

- Interpret oral and written Russian texts applying knowledge of learned structures and vocabulary.
- Communicate in Russian orally and in writing applying learned structures and vocabulary to transactional situations.
- Integrate and apply knowledge of Russian culture and cultural-linguistic norms.

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 Russian

Course .................................................Units

Choose 9 units from the following core courses:

RUSS 1 Elementary Russian ..........................5.0
or RUSS 1A Elementary Russian ........................3.0
and RUSS 1B Elementary Russian ........................3.0

RUSS 2 Elementary Russian ..........................5.0
or RUSS 2A Elementary Russian ........................3.0
and RUSS 2B Elementary Russian ........................3.0

RUSS 3A Intermediate Russian ........................3.0
and RUSS 3B Intermediate Russian ........................3.0

RUSS 4A Continuation of Intermediate Russian ........................3.0

RUSS 21 Elementary Russian for Bilingual Students .................................................5.0
or RUSS 21A Elementary Russian for Bilingual Students .................................................3.0
and RUSS 21B Elementary Russian for Bilingual Students .................................................3.0

RUSS 22 Continuation of Elementary Russian for Bilingual Students .................................................5.0
or RUSS 22A Continuation of Elementary Russian for Bilingual Students .................................................3.0
and RUSS 22B Continuation of Elementary Russian for Bilingual Students .................................................3.0

Choose 6 units from the following elective courses:

RUSS 10A Beginning Practical Spoken Russian ........................3.0
RUSS 10B Continuation of Beginning Practical Spoken Russian .................................................3.0

RUSS 10C Intermediate Conversational Russian ........................3.0
RUSS 15A Advanced Russian Conversation .................................................3.0
RUSS 15B Advanced Russian Conversation .................................................3.0
RUSS 16A Advanced Conversation through Russian Cinema .................................................3.0
RUSS 16B Advanced Conversation through Contemporary Russian Cinema .................................................3.0
RUSS 41 Russian Culture and Civilization .................................................3.0

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

Announcement of Courses

Students of beginning Russian are directed to consider RUSS 1, 1A, and 10A.

Credit, Degree Applicable Courses:

RUSS 1. Elementary Russian (5)
Lec-87.5  P/NP available
Recommended Prep: ENGL 88 or ESL 188 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 are enrolled in or who have completed RUSS 21.
Offered Fall semesters

RUSS 1A. Elementary Russian (3)
Lec-52.5  P/NP available
Recommended Prep: ENGL 88 or ESL 188 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 to students who are enrolled in or 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 are enrolled in or who have completed RUSS 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 and 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 1A or RUSS 22B or demonstration of RUSS 1A exit skills
Recommended Pref: ENGL 88 or ESL 188 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 4A. Continuation of Intermediate Russian (3)
Lec-52.5, field trips P/NP available
Prereq: RUSS 3B or demonstration of exit skills
Review of grammar and composition in the cultural context; continuing practice in the use and comprehension of spoken Russian. CSU Native speakers of Russian are encouraged to speak with the instructor prior to enrolling.

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 on occasion

RUSS 10B. Continuation of Beginning Practical Spoken Russian (3)
Lec-52.5 P/NP available
Recommended Pref: RUSS 10A or demonstration of exit skills
Second semester course. Extensive oral training in Russian. Emphasis on practical vocabulary and idiom rather than on formal grammar. CSU Usually offered as an evening course
Offered on occasion

RUSS 10C. Intermediate Conversational Russian (3)
Lec-52.5 P/NP available
Recommended Pref: RUSS 10B or demonstration of exit skills
Third semester course. Continuation of extensive oral training in Russian. Designed for students who wish to continue acquiring intermediate 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
Recommended Pref: 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
Recommended Pref: 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
Recommended Pref: RUSS 3 or RUSS 3B or RUSS 15A or RUSS 15B or demonstration of RUSS 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 on occasion

RUSS 16B. Advanced Conversation through Contemporary Russian Cinema (3)
Lec-52.5 P/NP available
Recommended Pref: RUSS 3 or RUSS 15A or RUSS 15B or RUSS 3B
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
Recommended Pref: 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 Not recommended to students who are enrolled in or who have completed RUSS 1. 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.
Offered Fall semesters

RUSS 21A. Elementary Russian for Bilingual Students (3)
Lec-52.5 P/NP available
Recommended Pref: 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 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
Beginner’s 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. 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.
Offered on occasion

RUSS 22A. Continuation of Elementary Russian for Bilingual Students (3)
Lec-52.5    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 and/or no formal training in the written forms of the language.
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, field trips    P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
A consideration of the major achievements of Russian culture as reflected in language, history, literature, the arts, philosophy, religion and daily life. No knowledge of Russian required. UC/CSU
No knowledge of Russian required.
Offered on occasion

Courses Required for the AA-T in Sociology

Required core courses:
- SOC 1 Introduction to Sociology ............................. 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, Business and Social Sciences. .................. 5.0
- MATH 80 Probability and Statistics .......................... 5.0

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 Anthropology ........................................ 3.0
- ANTH 3C Introduction to Cultural Anthropology: Focus on American Cultures .......... 3.0
- 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: ......................................................... 20.0

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 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.

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.

Office: Batmale 354
Phone Number: (415) 239-3433
Web Site: www.ccsf.edu/behavior
Announcement of Courses

Credit, Degree Applicable Courses:

SOC 1. Introduction to Sociology (3)
Lec-52.5  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

SOC 3. Social Problems (3)
Lec-52.5  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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 115

SOC 11. Intro to Social Work and Human Services (3)
Lec-52.5  P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
An introductory overview of social welfare and the societal institutions in the U.S. that structure the provision of social services. The course presents a historical perspective on the development of U.S. social work and human services. Special attention is given to current service delivery systems, their policies and procedures, and the tasks of culturally responsive social workers and human service workers within those settings. CSU

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 120

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

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-speaking world.
- Communicate in Spanish at a level of proficiency necessary to perform successfully in upper-division course work.

Note: Students who place into higher level Spanish courses and do not complete a minimum of 18 units in the major, should take courses from Option 2, List B below to meet the minimum 18 units in the major required by Title 5.

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 Spanish

Course ................................................. Units
Choose either Option 1: Spanish Language Learners or Option 2: Spanish Heritage Speakers

OPTION 1: SPANISH LANGUAGE LEARNERS

Required courses:
SPAN 1 Elementary Spanish .......................... 5.0
or SPAN 1A Elementary Spanish ................ 3.0
and SPAN 1B Elementary Spanish .............. 3.0
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
SPAN 3 Intermediate Spanish ....................... 5.0
or SPAN 3A Intermediate Spanish ............... 3.0
and SPAN 3B Intermediate Spanish ............ 3.0
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

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 Bilinguals .......................................... 3.0
SPAN 32A Intermediate Spanish for Heritage Speakers .......................... 3.0
and SPAN 32B Intermediate Spanish for Heritage Speakers ........................ 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:

- Interact fluently in Spanish in a normal and spontaneous fashion at an intermediate level.
- Analyze publications and current affairs media as well as contemporary literary prose in Spanish.
- Describe geographic and cultural differences in the Spanish-speaking world.
- Communicate in Spanish at a level of proficiency necessary to 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

Course ................................................. Units
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
SPAN 3 Intermediate Spanish .............................................................. 5.0
or SPAN 3A Intermediate Spanish .............................................................. 3.0
and SPAN 3B Intermediate Spanish .............................................................. 3.0
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
SPAN 22A Grammar Review and Composition ........................................ 3.0
and SPAN 22B Grammar Review and Composition ....................................... 3.0
SPAN 31A Elementary Spanish .............................................................. 3.0
or SPAN 1A Elementary Spanish .............................................................. 3.0
and SPAN 1B Elementary Spanish .............................................................. 3.0
SPAN 10B Continuation of Beginning Conversational Spanish ......................... 3.0

Choose an additional six (6) units from the following elective courses:
SPAN 1 Elementary Spanish .............................................................. 3.0
or SPAN 1A Elementary Spanish .............................................................. 3.0
and SPAN 1B Elementary Spanish .............................................................. 3.0
SPAN 10B Continuation of Beginning Conversational 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

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<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>SPAN 1A Elementary Spanish</td>
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<td>SPAN 2 Continuation of Elementary Spanish</td>
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<td>SPAN 2A Continuation of Elementary Spanish</td>
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<td>and SPAN 3B Intermediate Spanish</td>
<td>3.0</td>
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<tr>
<td>SPAN 5 Advanced Spanish: Hispanic Culture and Civilization</td>
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<tr>
<td>or SPAN 5S Advanced Spanish: Hispanic Culture and Civilization</td>
<td>3.0</td>
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<tr>
<td>SPAN 6 Continuation of Intermediate Spanish</td>
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<td>or SPAN 6A Continuation of Intermediate Spanish</td>
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<td>3.0</td>
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<tr>
<td>SPAN 7 Intro. to Literature in Spanish</td>
<td>3.0</td>
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<tr>
<td>SPAN 22A Grammar Review and Composition</td>
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<td>and SPAN 22B Grammar Review and Composition</td>
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<td>SPAN 31A Spanish for Heritage Speakers 1A</td>
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<tr>
<td>and SPAN 31B Spanish for Heritage Speakers 1B</td>
<td>3.0</td>
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<tr>
<td>Choose 6 units from the following elective courses:</td>
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<tr>
<td>SPAN 10A Beginning Conversational Spanish</td>
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<tr>
<td>SPAN 10C Continuation of Beginning Conversational Spanish</td>
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<td>SPAN 10D Continuation of Intermediate Conversational Spanish</td>
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<td>SPAN 10T Advanced Spanish: Hispanic Culture and Civilization</td>
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<td>SPAN 5S Advanced Spanish: Hispanic Culture and Civilization</td>
<td>3.0</td>
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<td>SPAN 10D Intermediate Conversational Spanish</td>
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<tr>
<td>and SPAN 10E Intermediate Conversational Spanish</td>
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<td>and SPAN 10G Advanced Spanish: Hispanic Culture and Civilization</td>
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<tr>
<td>SPAN 10H Advanced Spanish: Hispanic Culture and Civilization</td>
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<tr>
<td>and SPAN 10I Advanced Spanish: Hispanic Culture and Civilization</td>
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<td>Total:</td>
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</table>

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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<tbody>
<tr>
<td>SPAN 1. Elementary Spanish (5)</td>
<td></td>
</tr>
<tr>
<td>Lec-87.5</td>
<td>P/NP available</td>
</tr>
<tr>
<td>Recommended Prep: ENGL 88 or ESL 188 or any City College or university foreign language course</td>
<td></td>
</tr>
<tr>
<td>Beginner’s course. Grammar, composition and reading. Practice in speaking and understanding Spanish. UC/CSU</td>
<td></td>
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<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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<tr>
<td>SPAN 1B. Elementary Spanish (3)</td>
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<tr>
<td>Lec-52.5</td>
<td>P/NP available</td>
</tr>
<tr>
<td>Recommended Prep: ENGL 88 or ESL 188 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>
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<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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<td>SPAN 1B. Elementary Spanish (3)</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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<tr>
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<td>P/NP available</td>
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<tr>
<td>Recommended Prep: ENGL 88 or ESL 188 or any City College or university foreign language course</td>
<td></td>
</tr>
<tr>
<td>Completion of elementary grammar, composition and reading; continued practice in speaking and understanding Spanish. Continued introduction to Spanish-speaking cultures. 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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<tr>
<td>SPAN 2A. Continuation of Elementary Spanish (3)</td>
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<tr>
<td>Lec-52.5</td>
<td>P/NP available</td>
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<tr>
<td>Recommended Prep: ENGL 88 or ESL 188 or any City College or university foreign language course</td>
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<tr>
<td>Completion of elementary grammar, composition and reading; continued practice in speaking and understanding Spanish. Continued introduction to Spanish-speaking cultures. UC/CSU</td>
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<tr>
<td>C-ID SPAN 100 (SPAN 2A + SPAN 2B)</td>
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<tr>
<td>SPAN 2A+2B = SPAN 2</td>
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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 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. Introduction to authentic texts and Hispanic films to study new cultural perspectives. 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 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 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.
Readings in and discussions of Hispanic Civilization from the High Paleolithic to the 17th Century: Spain and Latin America. Designed to improve command of the spoken language through building vocabulary, improving pronunciation and expressing ideas in a more natural manner with some written Spanish practice as well. Conducted in Spanish. UC/CSU
SPAN 5 not prerequisite to SPAN 5S.
Offered on occasion

SPAN 5A. 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.
Readings in and discussions of Hispanic Civilization from the Golden Age to the present: Spain and Latin America. Designed to improve command of the spoken language through building vocabulary, improving pronunciation and expressing ideas in a more natural manner with some written Spanish practice as well. Conducted in Spanish. UC/CSU
SPAN 5 not prerequisite to SPAN 5S.
Offered on occasion

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+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 + SPAN 6B)
SPAN 6 = SPAN 6A + SPAN 6B. 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. Recommended Prep: 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 + SPAN 6B)
SPAN 6 = SPAN 6A + SPAN 6B. 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
Recommended Prep: 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
Offered Fall semesters

SPAN 10B. Continuation of Beginning Conversational Spanish (3)
Lec-52.5 P/NP available
Recommended Prep: 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

Offered Spring semesters

SPAN 10C. Intermediate Conversational Spanish (3)
Lec-52.5 P/NP available
Recommended Prep: SPAN 10B or demonstration of SPAN 10B
exit skills;
Extensive oral practice of structures and vocabulary most often used
in conversation at the intermediate level and study of aspects of the
Spanish-speaking world. Elective for Spanish Major and Certificate. CSU

Offered Fall semesters

SPAN 10D. Continuation of Intermediate Conversational Spanish (3)
Lec-52.5 P/NP available
Recommended Prep: 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 Spring semesters

SPAN 22A. Grammar Review and Composition (3)
Lec-52.5 P/NP available
Prereq: SPAN 3 or SPAN 3B 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 SPAN 3B 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 22C. Grammar Review and Composition (3)
Lec-52.5 P/NP available
Prereq: SPAN 3 or SPAN 3B or equivalent
Advanced review of grammar and composition with attention to style,
vocabulary development, and grammatical structure. Course taught in
Spanish. CSU

SPAN 31. Spanish for Heritage Speakers 1 (5)
Lec-87.5 P/NP available
Recommended Prep: Oral fluency in Spanish
Designed for bilingual/heritage students who are effective in oral commu-
ication in Spanish within their communities, but have little formal
training in written forms of the language. Intensive review of gram-
mar, 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. Spanish for Heritage Speakers 1B (3)
Lec-52.5 P/NP available
Recommended Prep: Oral fluency in Spanish
Designed for bilingual/heritage students who are effective in oral com-
munication 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 31A. Spanish for Heritage Speakers 1A (3)
Lec-52.5 P/NP available
Recommended Prep: Must communicate fluently with ease in
Spanish
Designed for bilingual/heritage students who are effective in oral com-
munication in Spanish within their communities, but have little formal
training in written forms of the language. Intensive review of gram-
mar, 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 32. Spanish for Heritage Speakers 2 (5)
Lec-87.5 P/NP available
Prereq: SPAN 31 or SPAN 31B or demonstration of exit skills
Intensive review of grammar. Composition and translation. Designed for
bilingual/heritage students who are effective in oral commu-
ication in Spanish within their communities, but have insufficient
formal training in written forms of the Spanish language. Emphasis on
increasing vocabulary, reading and writing skills through essays and
guided compositions. UC/CSU

C-ID SPAN 230
SPAN 31 is not a prerequisite of Spanish 32.

Offered on occasion

SPAN 32A. Spanish for Heritage Speakers 2A (3)
Lec-52.5 P/NP available
Prereq: SPAN 31 or SPAN 31B or demonstration of exit skills
Continued intensive review of grammar, composition, and 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)
Formerly Intermediate Spanish for Bilingual Students

Offered on occasion

SPAN 32B. Spanish for Heritage Speakers 2B (3)
Lec-52.5 P/NP available
Prereq: SPAN 31 or SPAN 31B or demonstration of exit skills
Further continued intensive review of grammar, composition, transla-
tion. Emphasizes increasing vocabulary, avoiding false cognates,
developing reading, writing skills. Focus on developing advanced aca-
demic 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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.
Offered on occasion

SPAN 42. LGBT Voices in Hispanic society (3)
Lec-52.5 P/NP available
Prereq: SPAN 3 or SPAN 3B or demonstration of exit skills
This course, conducted in Spanish, examines literary texts and other media to explore the culture, lives, and social aspects of Lesbian, Gay, Bisexual, and Transgender people in the context of Latin America and Spain, including Latinx population in the United States. CSU
Offered on occasion

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 .......................................... 1.0
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
Presentation .......................................... 1.0
TH A 202C Principal Role Drama Play Rehearsal and
Presentation .......................................... 3.0
TH A 203A Ensemble Role Classical Play Rehearsal
Presentation .......................................... 1.0
TH A 203B Supporting Role Classic Play Rehearsal
Presentation .......................................... 1.0
TH A 203C Principal Role Classic Play Rehearsal and
Presentation .......................................... 3.0
TH A 204A Ensemble Role Tragedy Play Rehearsal
Presentation .......................................... 1.0
TH A 204B Supporting Role Tragedy Play Rehearsal
Presentation .......................................... 2.0
TH A 204C Principal Role Tragedy Play Rehearsal and
Presentation .......................................... 3.0

Group 2: Technical Theatre Production
TH A 61 Technical Theatre Production .................. 3.0

Choose 9 units from the following elective courses:
TH A 150B Intermediate Acting Fundamentals .......... 3.0
TH A 63 Introduction to Lighting Design ................. 4.0
TH A 71 Intro to Make-up and Costume Design .......... 3.0
TH A 72 Intermediate Costume and Makeup ............ 3.0
TH A 60 Stagecraft .................. 3.0
Course(s) in Group 1 or Group 2 (whichever Group was not taken for the Core requirements) .................. 3.0
Total: ........................................ 18.0

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 111

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

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
RECOMMENDED PREP: ENGL 88 or ESL 188 or READINESS FOR COLLEGE-LEVEL ENGLISH
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 and commedia dell’arte, stand up, improvisational and musical comedy of present day. UC/CSU

TH A 61. Technical Theatre Production (1-3)
Work-60.0-225.0
P/NP available
PREREQ: APPROVAL OF THE THEATRE ARTS DEPARTMENT
REPEAT MAX. 12.0 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. One unit of credit is earned for 60 hours of unpaid, or 75 hours of paid work. 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 FALL SEMesters

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 SPRING SEMesters

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

Theatre Arts 419
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
Recommended Prep: TH A 150A
Beginning level analysis, development and creation of believable characters, and in-class performance. Concentration on 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 in-class performance. 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, in relation to text analysis of characters from diverse material. Special emphasis on social-cultural influences on both character and text through in class scene presentation. 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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

Acting in Media
TH A 154A. Beginning Acting For The Camera (4)
Lec-52.5, Lab-60
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

TH A 154B. Intermediate Acting For The Camera (4)
Lec-52.5, Lab-60
Prereq: TH A 154A
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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
Recommended Prep: ENGL 88 or ESL 160 or readiness for college-level English
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

Vocal Production and Audition
TH A 160A. Beginning Vocal Production and Audition (3)
Lec-52.5
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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, and to develop the actor’s process in preparation for performance and selection of materials for various audition settings. UC/CSU

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. UC/CSU

TH A 160C. Advanced-Intermediate Vocal Production and Audition (3)
Lec-52.5
Prereq: TH A 160B
Advance-Intermediate instruction in the study of the anatomy of the vocal mechanism. Practice of voice and articulation in preparation of classical and contemporary auditions. Focused auditioning exercises for the stage to develop the actor’s process in preparation for performance and audition, selection of materials, and presentation of self in various audition settings. UC/CSU

Shakespeare for Actors
TH A 170A. Beginning Shakespeare for Actors (3)
Lec-52.5
Recommended Prep: TH A 150A; ENGL 88 or ESL 188 or readiness for college-level English
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

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

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

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
Offered on occasion

Performing Storytelling
TH A 171A. Beginning Storytelling and Performance (3)
Lec-52.5, field trips
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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

Comedy-Play Rehearsal and Performance
TH A 201A. 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
C-ID THTR 191
Offered on occasion

TH A 201B. 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 comic play 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
C-ID THTR 191
Offered on occasion

TH A 201C. 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 comic play 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
C-ID THTR 191
Offered on occasion

Drama-Play Rehearsal and Performance
TH A 202A. 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 "Drama" 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
C-ID THTR 191
Offered Fall semesters

TH A 202B. Supporting Role Drama-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 a theatrical performances of a "Drama" 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
C-ID THTR 191
Offered Fall semesters

TH A 202C. 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
C-ID THTR 191
Offered Fall semesters
Classical-Play Rehearsal and Performance
TH A 203A. Ensemble Role Classical-Play Rehearsal and Presentation (1)
Lab-52.5 P/NP available
Prerequisite: Limitation on enrollment - by audition/interview
Ensemble 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 in a "Classical" play in order to receive credit. UC/CSU
C-ID THTR 191
Offered on occasion

TH A 203B. Supporting Role Classic-Play Rehearsal and Presentation (2)
Lab-105.5 P/NP available
Prerequisite: 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
C-ID THTR 191
Offered on occasion

TH A 203C. Principal Role Classic-Play Rehearsal and Presentation (3)
Lab-157.5 P/NP available
Prerequisite: 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 "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
C-ID THTR 191
Offered on occasion

Tragedy-Play Rehearsal and Performance
TH A 204A. Ensemble Role Tragedy-Play Rehearsal and Presentation (1)
Lab-52.5 P/NP available
Prerequisite: 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 in a "Tragedy" in order to receive credit. UC/CSU
C-ID THTR 191
Offered Spring semesters

TH A 204B. Supporting Role Tragedy-Play Rehearsal and Presentation (2)
Lab-105.5 P/NP available
Prerequisite: 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
C-ID THTR 191
Offered Spring semesters

TH A 204C. Principal Role Tragedy-Play Rehearsal and Presentation (3)
Lab-157.5 P/NP available
Prerequisite: 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
C-ID THTR 191
Offered Spring semesters

Related Courses:
BCST 115. Announcing and Performance (3)
Lec-52.5, field trips
Recommended Preparation: BCST 120; ENGL 88 or ESL 188 or readiness for college-level English
Introduction to basic theory and practice in interpretation of copy, pronunciation, and announcer's duties for radio, television, podcast and web video. Study and practice of oral skills for effective communication of meaning in scripts, newscasts, voiceovers and commercials.
CMST 38. Forensics Competition (3)
Lec-52.5, Lab-17.5, field trips
Recommended Preparation: CMST 1A or CMST 3 or CMST 4 or ESL 79
Repeat: 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.
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 exami
nation 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 center:

Mission Center (Julita McNichol or Maria Rosales-Uribe, Chair) .................. (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.

Credits may be earned in three ways: by completing course work, or by earning 12.5 points for each GED subtest and 10 points for each HiSET subtest that the student successfully passes.

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 High School Program.

The CCSF High School Diploma’s Program Learning Outcomes are derived from the Common Core State Standard and CASAS competencies.

**Learning Outcomes**

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

- Apply quantitative concepts and critical reasoning to address complex problems
- Apply effective and respectful communication skills.
- Locate, evaluate, and synthesize multiple forms of information from diverse disciplines and use proper attribution
- Integrate diverse perspectives using critical and creative reasoning
- Articulate an understanding of the history and values of diverse cultures including one’s own.
- Assess one’s own achievements and cultivate resources for educational and/or career growth

- Recognize and interpret creative expression

**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.

Completion time will vary based on student preparation and number of high school credits completed at other institutions. The minimum time for completion of this program is 1 semester because of the residency requirement.

**Courses Required for the HS Diploma in CCSF High School Diploma Program**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRST 3631 High School Physical Science</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3642 High School Biology</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3643 High School Ecology</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3644 High School Physics</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 5044 High School Equivalency Prep: Science</td>
<td>90.0</td>
</tr>
</tbody>
</table>

**High School Social Science Choose 540 hours (30 high school credits) from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRST 3531 High School United States History 1</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3532 High School United States History 2</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3533 Civics</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3534 Economics</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3535 Modern World History</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3537 H.S. United States History 3</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3536 Social Justice</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 5043 High School Equivalency Prep: Social Studies</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 5052 High School Lab: Contemporary World</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 5056 High School Lab: Civics</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 5057 High School Lab: Economics</td>
<td>90.0</td>
</tr>
</tbody>
</table>

**High School Humanities Choose 180 hours (10 high school credits) from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRST 3721 Visual Arts</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3732 Comparative Religion</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3733 High School Art and Literature</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 5053 High School Learning Lab: Humanities</td>
<td>90.0</td>
</tr>
</tbody>
</table>

**High School English Choose 540 hours (30 high school credits) from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRST 3322 Academic Reading and Writing 1.5</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 2322 Academic Reading/ Writing 2.5</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 2323 Media Literacy</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 2731 The Americas in Film</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3331 Academic Reading and Writing 3</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3332 Grammar and Writing</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3333 Introduction to Public Speaking</td>
<td>90.0</td>
</tr>
<tr>
<td>TRST 3334 Discovering Literature</td>
<td>90.0</td>
</tr>
</tbody>
</table>
TRST 3335 Exploring Literature ............................ 90.0
TRST 3346 H.S. Literature and Composition ............ 90.0
TRST 3347 Contemporary American Writers ............ 90.0
TRST 3733 High School Art and Literature ............. 90.0
TRST 5053 High School Learning Lab:
  Humanities ........................................... 90.0
TRST 5054 High School Learning Lab: English ........ 90.0
TRST 5041 High School Equivalency Prep:
  Language Arts ....................................... 90.0
TRST 3348 Academic Writing 2 .......................... 90.0
High School Mathematics Choose 360 hours (20 high school credits) from the following:
TRST 3421 High School Algebra 1A .................... 90.0
TRST 3422 High School Algebra 1B .................... 90.0
TRST 3423 High School Geometry 1A .................. 90.0
TRST 3424 Geometry 1B ................................ 90.0
TRST 5055 High School Learning Lab:
  Mathematics ......................................... 90.0
TRST 5042 High School Equivalency Prep:
  Mathematics ......................................... 90.0
High School Electives Choose 900 hours (50 high school credits) from the following:
TRST 5038 Introduction to Academic Success ........ 90.0
TRST 2533 Health Education ................................ 90.0
TRST 2421 Math Skills Development 2 .................. 90.0
TRST 2422 Math Skills Lab ................................ 90.0
TRST 5036 Reading/Writing Lab .......................... 90.0
TRST 1422 Math Skills Development I ................... 90.0
Any courses not taken to meet requirements above
Total: .................................................... 2880.0

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 2
Certificate of Completion
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 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 Completion 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
Certificate of Completion
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.

Recommended Preparation TRST 5039 or placement into TRST 5041
The minimum time for completion is two semesters.

Courses Required for the Certificate of Completion 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
TRST 5042 High School Equivalency Prep:
  Mathematics ......................................... 90.0
Total: .................................................... 270.0

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

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.

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.

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 Equivalency Preparation courses.
Formerly TRST 0039

TRST 5041. High School Equivalency Prep: Language Arts (90 hrs)
Recommended Prep: TRST 5039
Prepares students for the GED Reasoning through Language Arts test, TASC, or HiSET Reading and Writing tests, and/or beginning credit English courses. Whole group, individual and/or small group instruction.
Formerly TRST 040A

TRST 5042. High School Equivalency Prep: Mathematics (90 hrs)
Prepares students for the GED Mathematical Reasoning test, TASC or HiSET Math test, and/or credit math courses. Whole group, individual and/or small group instruction.
Formerly TRST 040B

TRST 5043. High School Equivalency Prep: Social Studies (90 hrs)
Recommended Prep: TRST 5039
Prepares students for the GED, TASC, or HiSET Social Studies test, and/or credit study in related subjects. Whole group, individual and/or small group instruction. Open enrollment.
Formerly TRST 040C

TRST 5044. High School Equivalency Prep: Science (90 hrs)
Recommended Prep: TRST 5039
Prepares students for the GED, TASC, or Hi SET Science test and/or credit science courses. Whole group, individual and/or small group instruction. Open enrollment.
Formerly TRST 040D

TRST 5052. High School Lab: Contemporary World (90 hrs)
Covers the major turning points that shaped the modern world from post-World War II to today. 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 037B

TRST 5053. High School Learning Lab: Humanities (90 hrs)
Recommended Prep: TRST 1322 or placement in TRST 2322
A self-paced course designed for students to develop reading and critical thinking skills. Credits earned may be applied toward meeting the CCSF High School Diploma requirements in Area C: Humanities.

TRST 5054. High School Learning Lab: English (90 hrs)
Recommended Prep: TRST 2322 or placement into TRST 3331
A self-paced course designed for students to develop academic reading and writing skills. Credits earned may be applied toward meeting the CCSF High School Diploma requirements in Area D: English.

TRST 5055. High School Learning Lab: Mathematics (90 hrs)
Recommended Prep: TRST 2421 or TRST 2422 or placement into TRST 3421 or 3423
A self-paced course designed for students to develop Adult Secondary Education academic skills in mathematics. Credits earned may be applied toward meeting the CCSF High School Diploma requirements in Area E: Mathematics.

TRST 5056. High School Lab: Civics (90 hrs)
Recommended Prep: TRST 2322 or placement in TRST 3331
History and interpretation of the U.S. Constitution. Structure of the federal government, individual rights and responsibilities. Exploration of key issues and analysis of current events. It is a self-paced lab allowing students to earn credits that may be applied to the CCSF High School Social Science requirements.

TRST 5057. High School Lab: Economics (90 hrs)
Recommended Prep: TRST 2322 or placement in TRST 3331
Exploration of basic economic principles and their applications to the free enterprise system. Analysis and discussion of key economic policy decisions made both domestically and globally. It is a self-paced lab allowing students to earn credits that may be applied to the CCSF High School Social Science requirements.

Level I
Beginning and Basic Instruction in Reading, Writing, Communicating and Mathematics

TRST 1322. Academic Reading and Writing 1.5 (90 hrs)
A beginning course designed to develop reading and writing.

TRST 1422. Math Skills Development 1 (90 hrs)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: TRST 1422 or placement into TRST 2421
This course focuses on the study of decimal, fractions, rations, proportions, percentages, basic algebra and geometry.
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)
Recommended Prep: TRST 1322
The study of Latin America and United States society using film. Themes such as conformity, rebellion, racism and feminism will be explored.

**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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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.

TRST 3348. Academic Writing 2 (90 hrs)
Recommended Prep: TRST 3346, 3347 or placement into TRST 3348
Students focus on writing coherent and focused essays that convey a well-defined thesis.

TRST 3421. High School Algebra 1A (90 hrs)
Recommended Prep: Placement into TRST 3421 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)
Recommended Prep: 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)
Recommended Prep: TRST 3421
A first course in high school geometry: point, lines, and planes; classifications of angles; triangles and the Pythagorean theorem; classifications of polygons; surface areas and volume of several shapes.

TRST 3424. Geometry 1B (90 hrs)
Recommended Prep: 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)
Recommended Prep: 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.

TRST 3532. High School U.S. History 2 (90 hrs)
Recommended Prep: 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.

TRST 3533. Civics (90 hrs)
Recommended Prep: 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)
Recommended Prep: 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)
Recommended Prep: 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.
TRST 3536. Social Justice (90 hrs)
Recommended Prep: 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.

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 3642. High School Biology (90 hrs)
A general introduction to cell structure and functions, the cell cycle, principles of molecular and organism genetics.

TRST 3643. 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 3644. High School Physics (90 hrs)
Recommended Prep: 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 3721. Visual Arts (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.

TRST 3732. Comparative Religion (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.

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

TRST 4600. Vocational Foundation Skills-Reading and Writing (30-90 hrs)
Recommended Prep: 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.

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.

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, 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 88 or ESL 184 or placement in ESL 186 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>First Semester:</td>
<td></td>
</tr>
<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>
</tr>
<tr>
<td>Second Semester:</td>
<td></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 152 InDesign I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 154 Photoshop I</td>
<td>3.0</td>
</tr>
<tr>
<td>Third Semester:</td>
<td></td>
</tr>
<tr>
<td>VMD 122 Graphic Design II</td>
<td>3.0</td>
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<tr>
<td>VMD 127 User Experience</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 131 Typography II</td>
<td>3.0</td>
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<tr>
<td>VMD 150 Illustrator I</td>
<td>3.0</td>
</tr>
<tr>
<td>Fourth Semester:</td>
<td></td>
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<tr>
<td>VMD 190 Portfolio Preparation</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 200A Design Studio Practicum</td>
<td>3.0</td>
</tr>
<tr>
<td>Fourth Semester—choose one of the following design courses:</td>
<td></td>
</tr>
<tr>
<td>VMD 124A Information Design</td>
<td>2.0</td>
</tr>
<tr>
<td>VMD 124B Package Design</td>
<td></td>
</tr>
<tr>
<td>VMD 124C User Interface Design</td>
<td></td>
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<tr>
<td>Total:</td>
<td>42.0</td>
</tr>
</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, 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.

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.

Learning Outcomes

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

- Employ an iterative process to develop design solutions.
- Apply the elements and principles of visual design.
- Select and use type effectively in design work.
- Select and use computer tools and processes.
- Evaluate design work in verbal and written critiques.

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>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required courses:</td>
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</tr>
<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>
</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 154 Photoshop I</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>25.0</td>
</tr>
</tbody>
</table>

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.
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 Art Foundation

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 100 Orientation to Visual Media Design</td>
<td>1.0</td>
</tr>
<tr>
<td>VMD 105 Visual Media Digital Skills</td>
<td>3.0</td>
</tr>
<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>
</tr>
</tbody>
</table>

Total: 20.5

Choose one of the following courses:

- VMD 101/DSGN 101/PHOT 100 Design Fundamentals, 3.0
- ART 125A Basic Design, 3.0

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.

Learning Outcomes

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

- Use an iterative process including research, sketching, development and refinement to create original illustrations
- Produce original illustrative work using appropriate software
- Critique illustration work in verbal and written form
- Prepare a portfolio of illustration work

This certificate requires successful completion of the Digital Art Foundation Certificate or demonstration of equivalent knowledge and skills.

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.

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.
- Use the elements and principles of visual 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>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 100 Orientation to Visual Media Design</td>
<td>1.0</td>
</tr>
<tr>
<td>VMD 105 Visual Media Digital Skills</td>
<td>3.0</td>
</tr>
<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>
</tr>
</tbody>
</table>

Total: 20.5

Choose one of the following courses:

- VMD 101/DSGN 101/PHOT 100 Design Fundamentals, 3.0
- 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


Courses Required for the Certificate of Achievement in Digital Illustration

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Required courses:</td>
<td></td>
</tr>
<tr>
<td>VMD 120 Graphic Design I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 151 Illustrator II</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 155 Photoshop II</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 170 Digital Illustration I</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 172 Digital Illustration II</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 132A Beginning Figure Drawing</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>
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</tr>
<tr>
<td>VMD 168 Visual Development for Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 136A Introduction to Illustration</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>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></td>
</tr>
<tr>
<td>ART 132B Intermediate Figure Drawing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 25.5 – 27.0

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>Required courses:</td>
<td></td>
</tr>
<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>
<tr>
<td>Capstone Course:</td>
<td></td>
</tr>
<tr>
<td>VMD 200A Design Studio Practicum</td>
<td>3.0</td>
</tr>
<tr>
<td>Select any two of the following non-sequential required courses:</td>
<td></td>
</tr>
<tr>
<td>VMD 124A Information Design</td>
<td>2.0</td>
</tr>
<tr>
<td>VMD 124B Package Design</td>
<td>2.0</td>
</tr>
<tr>
<td>VMD 124C User Interface Design</td>
<td>2.0</td>
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</tbody>
</table>

Choose 6 units from the following elective courses:

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VMD 111 Print Processes for Designians</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 112/DSGN 110 Design Drawing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>VMD 114A Letterpress Printing I</td>
<td>2.0</td>
</tr>
<tr>
<td>VMD 116A Bookbinding &amp; Book Arts I</td>
<td>2.0</td>
</tr>
<tr>
<td>VMD 134 Calligraphy</td>
<td>1.0</td>
</tr>
<tr>
<td>VMD 135 Hand-Lettering</td>
<td>1.0</td>
</tr>
<tr>
<td>VMD 141 Web Production II</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 151 Illustrator II</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 153 InDesign II</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 155 Photoshop II</td>
<td>3.0</td>
</tr>
<tr>
<td>VMD 192 Professional Practice</td>
<td>1.0</td>
</tr>
<tr>
<td>VMD 194A Internship/Work Experience I</td>
<td>1.0</td>
</tr>
<tr>
<td>VMD 194B Internship/Work Experience II</td>
<td>2.0</td>
</tr>
<tr>
<td>VMD 200B Design Studio Practicum</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total: 25.5 – 31.0

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
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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, field trips P/NP available
Recommended Prep: ESL 186 or ENGL 88 or placement in ESL 188 or ENGL 1A
A study of the development of visual communication in art, graphic design, illustration and popular culture from the prehistory 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
Recommended Prep: ESL 186 or ENGL 88 or placement in ESL 188 or readiness for college-level English
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
Offered on Occasion

VMD 112. Design Drawing Techniques (1.5)
Lec-17.5, Lab-35 P/NP available
Recommended Prep: DSGN 101 or VMD 101 or PHOT 100; ESL 188 or ENGL 88 or readiness for college-level English
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 Spring 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
Offered on Occasion

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
Offered on Occasion

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 on Occasion

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 on Occasion

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 on Occasion

VMD 118. Color in Design (3)
Lec-35, Lab-70 P/NP available
Recommended Prep: 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 DSGN 101 or ART 125A or PHOT 100
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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. UC/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 on Occasion

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 Spring semesters

VMD 127. User Experience (3)
Lec-52.5, Lab-17.5      P/NP available
Prereq: VMD 140
This course focuses on industry-standard User Experience (UX) concepts and processes including user-centered design, information architecture, interaction design and prototyping used in digital product design and development. Students explore key topics through a series of hands-on exercises and projects. CSU
Offered Spring 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 MMSP 136
Offered Fall 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 131
Offered Fall semesters

VMD 134. Calligraphy (1)
Lec-16, Lab-8      P/NP available
Recommended Prep: 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 on Occasion

VMD 135. Hand-Lettering (1)
Lec-16, Lab-8      P/NP available
Recommended Prep: 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 on Occasion

VMD 136. Digital Font Creation (2)
Lec-35, Lab-17.5      P/NP available
Prereq: VMD 105
Recommended Prep: VMD 130
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      P/NP available
Prereq: VMD 140; Completion of or concurrent enrollment in: VMD 120
This is a hands-on intermediate course covering responsive web design processes and production. Students will learn the requirements of responsive design and how to plan and create responsive assets and pages. CSU
Formerly MMSP 135A
Offered Fall semesters

VMD 150. Illustrator I (3)
Lec-52.5, Lab-17.5      P/NP available
Prereq: VMD 105
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      P/NP available
Prereq: VMD 150
Recommended Prep: 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
Offered Spring semesters

VMD 152. InDesign I (3)
Lec-52.5, Lab-17.5  P/NP available
Prereq: VMD 105
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  P/NP available
Prereq: VMD 152
Recommended Prep: VMD 120; VMD 130
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
Offered Fall semesters

VMD 154. Photoshop I (3)
Lec-52.5, Lab-17.5  P/NP available
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
Recommended Prep: 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
Offered Spring semesters

VMD 162A. 2D Animation I (3)
Lec-35, Lab-70, field trips  P/NP available
Prereq: VMD 105 and (VMD 101 or DSGN 101 or PHOT 100 or ART 125A)
Recommended Prep: 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.
Offered Fall semesters

VMD 162B. 2D Animation II (3)
Lec-35, Lab-70, field trips  P/NP available
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
Offered Fall semesters

VMD 164. 3D Animation (3)
Lec-35, Lab-70, field trips  P/NP available
Prereq: VMD 105; and VMD 101/DSGN 101/ PHOT 100 or ART 130A
Recommended Prep: 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  P/NP available
Prereq: VMD 101/DSGN 101/PHOT 100 and VMD 105
Recommended Prep: 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  P/NP available
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
Offered on occasion

VMD 172. Digital Illustration II (3)
Lec-35, Lab-70  P/NP available
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 182. Game Production Workflow (3)
Lec-52.5, Lab-17.5  P/NP available
Prereq: VMD 180 and VMD 105
Recommended Prep: 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 an original playable prototype in a 3D game engine. Students will design
independently and as part of a team. UC/CSU

Formerly GAME 130
Offered on Occasion

VMD 184. Team Production of Games (3)
Lec-35, Lab-70 P/NP available
Prereq: VMD 182
Recommended Prep: 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 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
Offered Spring semesters

VMD 191. Social Media for Professionals (1)
Lec-17.5, Lab-17.5 P/NP available
Prereq: VMD 105 or BCST 119
Recommended Prep: 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 on occasion

VMD 192. Professional Practice (1)
Lec-17.5 P/NP available
This is an advanced course focusing on graphic design and digital media production professional practices covering topics such as freelancing and small business issues, fees, contracts, taxes, and copyright. CSU
Formerly GRPH 148
Offered on occasion

VMD 194A. Internship/Work Experience I (1)
Work-60 to 75 P/NP available
Prereq: Completion of foundation certificate
Coreq: Enrollment in at least 7 units of course work
Application of visual media design skills and development of proficiency in a supervised work environment. CSU
Formerly MMSP 160

VMD 194B. Internship/Work Experience II (2)
Work-120 to 150
Prereq: Completion of foundation certificate
Coreq: Enrollment in at least 7 units of course work
Application of visual media design skills and development of proficiency in a supervised work environment. CSU
Formerly MMSP 160

VMD 200A. Design Studio Practicum (3)
Lec-17.5, Lab-122.5 P/NP available
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 GRPH 68A

VMD 200B. Design Studio Practicum II (3)
Lec-17.5, Lab-122.5 P/NP available
Prereq: VMD 200A
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 68B

Women’s and Gender Studies
Office: Cloud 402C
Phone Number: (415) 452-5825
Web Site: www.ccsf.edu/women
*Formerly: Women’s Studies

Announcement of Curricula

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 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>Required courses:</td>
<td></td>
</tr>
<tr>
<td>WGST 25 Introduction to Women's Studies: Feminism</td>
<td>3.0</td>
</tr>
<tr>
<td>Demystified</td>
<td></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>
</tbody>
</table>

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.

**Area 1: History or Government**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

**Area 2: Arts & Humanities**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGST 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: 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 and Gender in the Middle East</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Area 3: Social Science**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGST 54 The Politics of Sexual Violence</td>
<td>3.0</td>
</tr>
<tr>
<td>AFAM 60 African American Women in the US</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 20 Lesbian Gay Bisexual Transgender Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 25 Culture, Gender and Sexuality</td>
<td>3.0</td>
</tr>
<tr>
<td>ASAM 35 Asian American Women</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 105 Gender &amp; Mass Media</td>
<td>3.0</td>
</tr>
<tr>
<td>ECON 25 Women in the Economy</td>
<td>3.0</td>
</tr>
<tr>
<td>IDST 31 Women and Gender in the Middle East</td>
<td>3.0</td>
</tr>
<tr>
<td>LALS 10 Latinas in the U.S./VOCES</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGBT 5 Introduction to Lesbian, Bisexual, Gay, and Transgender Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>LGBT 21 Issues in Lesbian Relationships</td>
<td>3.0</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>PSYC 25 Psychology of Gender</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 25 Sex and Gender in American Society</td>
<td>3.0</td>
</tr>
<tr>
<td>Total:</td>
<td>18.0</td>
</tr>
</tbody>
</table>

**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>Required course:</td>
<td></td>
</tr>
<tr>
<td>WGST 25 Introduction to Women's Studies: Feminism Demystified</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose three units from the following Behavioral Sciences courses:</td>
<td></td>
</tr>
<tr>
<td>PSYC 25 Psychology of Gender</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 25 Sex and Gender in American Society</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 20 Lesbian Gay Bisexual Transgender Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>ANTH 25 Culture, Gender and Sexuality</td>
<td>3.0</td>
</tr>
<tr>
<td>Choose three units from the following Social Sciences courses:</td>
<td></td>
</tr>
<tr>
<td>ECON 25 Women in the Economy</td>
<td>3.0</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>Choose six units from the following Humanities courses:</td>
<td></td>
</tr>
<tr>
<td>WGST 10 Women and Film</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 25 Women in the Arts</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 108 Women Through Art History</td>
<td>3.0</td>
</tr>
<tr>
<td>BCST 105 Gender &amp; Mass Media</td>
<td>3.0</td>
</tr>
</tbody>
</table>
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:
AFAM 60 African American Women in the US ........ 3.0
ASAM 35 Asian American Women ....................... 3.0
IDST 31 Women and Gender 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
IDST 80G Diversity and Social Justice:
Transphobia ............................................... 0.5
IDST 80F Diversity and Social Justice: Class and
Classism .................................................. 0.5
IDST 81A Diversity: Ageism and Adultism (Age-based
Oppression) ............................................. 1.0
IDST 80E Diversity and Social Justice: Ableism ...... 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:
WGST 54 The Politics of Sexual Violence .............. 3.0
WGST 55 Ending Sexual Violence: Peer Education .. 3.0
HLTH 25 Women's Health ................................ 3.0
MGT 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 healthy and safer sexual relationships in their client populations. They will be able to teach others to negotiate sexual situations with more confidence, knowing their limits, recognizing danger zones, assessing risk factors, and respecting their own and their partners' needs.

**Learning Outcomes**

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

- 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 semester. Each course must be completed with a final grade of “C” or higher or Pass.

**Credit toward Graduation.** Credit earned to obtain the Certificate of Achievement satisfies the G2 and H2 graduation requirements, 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
</table>

**Required courses:**

- WGST 54 The Politics of Sexual Violence ........ 3.0
- WGST 55 Ending Sexual Violence: Peer Education .. 3.0
- IDST 17 Human Sexuality .......................... 3.0
- HLTH 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
- HLTH 64 Health Education Training: Skills and
  Practice ............................................. 3.0
- HLTH 67 HIV and Hepatitis Navigation Skills ...... 3.0
- HLTH 97 Stress and Resilience ..................... 3.0
- LGBT 21 Issues in Lesbian Relationships .......... 3.0
- LGBT 24 Intimacy and Relationships between Men .................. 3.0
- HLTH 95 Transgender Health: Working with Clients
  and Communities .................................... 1.0
- 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
- IDST 81B Diversity and Social Justice: Anti-Semitism/
  Anti-Arabism ........................................ 1.0
- 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
Total: ........................................................................ 16.0

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:

WGST 10. Women and Film (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Feminist film studies. Uses an intersectional lens to analyze women's roles in cinema as filmmakers and actors from its origins to the present. UC/CSU
Formerly WOMN 10
Offered on occasion

WGST 20. Her/His/Ourstories (3)
Lec-52.5, field trips P/NP available
Recommended Prep: ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English
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
Formerly WOMN 20
Offered Spring semesters

WGST 25. Introduction to Women's Studies: Feminism Demystified (3)
Lec-52.5 P/NP available
Introduction to the origins, purpose, subject matter, and methods of Women's Studies and to feminist perspectives on a range of social issues affecting women of diverse backgrounds. Study of the formation of gender and its intersections with race, class, sexuality, dis/ability, age, religion, and other systems of difference. UC/CSU
Formerly WOMN 55

WGST 35. Introduction to Masculinity Studies (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
An interdisciplinary and intersectional study of masculinities within US culture and society. Special attention will be given to how masculinity is represented and constructed along axes of race, ethnicity, sexuality, gender, class, and ability, as well as possibilities for challenging hegemonic masculinity and building new masculinities. CSU

WGST 54. The Politics of Sexual Violence (3)
Lec-52.5 P/NP available
An examination of the political, social, and psychological causes of sexual violence, its connections to other hate crimes, and strategies for transforming a rape culture through prevention education. Includes a special emphasis on the healing function of creative expression, especially writing. Field project required. CSU
Formerly WOMN 54

WGST 55. Ending Sexual Violence: Peer Education (3)
Lec-52.5 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 classes and volunteer work in community based organizations. Field project required. CSU
Formerly WOMN 55

AFAM 60. African American Women in the United States (3)
Lec-52.5 P/NP available
Examines and comparatively analyzes African American women in the U.S. with particular emphasis on the struggle for rights as African people. Explores the contributions, strategies for success and political activism of African American women from 1619 to the present. UC/CSU
Offered Fall semesters

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 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

ART 108. Women Through Art History (3)
Lec-52.5, field trips
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
Investigation of women's role in European and non-European society as artists, patrons and subjects in art from pre-history to the present. Artworks are examined through formal and thematic characteristics and from a historical, social and gender-based perspective. UC/CSU

ASAM 35. Asian American Women (3)
Lec-52.5 P/NP available
Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English
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  
**Recommended Prep:** ENGL 88 or ESL 188 or readiness for college-level English  
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 on occasion*

ENGL 57. Survey of Women's Literature (3)  
Lec-52.5, field trips  P/NP available  
**Prereq:** Eligibility for English IA  
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:** Eligibility for English IA  
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*

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.**  
*Offered in Fall semesters*

HLTH 25. Women's Health (3)  
Lec-52.5, field trips  P/NP available  
**Recommended Prep:** ENGL 88 or ESL 186 or placement in ESL 188 or readiness for college-level English  
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  

HUM 25. Women in the Arts (3)  
Lec-52.5, field trips  P/NP available  
**Recommended Prep:** ENGL 88 or ESL 188 or readiness for college-level English  
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  
**Recommended Prep:** ESL 184 or ENGL 88 or ESL 188 or placement in ESL 186 or readiness for college-level English  
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 and Gender in the Middle East (3)  
Lec-52.5, field trips  P/NP available  
**Recommended Prep:** ENGL 88 or ESL 188 or readiness for college-level English  
An interdisciplinary examination of differences/similarities in women's lives in the Muslim/Arab world, including the diaspora, and among minorities in the Middle East/Southwest Asia and North Africa (SWANA). Analysis includes diversity, colonization, nationalism, religion, gender, sexuality, family, law, literature, music, art and film. UC/CSU  

IDST 80A. Diversity and Social Justice: Racism (.5)  
Lec-9  P/NP available  
**Recommended Prep:** ESL 184 or ENGL 88 or ESL 188 or placement in ESL 186 or readiness for college-level English  
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 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  
**Recommended Prep:** ESL 184 or ENGL 88 or ESL 188 or placement in ESL 186 or readiness for college-level English  
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 80G. Diversity and Social Justice: Transphobia (.5)
Lec-9 P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
A consciousness-raising analysis and evaluation of transphobia and gender oppression on individual, institutional, and cultural levels in the US. 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 are emphasized. CSU

Offered Fall semesters

IDST 81A. Diversity and Social Justice: Ageism and Adultism (Age-based Oppression) (1)
Lec-18 P/NP available
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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
Recommended Prep: ESL 184 or ENGL 88 or placement in ESL 186 or readiness for college-level English
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

IDST 300. Social Justice Work Experience (1-6)
Work-60-450 P/NP only
Prereq: Approval of the Interdisciplinary Studies Department
Repeat: max. 16 units
General work experience course designed for students considering careers in social justice, public service and the nonprofit sector. Through supervised internships and at social justice and community-based organization, students can increase their skills working with the public sector and their knowledge of career options and pathways, including the skills necessary for work in this sector. One unit of credit is earned for each 60 hours of unpaid work or 75 hours of paid work. CSU

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

MGT 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

Formerly SUPV 236

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

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 25. Psychology of Gender (3)
Lec-52.5 P/NP available
This course is an analysis of theories and research on how behavioral, cognitive, and emotional processes are impacted by gender. It includes an intersectional critique of biological, psychological, sociocultural ideas of gender, gender continua from cis to transgender and addresses topics such as stereotypes, relationships, violence, sexuality, work and academics from various perspectives. Included is a focus on experiences of, and responses to, oppression. 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

Noncredit Courses:
WGST 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.
Formerly WOMN 2501

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.

Work Experience
Office: MUB 130B
Phone Number: (415) 452-7013
Web Site: www.ccsf.edu/workexperience

General Information:
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 education courses. Students who fulfill the work experience agreement achieve several job objectives and earn transferable college units.

Credit, Degree Applicable Courses:
WKEX 333. General Work Experience (1-6)
Work-60.000-450.000 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-60.000-450.000 P/NP only
Prereq: Approval of Business Department Work Experience Coordinator required
Repeat: max. 6.00 units
General work experience course with supervised employment that involves classroom-based learning at an on-campus learning station related to the student's educational or occupational goal. The focus of the course varies according to the CCSF department in which the student works. One unit of credit is earned for each 60 hours of unpaid work or 75 hours of paid work. CSU

For detailed information about other work experience and internship courses in a specific program, please consult the "Programs and Courses" section of this 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 world languages 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. 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

Recommended Prep: ENGL 88 or ESL 188 or readiness for college-level English

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*