



OFFICE OF INSTRUCTION

Curriculum/Tenure Review/Faculty Evaluation & Catalog

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Catalog Update for 2017-18 College Catalog

Last Updated: January 31, 2018

Programs

The following programs shall be considered included in the 2017-18 College Catalog, with the effective dates noted below.

Department	Program	Effective Date
Broadcast Electronic Media Arts	Certificate of Achievement in Broadcast Motion Graphics - REVISED	Spring 2018
Broadcast Electronic Media Arts	Certificate of Achievement in Convergent Media Production - REACTIVATED	Spring 2018
Broadcast Electronic Media Arts	Certificate of Achievement in Television Production - REVISED	Spring 2018
Computer Science	Certificate of Accomplishment in Android App Programming- REACTIVATED	Spring 2018
Engineering and Technology	Certificate of Accomplishment in Stem Cell Technology - REVISED	Spring 2018
Health Care Technology	Certificate of Achievement in Medical Clinic Assisting - NEW	Spring 2018
Photography	Certificate of Accomplishment in Motion Photography - Studio- REACTIVATED	Spring 2018

BROADCAST ELECTRONIC MEDIA ARTS

Broadcast Motion Graphics Certificate of Achievement

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.

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Learning Outcomes

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

- Analyze, plan, edit and manage the creative and technical elements of broadcast and video effects and motion graphics workflow.
- Work in a variety of areas within the television and video production process as a motion graphics and special effects assistant.
- Display professionalism and understanding of the video industry, workforce protocol and communication skills.

Admission Requirement: Students must earn a Certificate of Accomplishment in Foundations in Broadcast Electronic Media Arts.

Completion Requirements: Students must complete each course with a grade of “C” or higher. Students must complete 4 of 5 courses listed below at City College of San Francisco. All courses must be 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 Broadcast Motion Graphics

Course.....	Units
Required courses:	
BCST 140 Studio Video Production.....	3.0
BCST 146 Video Motion Graphics.....	4.0
BCST 148 HDTV Studio Production.....	4.0
Choose one of the following video editing courses:	
BCST 143 Digital Video Editing AVID.....	4.0
BCST 144 Digital Video Editing: FCP & Premiere.....	4.0
Choose one of the following internship courses:	
BCST 160 College Internship.....	1.0
BCST 165 Industry Internship.....	1.0
Recommended additional coursework:	
BCST 147 Advanced Digital Video Editing.....	4.0
BCST 149 HDTV Field Production.....	4.0
VMD 120 Graphic Design I.....	3.0
VMD 150 Illustrator I.....	3.0
VMD 154 Photoshop I.....	3.0
Total:	16.0

Convergent Media Production Certificate of Achievement

This certificate focuses on multi-platform and multi-format production concepts, techniques, and technologies using audio, video, web, and storytelling for interactive digital convergent media production.

Learning Outcomes

Upon completion of this 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, manage and complete professional digital video and audio projects using industry standard software and equipment.

- Develop, implement and manage creative storytelling across platforms and devices.
- Create a distribution and promotional plan for a convergent media product.
- Use critical thinking skills to analyze and critique projects, provide constructive criticism and communicate complex ideas clearly, both in written and verbal form.
- Display professionalism and understanding of workforce protocol in communication and behavior.

Students must complete each course with a final grade of “C” or higher.

All courses must be completed within the last six years.

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
First semester required courses:	
CMST 8 Rhetoric of Popular Culture	3.0
VMD 103 Content and Form	3.0
First semester: choose one of the following digital media skills courses:	
BCST 119 Digital Media Skills	2.5
VMD 105 Visual Media Digital Skills	3.0
First semester: choose one of the following video production courses:	
BCST 140 Studio Video Production.....	3.0
BCST 141 Field Video Production	3.0
Second semester required courses:	
BCST 120 Audio Production	4.0
VMD 140 Web Production I	3.0
VMD 191 Social Media for Professionals	1.0
Second semester: choose one of the following writing courses:	
BCST 110 Introduction to Writing for Electronic Media	3.0
CINE 75 Screenwriting.....	3.0
JOUR 22 Feature Writing.....	3.0
Second semester: choose one of the following digital video editing courses:	
BCST 143 Digital Video Editing AVID.....	4.0
BCST 144 Digital Video Editing: FCP & Premiere.....	4.0
Third semester required courses:	
BCST 135 Audio for the Web.....	1.0
BCST 136 Video for the Web.....	1.0
BCST 146 Video Motion Graphics	4.0
VMD 141 Web Production II	3.0
JOUR 26 Fundamentals of Public Relations	3.0
Third semester: choose one of the following audio courses:	
BCST 124 Digital Audio Production	4.0
BCST 126 Sound for Visual Media	4.0
Fourth semester required courses:	
BCST 159 Digital Media Portfolio	1.0
VMD 127 User Experience	3.0
Fourth semester: choose one of the following courses:	
BCST 148 HDTV Studio Production	4.0
BCST 149 HDTV Field Production.....	4.0
CINE 40 Film Festival	3.0
JOUR 29 Magazine Editing and Production	3.0

Fourth semester: choose one of the following internship courses:

BCST 160 College Internship	1.0-2.0
BCST 165 Industry Internship.....	1.0-2.0

Fourth semester: choose 6 units from the following elective courses (all of these are recommended additional coursework):

BCST 125A Beginning Sound Recording Studio.....	5.0
BCST 128 Sound Reinforcement.....	3.0
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 56 Introduction to Digital Film Editing.....	4.0
CINE 60 Sound for Motion Pictures I.....	3.0
CINE 72 Nonfiction Scriptwriting.....	3.0
CINE 136 Special Effects.....	3.0
MUS 29 Electronic Music.....	3.0
MUS 30 Electronic Music Laboratory.....	3.0
PHOT 51 Beginning Photography.....	3.0
PHOT 57 Photography for the Web.....	3.0
PHOT 102B Documentary/News Photography.....	2.0
VMD 120 Graphic Design I.....	3.0
VMD 130 Typography I.....	3.0
VMD 126 Design for Interactive Media.....	4.0
VMD 152 InDesign I.....	3.0
VMD 153 InDesign II.....	3.0
VMD 154 Photoshop I.....	3.0
VMD 155 Photoshop II.....	3.0
VMD 166 Storytelling and Storyboarding.....	3.0
VMD 180 Exploring Game Worlds.....	3.0
VMD 184 Team Production of Games.....	3.0
Total:	56.5 – 60.0

Television Production Certificate of Achievement

The Television Production Certificate builds on the Foundations in Broadcast Electronic Media Arts Certificate with an emphasis in audio post production. This certificate provides basic video production skills including instruction in pre-production planning, audio and video production competency, program completion and distribution via broadcast, tape, disc and the Internet. Students completing this certificate program will be qualified for entry-level employment in video production for television, advertising, public relations, multimedia, education, music, theater, entrepreneurial projects and media departments of agencies, businesses, and institutions.

Learning Outcomes

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

- Plan, implement, and manage 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.
- Demonstrate knowledge of major audio-visual script formats as well as a familiarity with the basic vocabulary of videography, including basic shots, angles, editing transitions, and camera movements.

- Demonstrate professionalism and understanding of the television and video industry’s workforce protocol and communication skills.

This is the second in a series of stackable certificates. Students must earn a Certificate of Accomplishment in Foundations in Broadcast Electronic Media Arts before earning this certificate.

Students must complete at least 4 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 Television Production

Course.....	Units
Core courses:	
BCST 140 Studio Video Production.....	3.0
BCST 141 Field Video Production	3.0
Choose one of the following video editing courses:	
BCST 143 Digital Video Editing AVID.....	4.0
BCST 144 Digital Video Editing: FCP & Premiere.....	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 one of the following internship options:	
BCST 160 College Internship	2.0
BCST 165 Industry Internship.....	2.0
Recommended additional coursework:	
BCST 115 Announcing and Performance.....	3.0
Total:	17.0

COMPUTER SCIENCE

Android App Programming Certificate of Accomplishment

This certificate is designed to teach students how to program native apps (mobile device applications) to run on Android phones and tablets. Students learn the basics of programming in Java, and the specifics of how to program for Android devices. Students completing this certificate program will be qualified for employment as entry-level app developers and quality assurance technicians.

Learning Outcomes

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

- Analyze a problem and interpret technical specifications to create and program appropriate algorithmic solutions that include the use of control structures, parameters, and return values.
- Design and implement abstract data types using classes, encapsulation, inheritance, polymorphism, exceptions, events, multithreading, collections, and generics.
- Create User Interfaces (UIs) using controls, layout managers, adaptors, menus, and dialogues.
- Implement Android applications incorporating activities, services, content providers, broadcast receivers, location tracking, maps, and Internet access.

- Use SQLite for database storage, Media Player, and telephony APIs.

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

Courses Required for the Certificate of Accomplishment in Android App Programming

Course	Units
Required courses:	
CS 111A Introduction to Programming: Java	4.0
CS 111B Programming Fundamentals: Java	4.0
CS 211S Advanced Java: Standard Edition	3.0
CS 211D Android Programming	3.0
CS 311D Advanced Android Programming	3.0
Recommended additional coursework:	
CS 160A Introduction to Unix/Linux	2.0
CS 155A MySQL Databases	3.0
CS 111C Data Structures and Algorithms: Java.....	4.0
CNIT 133M Mobile Web w/HTML, CSS & JS	3.0
CNIT 133 JavaScript, jQuery, AJAX	3.0
CS 142 Programming Techniques for XML	3.0
CNIT 131A XML and JSON	3.0
Total:	17.0

ENGINEERING AND TECHNOLOGY

Stem Cell Technology Certificate of Accomplishment

Students in the Stem Cell Technology certificate program will be prepared to work at a biotech company or an academic research lab as a technician in mammalian cell culture or adult and embryonic stem cell culture.

Learning Outcomes

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

- Utilize proper aseptic technique in laminar flow hood and laboratory bench.
- Apply skills in culturing and maintaining mammalian cells including stem cells.
- Formulate and apply knowledge of fluorescent markers and stains in cell biology research.
- Evaluate and apply methods of quantifying and analyzing cellular proteins and nucleic acids.
- Apply knowledge of industry regulations and processes.

The Stem Cell Technology certificate is designed for students that have a strong grasp of algebra, biology, and chemistry from previous academic or work experience. The following courses (or the equivalent) are strongly recommended: One semester of elementary algebra or completion of a higher level math class, two semesters of general chemistry and one semester of general biology.

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

Courses Required for the Certificate of Accomplishment in Stem Cell Technology

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.....	1.0
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 22 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

HEALTH CARE TECHNOLOGY

Medical Clinic Assisting Certificate of Achievement

Students who complete this certificate successfully are prepared to hold positions as clinic assistants. Students have the option of completing additional courses for a Certificate of Achievement in Medical Assisting. Students receive training in anatomy and physiology, medical terminology, computer applications and administrative procedures, the electronic health record, disease processes, communication and professionalism, and clinical procedures. Students will complete an internship and must hold a valid CPR Health Provider card and a HIPAA Awareness Training certificate.

Learning Outcomes

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

- Practice infection control and adhere to OSHA regulations.
- Perform clinical procedures effectively, including injections and skin punctures, laboratory tests, and diagnostic studies.
- Use computer applications to create documents, communicate with, and support patients and staff.
- Collaborate in a culturally diverse health care environment, applying the principles of health care ethics and professional conduct.

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

Courses Required for the Certificate of Achievement in Medical Clinic Assisting

Course.....	Units
First semester required courses:	
ANAT 14 Introduction to Human Anatomy and Physiology.....	4.0
HIT 50A Medical Terminology I.....	3.0
HCT 67 Computer Applications in the Health Care Setting.....	2.0
MED 56 Administrative Procedures.....	3.5
MED 62 Communication and Professionalism in Health Care.....	2.0
Second semester required courses:	
MED 49 Clinical Procedures.....	5.5
HIT 57 Disease Process.....	3.0
MED 55 The Electronic Health Record.....	4.0
HCT 82 Professional Practice Internship/Certification.....	5.0
Total:	32.0

PHOTOGRAPHY

Motion Photography - Studio Certificate of Accomplishment

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.

ADVISE: ESL 160 or ENGL 93 or ENGL 95 or ENGL 88 or ENGL 88A or placement in ENGL 93 or ENGL 88 or ENGL 88A

Students must complete each course with a grade of C or higher. Students must complete at least 4 courses listed below at City College of San Francisco. All courses must be taken 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 - Studio

Course..... Units

Required Courses

PHOT 51 Beginning Photography*	3.0
BCST 119 Digital Media Skills*	2.5
PHOT 85A Beginning Lighting Techniques	4.0
BCST 140 Studio Video Production.....	3.0
BCST 144 Digital Video Editing: FCP & Premiere.....	4.0
PHOT 52 Photographers and Their Images	1.0

* Students may challenge this requirement by showing a college transcript or passing a challenge test.

Recommended Additional Coursework

BCST 135 Audio for the Web.....	1.0
BCST 136 Video for the Web.....	1.0
PHOT 99 Business Practices of Photography	3.0
PHOT 85B Advanced Studio Lighting Tech.....	4.0
PHOT 90 Portraiture	4.0
PHOT 93 Editorial Photography.....	2.0
PHOT 57 Photography for the Web	3.0
or BCST 159 Digital Media Portfolio	1.0
Total:	17.5

Error Correction

The Construction Management: Core Skills Certificate of Accomplishment in the 17-18 print catalog contains an error. The corrected version is below:

Construction Management: Core Skills Certificate of Accomplishment

The Certificate of Accomplishment 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. All courses required for the Certificate Program are also required for the Associates in Science Degree Program making it easier for students to continue their studies to enhance their opportunities for career advancement. Students may receive a Certificate of Accomplishment in Construction Management: Core Skills by completing the courses required by the certificate program with a final grade of "C" or higher. Pass/No Pass grades will not be accepted towards completion of a certificate program.

Learning Outcomes

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

- Estimate, organize and manage construction project resources through the use of cost estimates and schedules.
- Manage and control construction work activities utilizing project control methodologies and quality control and assurance techniques.
- Analyze and interpret construction documents.
- Assess the role of material selection and structures in the field of construction management.
- Assess the contractual and regulatory considerations and restraints associated with the administration of a construction project.
- Manage a construction project utilizing computer software.
- Assess effective methods of communication in a professional work environment.

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

Required courses:

CM 100 - Fundamentals of Construction Management.....	3.00
CM 110 - Construction Graphics.....	3.00
CM 240 - Construction Cost Estimating.....	3.00
CM 244 - Construction Scheduling	3.00
CM 248 - Construction Project Administration	3.00
Total.....	15.00

Time Conflict/Overlapping Courses

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

- The students must provide sound justification other than mere scheduling convenience.
- The instructor and the school dean must review the justification and approve the request to enroll in the overlapping class.

- The students must make up the hours of overlap under the supervision of the instructor of the course.
- The instructor and the student must maintain documentation of the made-up hours.

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

Enrollment Limitations

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

Students wishing to enroll in more than the maximum units allowable must receive permission form an academic counselor. Approval thy take more than eighteen (18) semester units will not be given unless students need such units to be candidates for graduation, or have completed their last full semester of work at the College with a GPA of 3.00 or higher.

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

Admissions Policy (Credit Classes)

City College has an Open Enrollment Policy. You are eligible to attend, if you meet the following requirements:

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

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

Open Enrollment Policy

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

Associate Degree Graduation Requirements - Area G Waiver

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

Accounting
Administrative Support
Aircraft Powerplant Maintenance Technology
Airframe-Maintenance Technology
Architecture
Automotive Mechanics
Avionics-Maintenance Technology
Biological Sciences
Biotechnology
Cardiovascular Technician/Echocardiography
Child Development
Cinema Production
Commercial Cut-Flower and Greenhouse Production
Computer Science
Construction Management
Culinary Arts Management
Diagnostic Medical Imaging
Earth Science
Electronic Engineering Technology
Engineering
Environmental Science
Environmental Studies
Fashion Design
Fashion Merchandising
Finance
Fire Science Technology
Floristry
Food Service Management
General Business
Geology
Graphic Design
Health Information Technology
Hotel Management
Interior Design
Journalism
Landscape Gardening and Landscape Contracting
Mechanical Engineering Technology
Medical Administrative Assisting
Medical Assisting
Nursery and Garden-Center Operation
Oceanography
Paralegal/Legal Studies
Paramedic
Photography
Registered Nursing

The following high-unit majors are NOT eligible for Area G waivers:

Dance - Performance Art
Physics

Additional options for waiving the Area G requirement.

The Area G1 Health Knowledge graduation requirement may be waived upon successful completion of a competency examination. Students should contact their counselor or program adviser for additional information.

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

Advanced Placement (AP) Exam Equivalencies

The existing General Education approvals/equivalencies were modified slightly to comply with statewide minimums established per AB 1985.

Subject	Score	CCSF General Education	CCSF Units Awarded	Course Equivalence - Only if needed for CCSF Major or Certificate
Art				
Art History	3/4/5	Area E	3	Art 101
Studio Art: Drawing	3/4/5	Area E	3	Consult with Department Chair
Studio Art: 2-D	3/4/5	Area E	3	Consult with Department Chair
Studio Art: 3-D	3/4/5	Area E	3	Consult with Department Chair
Biology				
Biology	3/4/5	Area C	4	Consult with Department Chair
Chemistry				
Chemistry	3/4/5	Area C	4	Consult with Department Chair
Computer Science				
CS "A" test	3	Area A	4	CS 111A or 110A
CS "A" test	4/5	Area A	4&4	CS 111A or 110A & CS 111B
CS "AB" test	2	Area A	4	CS 111A or 110A

Subject	Score	CCSF General Education	CCSF Units Awarded	Course Equivalence - Only if needed for CCSF Major or Certificate
CS "AB" test	3	Area A	4&4	CS 111A or 110A & CS 111B
CS "AB" test	4/5	Area A	4&4&4	CS 111A or 110A & CS 111B & CS 111C
Economics				
Macroeconomics	3/4/5	Area D	3	Econ 1
Microeconomics	3/4/5	Area D	3	Econ 3
English				
Language & Composition	3/4/5	Area B	4	English 1A
Literature & Language Comp.	3/4	Area B or E	4	English 1A
Literature & Language Comp.	5	Area B or E	4&3	English 1A & 1B
Environmental Science				
Environmental Science	3/4/5	Area C	4	Consult with Department Chair
Geography				
Human Geography	3/4/5	Area D	3	Consult with Department Chair
Government and Politics				
United States	3/4/5	Area D or F	3	Pols 1
Comparative	3/4/5	Area D	3	Pols 2
History				
U.S. History	3/4/5	Areas D & F or E & F	3&3	Hist 17A & 17B
European History	3/4/5	Areas D & E	3&3	Hist 4A & 4B
World History	3/4/5	Area D or E	3	No equivalent
Language other than English				
Chinese Language & Culture	3/4/5	Areas A & E	6	Take Foreign Language Placement Test and Consult with Department Chair
French Language & Culture	3/4/5	Areas A & E	6	See above
German Language & Culture	3/4/5	Areas A & E	6	See above

Subject	Score	CCSF General Education	CCSF Units Awarded	Course Equivalence - Only if needed for CCSF Major or Certificate
Italian Language & Culture	3/4/5	Areas A & E	6	See above
Japanese Language & Culture	3/4/5	Areas A & E	6	See above
Latin	3/4/5	Area E	3	No equivalent
Russian Language & Culture	3/4/5	Areas A & E	6	Take Foreign Language Placement Test and Consult with Department Chair
Spanish Language & Culture	3/4/5	Areas A & E	6	See above
Spanish Literature & Culture	3/4/5	Area E	6	See above
Mathematics				
Calculus AB	3/4/5	Area A & Math Grad. Requirement	5 or 3	Math 110A or 100A
Calculus BC	3/4	See above	5 or 3	Math 110A or Math 100A
Calculus BC	5	See above	(5 & 5) or 3	(Math 110A & 110B) or Math 100A
Music				
Music Theory	3/4/5	Area E	5	None
Physics				
Physics 1	3/4/5	Area C	4	Consult with Department Chair
Physics 2	3/4/5	Area C	4	Consult with Department Chair
Physics C Mechanics	3/4/5	Area C	4	Consult with Department Chair
Physics C Elect. & Magnetism	3/4/5	Area C	4	Consult with Department Chair
Psychology				
Psychology	3/4/5	Area D	3	Psyc 1
Statistics				
Statistics	3	Area A & Math Grad. Requirement	3	None
Statistics	4/5	See above	4	Math 80