



OFFICE OF INSTRUCTION

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Catalog Update for 2019-20 College Catalog

Last Updated: March 17, 2020

Changes to Voluntary Student Activity Fee (page 18 of the 2019-20 Catalog)

A fee increase of \$2 will take effect for the Spring 2020 registration cycle. The voluntary Student Activity Fee will change from \$5 to \$7.

Updated Programmatic Accreditation

Drug and Alcohol Studies Certificate

Accredited by:

The California Consortium of Addiction Programs and Professionals (CCAPP)

2400 Marconi Avenue, Suite C,

Sacramento, CA 95821

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Programs

The following programs shall be considered included in the 2019-20 College Catalog, with the effective dates noted below.

Department	Program	Effective Date
Administration of Justice and Fire Science	Certificate of Achievement in Basic Fire Academy (Accredited Local Academy)	Spring 2020
Administration of Justice and Fire Science	Certificate of Achievement in Basic Police Officer	Spring 2020
Automotive, Motorcycle, Construction & Building Maintenance	Certificate of Achievement in Automotive Technician	Spring 2020
Automotive, Motorcycle, Construction & Building Maintenance	Certificate of Achievement in Construction	Spring 2020

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Department	Program	Effective Date
Biology	Certificate of Achievement in Science Core for Nursing	Spring 2020
Business	Associate in Sciences in Supervision and Management Program	Spring 2020
Cinema	Associate in Arts in Film Studies	Spring 2020
Cinema	Certificate of Achievement in Cinema Foundations	Spring 2020
Cinema	Certificate of Achievement in Cinematography	Spring 2020
Cinema	Certificate of Achievement in Directing	Spring 2020
Cinema	Certificate of Achievement in Film Studies	Spring 2020
Cinema	Certificate of Achievement in Scriptwriting	Spring 2020
Library Information Technology	Certificate of Achievement in Library Information Technology	Spring 2020
World Languages and Cultures	Certificate of Achievement in French	Spring 2020

ADMINISTRATION OF JUSTICE AND FIRE SCIENCE

Basic Fire Academy (Accredited Local Academy) Certificate of Achievement

Basic Fire Academy (Accredited Local Academy) is for entry level Firefighter positions with the 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 (WMD) training in areas such as fire service communications, fire-ground and rescue operations, preparedness and maintenance of fire service equipment and specialized apparatus, mitigation of hazardous materials incidents, recognition of potential WMD incidents, and assistance of scene preservation for law enforcement.

Learning Outcomes

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

- Execute job knowledge and performance specific to the firefighter profession.
- Recognize and execute decisions related to wildland fire incidents, including use of personal protective equipment, wildland fire tools and apparatus, wildland fire safety, and fire suppression operations
- Identify and define hazardous materials and associated risks present in a hazardous materials emergency,
- Assess patient status and apply the correct basic life support interventions to patients with a variety of emergency medical and traumatic conditions, in accordance with local and national EMT protocols.

Entry level Firefighters are required to have a current EMT certification; AHA BLS Healthcare Provider or Red Cross CPR for Professional Rescuer; Passing score on the Candidate Physical Agility Test (CPAT); Live Scan; valid California Driver's License.

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

Courses Required for the Certificate of Achievement in Basic Fire Academy (Accredited Local Academy)

Course **Units**

Required courses:

F SC 110 Basic Fire Academy..... 21.0

F SC 108 Fire Service Work Experience..... 1.0 - 8.0

Total:.....**22.0 – 29.0**

Basic Police Officer Certificate of Achievement

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).

Learning Outcomes

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

- Explain the legal and ethical principles and procedures associated with the duties of a police officer.
- Interpret and apply criminal law
- Implement appropriate patrol and investigation procedures
- Manage and write accurate law enforcement reports
- Employ legally approved defensive policing tactics and appropriate levels of use of force

Admission Requirements: California P.O.S.T. (Commission on Peace Officer Standards and Training) reading and writing exam or employment by a P.O.S.T. approved agency; Department of Justice clearance; medical verification: clearance from a licensed physician to participate in intensive physical activity commensurate with a police academy. 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 Basic Police Officer

Course	Units
Required courses:	
ADMJ 101 Basic Police Academy.....	38.0
ADMJ 71 Police Work Experience	1.0 - 8.0
Total:	39.0 – 46.0

AUTOMOTIVE, MOTORCYCLE, CONSTRUCTION & BUILDING MAINTENANCE

Automotive Technician Certificate of Achievement

This Automotive Technician Certificate of Achievement prepares students to enter the automotive maintenance field with all the necessary skills to perform entry level work as well as have a thorough understanding of theory so they will be qualified to participate in advanced training at the dealer level. This program complies with our national Automotive Service Excellence (ASE) certification through the accreditation body: National Automotive Teachers Education Foundation (NATEF), through which the Automotive department maintains certification every five years.

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 computer circuits and systems.

The minimum time for completion 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 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

Construction Certificate of Achievement

This Construction Certificate of Achievement prepares students to enter the construction field with all the necessary skills to perform entry level work as well as have a thorough understanding of theory so they will be qualified to participate in advanced training. Students completing this certificate will be qualified for employment in both union and non-union companies where construction 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 and materials to plan and execute construction projects.
- Apply construction skills to a variety of construction projects.
- Describe concepts and components of construction fields and building trades.

The minimum time for completion 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 Construction

Course	Units
First Semester required courses	
CNST 100 Introduction to Construction Applications	3.0
CNST 77 OSHA 30	2.0
Choose elective courses totaling at least 13 units	
CNST 102 Concrete Applications	3.0
CNST 103 Residential Plumbing	3.0
CNST 106 Fundamentals of the Uniform Plumbing Code	3.0
CNST 107 Blueprint Reading	3.0
CNST 108 Contractor License Preparation	3.0
CNST 109 Residential Wiring	4.0
CNST 111 Carpentry Rough Framing	3.0
CNST 112 Carpentry-Advanced Framing	3.0

CNST 113 Finish Carpentry.....	3.0
CNST 114 Custom Cabinetmaking.....	3.0
CNST 116 Furniture Making & Woodworking.....	3.0
CNST 118A Adv. Project Furniture Making I.....	3.0
CNST 118B Adv. Project Furniture Making II.....	3.0
CNST 128 Introduction to the National Electrical Code.....	2.0
CNST 129 Intermediate National Electrical Code.....	2.0
CNST 131 Advanced National Electrical Codes.....	2.0
Total:	18.0

BIOLOGY

Science Core for Nursing Certificate of Achievement

Registered nurses (RNs) provide and coordinate patient care, educate patients and the public about various health conditions, and provide advice and emotional support to patients and their family members. Registered Nurses usually take one of three education paths: a Bachelor of Science degree in nursing (BSN), an associates degree in nursing (ADN) or a diploma from an approved nursing program. All of these types of programs require students to take a series of prerequisites prior to entry. Depending on the program various paths that may include courses in speech, communication, statistics, English and psychology may be required. However, all programs require the successful completion of a core set of science courses including courses in Anatomy, Physiology and Microbiology. This program is designed to ensure the successful completion of these key courses as well as providing a fundamental background for successful completion of the scientific portion of the ATI Test of Essential Academic Skill (TEAS).

Learning Outcomes

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

- Articulate the structure function relationships within the human body.
- Differentiate between commonly encountered infectious and non-infectious disease states in humans.
- Evaluate the impacts of society and the environment on human health outcomes.
- Apply basic laboratory skills and analytical methods to test a scientific hypothesis.
- Critique health-care related scientific information based on the strength and quality of the supporting evidence

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 Science Core for Nursing

Course	Units
Required Courses	
CHEM 32 Introduction to Medical Chemistry.....	4.0
or CHEM 101A General College Chemistry	6.0
BIO 108 General Human Anatomy	4.0
BIO 112 Introduction to Human Physiology.....	4.0
BIO 120 Introduction to Microbiology	4.0
Total:	16.0 – 18.0

BUSINESS

Associate in Sciences in Supervision and Management Program (AS)

The Supervision and Management Program (SAM) is designed to comprehensively cover the major aspects of supervision and management necessary to advance and succeed in the business economy. Course work will cover the basic business management skills with emphasis on human relations, leadership, and communications designed to meet the needs of those who are (1) preparing for supervisory positions, (2) seeking advancement opportunities, and (3) planning to own and operate their own business. This program prepares students to move into positions as supervisors, team leaders, or managers. Students will become proficient in problem solving, decision-making, communicating, managing people, working in groups and teams, and understanding and applying basic managerial skills.

Learning Outcomes

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

- Use the functions and roles of management to achieve organizational success.
- Apply theories of behaviors to workplace situations.
- Apply effective communication skills.
- Determine the appropriate human resources procedures and processes for various situations.
- Integrate critical thinking and problem solving in making strategic decisions.
- Discuss practices to minimize bias and promote equity in the workforce.
- Maintain and improve technological and interpersonal skills for professional development.

Advisory: ESL 188 or ENGL 88 or placement in ENGL 1A

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 Supervision and Management Program

Course	Units
Required Courses	
MGT 231 Introduction to Supervision and Management.....	3.0
MGT 232 Organizational Behavior for Supervisors	3.0
MGT 233 Human Resources Management.....	3.0
MGT 234 Communication for Business Management	3.0
MABS 60 Introduction to Computer Applications for Business.....	3.0
GNBS 100 Essential Skills for Business Professionals.....	1.0
Choose one of the following courses:	
MGT 235 Organizational Leadership	3.0
MGT 236 Women Leaders at Work	3.0
Total:	19.0

CINEMA

Associate in Arts in Film Studies (AA)

The Film Studies major provides students with critical thinking skills and various perspectives on historical and contemporary media forms. The major teaches close study of media in social, cultural, political, aesthetic and technological contexts to promote the understanding of film as a crucial element of the global environment. The AA prepares students for transfer to upper division film/cinema programs at four-year colleges and universities.

Learning Outcomes

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

- Apply media literacy through critical, analytical, and argumentation skills and independent research.
- Analyze formal elements of film to critically assess the language of cinema.
- Evaluate the ways in which film is influenced and shaped by individuals, movements, institutions and technologies.

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 Film Studies

Course **Units**

Required 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
CINE 21 Introduction to Film Studies.....	3.0

Choose one of the following film studies courses:

CINE 19 Documentary, Digital Media and Society.....	3.0
CINE 22 The Documentary Tradition.....	3.0
CINE 23A Films of Alfred Hitchcock.....	3.0
CINE 23B Focus on Film Noir.....	3.0

Choose one of the following electives:

ASAM 30 Asian American Issues Through Film.....	3.0
ASIA 30 Manga and Anime.....	3.0
BCST 101 Media Literacy.....	3.0
BCST 103 Mass Media and Society.....	3.0
CINE 24 Basic Film Production.....	4.0
CMST 8 Rhetoric of Popular Culture.....	3.0
ENGL 61 Literature and Film.....	3.0
IDST 14 American Cultures in Literature and Film.....	3.0
LGBT 11 Film Expression: History of Queer Film.....	3.0
LGBT 12 Contemporary LGBTQ Film.....	3.0
LGBT 75 Queer Cinema in the 1970s.....	3.0
PHST 30 Philippine Society and Culture Through Film.....	3.0
WGST 10 Women and Film.....	3.0

Total:.....**18.0 – 19.0**

Cinema Foundations Certificate of Achievement

This Certificate provides foundational elements of motion picture concepts, production and post-production. Upon completion students will have the essential tools to take back to their current or new employment, thrive in a 4-year program, obtain entry-level work in the field and/or execute their own independent projects.

Learning Outcomes

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

- Operate camera, lighting and sound equipment in accordance with industry standards.
- Utilize post-production techniques to produce narrative films with picture, sound and editing.
- Apply pre-production, production and post-production skills to film production workflow.

In the first semester CINE 24, 25 and 60 may be taken concurrently.

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 Cinema Foundations

Course	Units
Required courses:	
CINE 24 Basic Film Production.....	4.0
CINE 25 Narrative Filmmaking	3.0
CINE 54 Cinematography & Lighting	3.0
CINE 60 Sound for Motion Pictures I	3.0
Choose one of the following editing courses:	
BCST 144A Video Editing Premiere Intro	4.0
CINE 56 Introduction to Digital Film Editing	4.0
Total:	17.0

Cinematography Certificate of Achievement

The Cinematography certificate provides students with well-rounded technical skills in camera and lighting techniques and aesthetics grounded in film studies. The curriculum provides students with experience with advanced camera, grip and lighting gear as students learn to use these to tell stories and move viewers. Students who complete this certificate will be prepared for entry level positions in commercial and independent narrative, documentary, music video or corporate production as director/producers, cinematographers, gaffers, grips, set electricians and audio video technicians.

Learning Outcomes

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

- Apply cinematography fundamentals for film and video.
- Collaborate in a group to plan and execute a dramatic scene, functioning in the role of producer, director, director of photography and editor.
- Demonstrate expressive use of composition, lens choice, lighting and camera movement.

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 Cinematography

Course	Units
Required courses:	
CINE 21 Introduction to Film Studies	3.0
CINE 24 Basic Film Production.....	4.0
CINE 25 Narrative Filmmaking	3.0
CINE 54 Cinematography & Lighting	3.0
CINE 56 Introduction to Digital Film Editing	4.0
CINE 74 Advanced Cinematography and Lighting	3.0
Total:	20.0

Directing Certificate of Achievement

The Directing Certificate provides a strong foundation in narrative filmmaking focusing on the role and responsibilities of the Director from creation of shooting scripts to optimizing collaborative skills with set crew and talent. Completion prepares students for upper division film work at a 4-year university, entry-level work in the field or applicable creative and professional assets to utilize in creative work environments.

With completion of this Certificate entry-level employment opportunities may include: Production Assistant, Script Reader/Development Assistant, Casting Director (Assistant), Choreographer Trainee, Assistant to the Director, Assistant Director Music Video Director, Assistant to the Producer, Production Design Intern/Assistant, Independent Filmmaker.

In the first semester CINE 24, 25, 30, 75 and TH A 154A can be taken concurrently. College-level English preparedness is strongly advised.

Learning Outcomes

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

- Apply knowledge of continuity, shooting styles, and editing methods to direct narrative films.
- Analyze crew roles and interpret results during the film production phase.
- Identify, analyze and solve performance issues through script analysis and establishing performance guidelines
- Apply technical and communication skills to work effectively on a film set
- Analyze and formulate shot lists to prepare a film for production.

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 Directing

Course	Units
Required courses:	
CINE 24 Basic Film Production.....	4.0
CINE 25 Narrative Filmmaking	3.0
CINE 30 Production Planning.....	3.0
CINE 54 Cinematography & Lighting	3.0
CINE 131 Directing Motion Pictures.....	3.0
Choose one of the following elective courses:	
CINE 75 Screenwriting	3.0
TH A 154A Beginning Acting For The Camera.....	4.0
Total:.....	19.0 – 20.0

Film Studies Certificate of Achievement

The Film Studies Certificate of Achievement teaches students to think critically about the culture, aesthetics, and technology of film and media. The expansive curriculum of the certificate develops an understanding of media production as a global enterprise. The certificate prepares students for further study in the Film Studies AA major and transfer to upper division film/cinema programs at four-year colleges and universities.

Learning Outcomes

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

- Apply media literacy through critical, analytical, and argumentation skills and independent research
- Analyze formal elements of film to critically assess the language of cinema
- Evaluate the ways in which film is influenced and shaped by individuals, movements, institutions and technologies

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. The majority of required courses for the certificate are offered online in the Spring, Summer, and Fall semesters.

Courses Required for the Certificate of Achievement in Film Studies

Course	Units
Required courses:	
CINE 20A Film History: Evolution of Film Expression.....	3.0
CINE 20B Film History: Contemporary Film Expression	3.0
CINE 21 Introduction to Film Studies	3.0
Choose 6 units from the following Film History/Studies elective courses:	
CINE 18 American Cinema.....	3.0
CINE 19 Documentary, Digital Media and Society	3.0
CINE 22 The Documentary Tradition	3.0
CINE 23A Films of Alfred Hitchcock.....	3.0
CINE 23B Focus on Film Noir.....	3.0
Choose 3 units from the following elective courses:	
ASAM 30 Asian American Issues Through Film.....	3.0
ASIA 15 Asian Societies and Cultures through Film	3.0
ASIA 30 Manga and Anime	3.0
BCST 101 Media Literacy.....	3.0
BCST 103 Mass Media and Society	3.0
CINE 24 Basic Film Production.....	4.0
CMST 8 Rhetoric of Popular Culture.....	3.0
ENGL 61 Literature and Film	3.0
IDST 14 American Cultures in Literature and Film	3.0
LGBT 11 Film Expression: History of Queer Film.....	3.0
LGBT 12 Contemporary LGBTQ Film	3.0
LGBT 75 Queer Cinema in the 1970s.....	3.0
PHST 30 Philippine Society and Culture Through Film	3.0
WGST 10 Women and Film.....	3.0
Total:.....	18.0 – 19.0

Scriptwriting Certificate of Achievement

The Scriptwriting Certificate of Achievement provides students with knowledge of and skills in scriptwriting for a broad range of media, including non-fiction and narrative film, broadcast, radio, electronic media, and journalism. Students gain knowledge of professional formats, research methods, story elements, visual grammar, and aesthetic considerations, in the course of developing scriptwriting skills specific to each format. With a required curriculum that spans writing for narrative and non-fiction film and electronic media, and cross-departmental electives, the Certificate expands students' understanding of historical, cultural, and political contexts, and of informational, entertainment and persuasive uses of media, providing solid grounding for continued education at a 4-year university and for entry-level employment as scriptwriters, content developers, story editors, and writer/producers.

With completion of this Certificate possible entry-level employment opportunities include: Broadcast Journalist, Video Writer/Producer for cultural, educational, informational and commercial applications, Computer App Writer/Producer, Advertising Copywriter, Writer/Designer of website narratives, Content Developer, Documentarian, Screenwriter, Independent Filmmaker, Game writer/designer/story editor/storyboard artist.

Learning Outcomes

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

- Apply basic principles of cinematic storytelling
- Evaluate historically and culturally significant film narratives
- Create original scripts and screenplays
- Revise the structure of original scripts and screenplays

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 Scriptwriting

Course	Units
Required courses:	
CINE 72 Nonfiction Scriptwriting.....	3.0
CINE 75 Screenwriting	3.0
CINE 85 Advanced Screenwriting.....	3.0
BCST 110 Introduction to Writing for Electronic Media.....	3.0
Select one of the following Film History/Studies courses:	
CINE 18 American Cinema.....	3.0
CINE 19 Documentary, Digital Media and Society	3.0
CINE 20A Film History: Evolution of Film Expression.....	3.0
CINE 20B Film History: Contemporary Film Expression	3.0
CINE 21 Introduction to Film Studies	3.0
CINE 22 The Documentary Tradition	3.0
CINE 23A Films of Alfred Hitchcock.....	3.0
CINE 23B Focus on Film Noir.....	3.0
Choose one of the following elective courses:	
ASAM 30 Asian American Issues Through Film.....	3.0
BCST 104 Race and Media.....	3.0
ENGL 35A Introduction to Writing Fiction.....	3.0
ENGL 35G Introduction to Writing Creative Nonfiction	3.0
ENGL 51 The Graphic Novel as Literature.....	3.0
ENGL 61 Literature and Film	3.0
IDST 14 American Cultures in Literature and Film	3.0
LBCS 104A Work Tales- Beginning Performance	3.0
LGBT 12 Contemporary LGBTQ Film	3.0
PHST 30 Philippine Society and Culture Through Film	3.0
TH A 171A Beginning Storytelling and Performance	3.0
VMD 166 Storytelling and Storyboarding	3.0
Total:.....	18.0

LIBRARY INFORMATION TECHNOLOGY

Library Information Technology Certificate of Achievement

The certificate in Library Information Technology is designed for those already holding academic degrees (Associate or higher) who seek paraprofessional employment or advancement in a library or related information service agency; or those seeking an introduction to libraries and information services in anticipation of further study in library science.

The course of study includes instruction in library organization and services; standard reference materials; supervision; computer applications; the acquisition, processing, and cataloging of print and non-print materials, legal, medical and business resources, and practical experience in a library or resource center. Students are encouraged to augment study with courses from other college departments such as office systems, visual media design, or computer networking and communications technologies.

Library support staff are taking on greater responsibilities in all types of libraries. Students should assume entry-level library work early in their studies although there are opportunities to advance within library systems. Those who complete the curriculum may find advantages in civil service with federal, state, county, and city agencies.

Learning Outcomes

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

- Explain the acquisition, description, storage, retrieval and use of library information products and services.
- Analyze problems of information access for various populations, within legal and ethical contexts.
- Apply technical and practical skills and functions in the use of library resources and for library and related employment.
- Evaluate the quality of information products and services, both for agency purchase and for practical or academic use.
- Explain management structures, employment needs and entry-level job expectations in library and information workplace environments.

Courses from other institutions may transfer, but half of all work should be completed at City College of San Francisco. All coursework must be taken within a ten-year period.

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 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 3 units from the following course electives:

LIBR 57 Internet Research Strategies.....	2.0
LIBR 58A Legal Resources and Libraries	1.0
LIBR 58B Medical Resources and Libraries.....	2.0
LIBR 58C Business Resources and Libraries.....	2.0
LIBR 59 Library Work Experience.....	3.0

Recommended additional coursework may be taken for skills development in WOPR, MABS, CNIT, VMD, or CMST, or for sophistication in the arts, social sciences and humanities.

Total:..... 18.0

WORLD LANGUAGES AND CULTURES

French Certificate of Achievement

The Certificate of Achievement in French fulfills requirements for transfer to UC and CSU and shows the attainment of an intermediate level of competency in French.

Learning Outcomes

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

- Interpret the main points of standard spoken and written French relating to everyday matters.
- Communicate in spoken French using a range of vocabulary, language functions, and sentence structures.
- Write simple connected text using a range of intermediate French vocabulary, grammar, and sentence structures.
- Compare aspects of French and Francophone 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 Achievement in French

Course	Units
Required courses: FREN 3 or FREN 3A+3B	
FREN 3 Intermediate French.....	5.0
or FREN 3A Intermediate French	3.0
and FREN 3B Intermediate French.....	3.0
Choose at least 11 units from the following courses:	
FREN 1 Elementary French.....	5.0
or FREN 1A Elementary French	3.0
and FREN 1B Elementary French	3.0
FREN 2 Continuation of Elementary French	5.0
or FREN 2A Continuation of Elementary French.....	3.0
and FREN 2B Continuation of Elementary French	3.0
FREN 4 Cont. of Intermediate French.....	3.0
FREN 5 Advanced French: Conversation on French Literature and Culture	3.0
FREN 22 Grammar Review and Composition.....	3.0
FREN 23 French Phonetics.....	3.0
FREN 10A Beginning Conversational French	3.0
FREN 10B Continuation of Beginning Conversational French.....	3.0
FREN 10C Intermediate Conversational French	3.0
FREN 10D Intermediate Conversational French	3.0
FREN 10E Continuation of Intermediate Conversational French	3.0
FREN 11A Advanced Conversational French	3.0
FREN 11B Advanced Conversational French	3.0
FREN 15A Continuation of Advanced Conversational French.....	3.0
FREN 15B Continuation of Advanced Conversational French.....	3.0
FREN 41 Culture and Civilization of France.....	3.0
FREN 42 Contemporary French Culture and Civilization.....	3.0
Total:.....	16.0 – 17.0

Updated Programs

The following programs have been updated.

Department	Program	Effective Date
Broadcast Electronic Media Arts	Certificate of Achievement in Live Sound	Fall 2019
Broadcast Electronic Media Arts	Certificate of Achievement in Video Editing and Post Production	Fall 2019
Culinary Arts and Hospitality Studies	Associate in Science in Food Service Management (AS)	Fall 2019
Earth Sciences	Associate in Science in Geology for Transfer (AS-T)	Fall 2019
Radiologic Sciences	Associate in Science in Diagnostic Medical Imaging (AS)	Fall 2019

BROADCAST ELETRONIC MEDIA ART

Video Editing and Post Production Certificate of Achievement

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,

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advertising, public relations, multimedia, education, music, theater, film, entrepreneurial projects and media departments of agencies, businesses, and institutions.

Learning Outcomes

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

- Plan and implement the aesthetic and technical elements of video programs through pre-production and post-production stages in the context of video editing and finishing.
- Produce content working in a variety of professional roles in the context of post-production.
- Apply a variety of video editing techniques related to story content and intent.
- Use color correction, audio finishing, and simple motion graphic techniques to effectively finish a video program
- Display professionalism and effective application of workforce protocol and communication skills in the video editing and post production industry.

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

Course Units

Required Courses: Courses may be taken in any order. Prerequisites may apply.

BCST 124A Pro Tools Editing Essentials..... 2.0

BCST 147 Advanced Video Editing 4.0

Choose two of the following video editing courses:

BCST 143A Avid Video Editing Beginning 4.0

BCST 143B Avid Video Editing Intermediate 4.0

BCST 144A Video Editing Premiere Intro 4.0

BCST 144B Video Editing Premiere Intermediate 4.0

Choose one of the following advanced courses:

BCST 146A Video Motion Graphics..... 4.0

BCST 149 HDTV Field Production..... 4.0

Choose 2 units from the following internship courses:

BCST 160 College Internship 2.0

BCST 165 Industry Internship..... 2.0

Total:..... 18.0

Live Sound Certificate of Achievement

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

Course Units

Required courses:

BCST 124A Pro Tools Editing Essentials.....	2.0
BCST 124B Pro Tools Mixing with Plugins.....	2.0
BCST 125A Beginning Sound Recording Studio.....	5.0
BCST 127B Interconnected Audio Systems.....	1.0
BCST 128 Sound Reinforcement.....	3.0

Choose 2 units from the following internship courses:

BCST 160 College Internship	1.0 - 2.0
BCST 165 Industry Internship.....	1.0 - 2.0
Total:.....	15.0

CULINARY ARTS AND HOSPITALITY STUDIES

Associate in Science in Food Service Management (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
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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 1.....	4.0
CAHS 10NL Culinary Fundamentals 1 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
CAHS 42 Fundamentals of Hospitality Financial Reports.....	3.0
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 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

EARTH SCIENCES

Associate in Science in Geology for Transfer (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 units for the major as specified below. Each course in the major must be completed with a grade of “C” or better. Courses used to meet the major requirement may also be used to meet IGETC or CSU GE requirements.

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

Courses Required for the AS-T in Geology

Course **Units**

Required courses:

GEOL 10 Physical Geology	3.0
GEOL 10L Physical Geology Lab	2.0
GEOL 11 Historical Geology.....	3.0
GEOL 11L Historical Geology Lab.....	1.0
CHEM 101A General College Chemistry	6.0
CHEM 101B General College Chemistry	5.0
MATH 110A Calculus I	5.0
MATH 110B Calculus II	5.0

RECOMMENDED: One of the following physics courses

PHYC 4A Classical Mechanics for Scientists and Engineers.....	3.0
PHYC 4AL Mechanics Laboratory for Scientists and Engineers	1.0
PHYC 4B Electromagnetism for Scientists and Engineers	3.0
PHYC 4BL Electromagnetism Laboratory for Scientists and Engineers.....	1.0
or PHYC 2A Introductory Physics	3.0
PHYC 2AL Introductory Physics Laboratory.....	1.0
PHYC 2B Introductory Physics	3.0
PHYC 2BL Introductory Physics Laboratory.....	1.0

* (NOTE: Students who want to increase their opportunities should choose Physics 4A/B series instead of 2A/B (especially if they plan to major in geochemistry or geophysics).

RECOMMENDED: One or more of the following course options for specialization:

GEOL 21A San Francisco Coastal Geology.....	0.5
GEOL 21B San Francisco Geology	0.5

GEOL 21C The San Andreas Fault System	0.5
OCAN 1 Oceanography.....	3.0
GEOL 30 Environmental Geology.....	3.0
Recommended additional activities:	
Enroll in the Earth Sciences Club	
Become part of the Earth Sciences Mentoring Program (see Department website for details).	
Total:.....	30.0

RADIOLOGIC SCIENCES

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
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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 56 Radiographic Pathology..... 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