

# SCC CLASS CATALOG

The official source and guide to Santiago Canyon College classes and student life

2020-2021

ISSUE 21

## SCC CELEBRATES 20 YEARS OF COLLEGIATE EXCELLENCE



As the second campus in the Rancho Santiago Community College District, Santiago Canyon College was originally called "Orange Campus". It wasn't until 2000 that SCC officially became an independently accredited college. While once a small campus with only two buildings on 30 acres, Santiago Canyon College has grown to hold 440,517 square feet of building space and is home to over 16,000 eager students ready to learn!

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### *Mission Statement*

Santiago Canyon College is an innovative learning community dedicated to intellectual and personal growth. Our purpose is to foster student success and to help students achieve these core outcomes: to learn, to act, to communicate and to think critically.

We are committed to maintaining standards of excellence and providing the following to our diverse community: courses, certificates, and degrees that are accessible, applicable, and engaging.



**WHAT HAPPENS HERE MATTERS.**



## GENERAL EDUCATION BREADTH REQUIREMENT COURSES FOR THE CALIFORNIA STATE UNIVERSITY (CSU) • PLAN B • 2020–2021

Students planning to graduate from one of the 23 campuses of the California State University must complete 48 semester units in general education breadth courses. Upon request, Santiago Canyon College will verify the completion (certify) of up to 39 units of lower-division general education requirements. Nine semester units of general education units must be completed at the upper-division level after transfer. Students are strongly encouraged to meet with a Santiago Canyon College counselor when planning to transfer to a CSU campus.

**IMPORTANT NOTE:** The list of certifiable courses is subject to change year by year, but students are assured that courses taken to meet General Education-Breadth requirements will be honored if they are approved for the academic year in which they are taken. Courses on this list are approved beginning Fall 2020 and are valid through Summer 2021.

### A. Communication in the English Language and Critical Thinking

(minimum 9 units)

The 9 units selected from this area must include at least one course from A1, A2, and A3. Each course must be completed with a grade of "C" or better. (C minus is not acceptable.)

#### A1: Oral Communication

Communication 100/100H, 101, 110, 111\*

#### A2: Written Communication

English 100, 101/101H

#### A3: Critical Thinking

Communication 111\*  
English 102\*/102H\*, 103/103H  
Philosophy 110/110H, 111  
Reading 150, 151

### B. The Physical Universe and Its Life Forms

(minimum 9 units)

Complete **ONE** course from Area B1 and **ONE** course from Area B2. One course **MUST** have a corresponding lab from Area B3. Lab courses are in **bold**. Complete **ONE** Math course from Area B4 with a grade of "C" or better (C minus is not acceptable).

#### B1: Physical Sciences

Astronomy 102, 103, 112  
Chemistry 100, 200A, 200AH  
Earth Sciences 100, 111, 120, 121, 130, 160, 200  
Geography 101/101H, 130, 130H  
Physical Science 100  
Physics 100, 150A, 150B, 250A, 250B, 250C

#### B2: Life Science

Anthropology 101  
Biology 109/109H, 115, 139, 149, 190, 211, 221, 229, 231, 239, 249, 259, 290  
Psychology 200

#### B3: Laboratory Activity

Anthropology 101L  
Astronomy 100L  
Biology 109L, 109HL, 115, 139, 149, 190L (F'17), 211, 221, 229, 231, 239, 259, 290  
Chemistry 100, 200A, 200AH  
Earth Sciences 100L, 111, 121  
Geography 101L  
Physical Science 100  
Physics 100, 150A, 150B, 250A, 250B, 250C

#### B4: Mathematics/Quantitative Reasoning

Mathematics 105, 140, 150, 170, 171, 180/180H, 203, 219/219H, 220, 287, 290, 295  
Sociology 125, 125H

### C. Arts, Literature, Philosophy, and Foreign Language

(minimum 9 units)

This area must include one course from C1, one course from C2, and a third course from either area.

#### C1: Arts (Art, Dance, Music, Theatre)

Art 100/100H, 101/101H, 102/102H  
Cinema Studies 103, 104  
Dance 100  
English 233A\*, 233B\*  
Music 101/101H, 102, 103, 104  
Theatre Arts 100

#### C2: Humanities

American Sign Language 110, 111, 116, 210  
Chinese 101, 102  
English 102\*/102H\*, 231, 232, 233A\*, 233B\*, 241, 242, 243, 246, 270, 271, 272, 278\*  
French 101, 102, 194, 201, 202  
History 101\*/101H\*, 102\*/102H\*, 132\*, 142, 152, 162  
Italian 101, 102, 194, 195, 201, 202  
Philosophy 106/106H, 108, 112, 115, 118, 120  
Spanish 101/101H, 101B\*\*, 102, 110, 111, 194, 195A, 195B, 201, 202

**\*\*Both SPAN 101A & 101B must be completed for C2 credit.**

**NOTE: The UNITED STATES HISTORY, CONSTITUTION AND AMERICAN IDEALS CSU graduation requirement may be met by completing Political Science 101/101H and one U.S. History course from the following: History 118, 120/120H, 121/121H, 122, 124, 127. These courses (in bold below) may also be used to meet 6 of the 9 units required for Area D.**

### D. Social, Political, and Economic Institutions and Behavior; Historical Background

(minimum 9 units)

**Courses must be selected from at least 2 different disciplines.**

Anthropology 100/100H, 103, 104  
Child Development 107\*, 110  
Cinema Studies 105  
Communication 120/120H, 225/225H  
Counseling 150  
Criminal Justice 101  
Economics 101, 102  
Education 101  
English 278  
Ethnic Studies 101, 110, 120, 130  
Gender, Sexuality, and Women's Studies 101, 102, 103  
Geography 100/100H, 102, 102H, 140  
History 101\*/101H\*, 102\*/102H\*, 118, 120/120H, 121/121H, 122\*, 124, 126, 127, 132\*, 133, 142, 152\*, 162\*, 240  
Interdisciplinary Studies 155\*  
Kinesiology 109  
Political Science 101/101H, 110, 150, 200, 201, 220, 221, 230  
Psychology 100/100H, 157\*, 160\*, 170, 180, 190\*, 200, 220, 230\*, 240, 250  
Sociology 100/100H, 115, 116, 120, 130\*, 150, 220, 240, 240H, 286

**+No credit for History 122 if taken after History 120/120H or 121/121H.**

### E. Lifelong Understanding and Self-Development

(minimum 3 units)

**Only one unit from E2 can be used to satisfy Area E.**

#### E1:

Counseling 101, 113, 116  
Child Development 107\*  
Interdisciplinary Studies 155\*  
Kinesiology 100, 101, 102, 104, 110, 111  
Nutrition and Food 115  
Psychology 157\*, 160\*, 190\*, 230\*  
Sociology 130\*

#### E2:

Kinesiology 119-283

### CERTIFICATION REQUIREMENTS

- No more than 30 semester units may be certified for areas B through D combined.
- Pass/No Pass grades are accepted for certification in all areas. However, letter grades may be recommended or required for specific courses in a given major. Each CSU campus may also limit the total number of units graded Pass.
- Grades of "C-" earned in Areas A1, A2, A3, and B4 can be used for certification. However, if the course double-counts to meet a major requirement, a "C" or better grade is recommended for certification.
- A single course may not meet more than one general education requirement.
- Certification of coursework from other colleges will only be granted to students who have completed a minimum of 12 units at Santiago Canyon College.
- Courses taken at other California Community Colleges will be applied to the subject areas in which they were listed by the institution where the course was completed.
- Courses taken at other regionally accredited institutions (which do not maintain a CSU certification list) may be approved for certification via a "Pass Along Petition" and after a review by the Santiago Canyon College Articulation Officer. Courses completed at foreign institutions are not acceptable for certification. Pass Along Petitions are available from the Santiago Canyon College Counseling Department and must be accompanied by the appropriate documentation.
- Requests for certification should be made during the semester prior to the last term of attendance. Please consult the class schedule or the Admissions website at [www.scccollege.edu](http://www.scccollege.edu) or the Santiago Canyon College Counseling Department for deadline information.
- Students following the Associate in Science Biology for Transfer (11856) must follow the CSU-GE for STEM and only need to complete the following CSU General Education Breadth requirements:
  - Area A – One course from areas A1, A2, and A3.
  - Area B – One course from areas B1, B2, B3, and B4
  - Area C – One course in areas C1 and C2
  - Area D – Two courses from two different disciplines in area D
  - Area E – One course from area E

- \*Courses may be listed in more than one area but will not be certified in more than one area.
- B1, B2, B3:** Courses in **bold** have laboratory activity.
- (F' YR) - Indicates the semester and year the course was approved in a general education area.





## INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC) FOR THE UNIVERSITY OF CALIFORNIA (UC) AND THE CALIFORNIA STATE UNIVERSITY (CSU) • PLAN C • 2020–2021

Completion and certification of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from Santiago Canyon College to a campus in either the CALIFORNIA STATE UNIVERSITY or the UNIVERSITY OF CALIFORNIA system without the need, after transfer, to take additional lower-division, general education courses to satisfy campus general education requirements. Completion of IGETC does not guarantee admission to a UC campus. Students are strongly encouraged to meet with a Santiago Canyon College counselor when planning to transfer to a UC campus.

**IMPORTANT NOTE:** The list of certifiable courses will be subject to change year by year, but students are assured that courses taken to meet IGETC requirements will be honored if they are approved for the academic year in which they are taken. Courses on this list are approved beginning Fall 2020 and are valid through Summer 2021.

### AREA 1—ENGLISH COMMUNICATION

- C.S.U.: 3 courses required, one from each group.  
U.C.: 2 courses required, one each from Group A and B.

#### Group A: English Composition

1 course required, minimum 3 semester units.  
English 100, 101\*/101H\*

#### Group B: Critical Thinking-English Composition

1 course required, minimum 3 semester units.  
English 102\*/102H\*, 103\*/103H\*  
Philosophy 110\*

#### Group C: Oral Communication (CSU ONLY)

1 course required, minimum 3 semester units.  
Communication 100\*/100H\*, 101, 110, 111

### AREA 2A—MATHEMATICAL CONCEPTS & QUANTITATIVE REASONING

1 course required, minimum 3 semester units.  
Math 105, 140\*, 150\*, 170\*, 171\*, 180\*/180H\*, 185, 219\*/219H\*, 220\*, 280, 287, 290, 295  
Sociology 125\*/125H\*

### AREA 3—ARTS & HUMANITIES

3 courses required, minimum 9 semester units, with at least one course from Group A and one course from Group B. Select a third course from either area.

#### Group A: Arts (minimum 3 units)

Art 100\*/100H\*, 101\*/101H (F'19)\*, 102\*/102H (F'19)\*  
Cinema Studies 103, 104  
Dance 100  
Music 101\*/101H\*, 102, 103, 104  
Theatre Arts 100

#### Group B: Humanities (minimum 3 units)

American Sign Language 111, 116, 210  
Chinese 102  
English 102\*/102H\*, 231, 232, 233A, 233B, 241, 242, 243, 246, 270 (F'20), 271, 272, 278  
French 102, 201, 202  
History 101\*/101H\*, 102\*/102H\*, 132, 142  
Italian 102, 201, 202  
Philosophy 106\*/106H\*, 108, 112, 115, 118, 120  
Spanish 102\*, 111, 195A, 195B, 201, 202

\* Indicates that transfer credit may be limited by either UC or CSU or both. Courses with an asterisk may be counted in one area only. Please consult with a counselor for additional information.

\*\* Official High School transcript must be on file in the admissions office.  
Area 5A, 5B, 5C: underlined courses have laboratory activity.

(F' YR) - Indicates the semester and year the course was approved in a general education area.

### AREA 4—SOCIAL & BEHAVIORAL SCIENCES

3 courses required, minimum 9 semester units from at least 2 disciplines or an interdisciplinary sequence.  
Anthropology 100\*/100H\*, 103, 104

Child Development 107\*  
Cinema Studies 105  
Communication 225\*/225H\*  
Criminal Justice 101  
Economics 101, 102  
Education 101  
Ethnic Studies 101, 110, 120, 130  
Gender, Sexuality, and Women's Studies 101\*, 102, 103  
Geography 100\*/100H\*, 102\*/102H\*, 140  
History 101\*/101H\*, 102\*/102H\*, 118, 120\*/120H\*, 121\*/121H\*, 122\*, 124, 126, 127, 133, 142, 152, 162, 240  
Interdisciplinary Studies 155  
Political Science 101\*/101H\*, 110, 150, 200, 201, 220, 221, 230  
Psychology 100\*/100H\*, 157\*, 160, 170, 180, 190, 200, 220, 230, 240, 250  
Sociology 100\*/100H\*, 115, 116, 120, 125, 130, 150, 220, 240\*, 240H\*, 286

### AREA 5—PHYSICAL & BIOLOGICAL SCIENCES

Minimum 7–9 semester units. One Physical Science course and one Biological Science course required. One course must include a corresponding laboratory. Lab courses are underlined.

#### Group A: Physical Science (minimum 3 units)

Astronomy 102, 103, 112  
Chemistry 100, 200A, 200AH, 200B  
Earth Sciences 100, 111, 120, 121, 130, 160, 200  
Geography 101\*/101H\*, 130\*/130H\*  
Physical Science 100  
Physics 100, 150A\*, 150B\*, 250A\*, 250B\*, 250C\*

#### Group B: Biological Science (minimum 3 units)

Anthropology 101  
Biology 109\*/109H\*, 115, 139, 149, 190, 211, 221, 229, 231, 239, 249, 259, 290  
Psychology 200

#### Group C: Laboratory Activity (minimum 1 unit)

Anthropology 101L  
Astronomy 100L  
Biology 109L/109HL, 115, 139, 149, 190L, 211, 221, 229, 231, 239, 249, 259, 290  
Chemistry 100, 200A, 200AH, 200B  
Earth Sciences 100L, 111, 121  
Geography 101L  
Physical Science 100  
Physics 100, 150A\*, 150B\*, 250A\*, 250B\*, 250C\*

### AREA 6—LANGUAGE OTHER THAN ENGLISH (LOTE) (UC ONLY)

This proficiency may be met by one of the following methods:  
Satisfactory completion of two years of high school coursework in a language other than English with grades of "C-" or better\*\*; or completion of one of the following: American Sign Language 110, 111, 210; Chinese 101, 102; French 101, 102, 201, 202; Italian 101, 102, 201, 202; Spanish 101\*/101H\*, 101B, 102\*, 110 (F'19), 111 (F'19), 201, 202

OR

satisfactory completion, with "C" grades or better, of two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English;

OR

3 or higher on College Board Advanced Placement Examination, 5 or higher on International Baccalaureate Higher Level Examination; SAT II: Subject Tests (see counselor for required scores); grade of A, B, or C on the "O" level exam; or score of 5, 6, or 7 on the "A" level exam

OR

satisfactory completion of an achievement test administered by a college in language other than English equivalent to two years of high school language; or verification of student competency equivalent to two years of high school language.

### AMERICAN INSTITUTIONS REQUIREMENT (AI)

(Not part of IGETC. May be completed prior to transfer.)

CSU has an American Institutions graduation requirement that is separate from IGETC. To meet the CSU requirement, students should take Political Science 101\*/101H\* AND one of the following courses: History 118, 120\*/120H\*, 121\*/121H\*, 122\*, 124, 127. These courses can be used for 6 of the 9 units required in Area 4 (Social and Behavioral Sciences).

UC requires the completion of a college course or courses with a grade of "C" or better OR a one-year course in high school in U.S. History or a half-year course in U.S. History and a half-year course in American Government with grades of "C" or better (UCLA requires grades of "B"). Requirements vary by UC campus. Check with a Santiago Canyon College counselor to determine which course(s) to take.

### CERTIFICATION REQUIREMENTS

1. Complete all courses used for IGETC certification with a minimum grade of C (C minus is not acceptable). A "Pass" is acceptable providing it is equivalent to a grade of C or higher.
2. Request certification from the last California community college you attend prior to transfer to CSU or UC. Requests should be made to the Office of Admissions and Records during the semester prior to the last term of attendance. Please consult the class schedule or the Santiago Canyon College Counseling Department for deadline information.
3. Prior to requesting certification, have official transcripts on file from every high school and college you have attended.
4. Courses taken at other California community colleges will be applied to the subject areas in which they are listed by the institution where the work was completed.
5. A course taken at other regionally accredited institutions (which do not maintain an IGETC certification list) may be approved for certification via a "Pass Along Petition" and after a review by the Santiago Canyon College Articulation Officer. Pass Along Petitions are available from the Santiago Canyon College Counseling Department and must be accompanied by the appropriate documentation.
6. Courses completed at foreign institutions are not acceptable except for certification of competence in a language other than English.
7. Completing IGETC prior to transfer is strongly recommended and can be advantageous in the admissions process. Partial certification is permitted if the student has completed all but two courses on the pattern. Please see a Santiago Canyon College counselor for guidelines.
8. Students completing the Associate in Science Biology for Transfer (11856) degree must follow IGETC for STEM and only need to complete the following IGETC areas to earn the degree:
  - Area 1 – all courses (except 1C for UC bound students)
  - Area 2 – One course
  - Area 3 – Two courses
  - Area 4 – Two courses
  - Area 5 – All courses
  - Area 6 – one course for UC-bound students  
-CSU students do not need to complete this section.



## Astronomy 112 Introduction to Cosmology

Unit(s): 3.0

Class Hours: 54 Lecture total.

Advisory: Concurrent enrollment in Astronomy 140.

Principles of astronomy stressing the origin, structure, and evolution of the universe. Discussions to include light, matter, gravity, stellar evolution, cosmology, relativity, the Big Bang Theory, and the expansion of the universe. **CSU/UC**

## BIOLOGY (BIOL)

Division of Mathematics and Sciences

**Interim Dean:** Denise Bailey

**Department Co-Chairs, Life Science:**

Denise Foley, Mark Smith

**Faculty:** Navanjot Batth, Denise Foley, Kimberly Johnson, Anson Lui, Sandra Sanchez, Mark Smith, Michael Taylor

### Associate of Science

#### Biology (11856)

The Associate of Science degree in Biology prepares students for transfer to a four-year institution leading to a baccalaureate degree in biology or disciplines such as microbiology, botany, zoology, and careers in teaching, medicine and health sciences.

#### Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate an understanding of the basic theories of biology.
- Demonstrate a knowledge of and an ability to apply and effectively communicate the scientific method.

Major requirements*	Units
Biology 211, Cellular and Molecular Biology	5
Biology 221, Animal Diversity and Evolution	5
Biology 231, Plant Diversity and Ecology	5
Chemistry 200A/200AH, General Chemistry A	5
Chemistry 200B, General Chemistry B	5
<b>TOTAL</b>	<b>25</b>

### Associate in Science

#### Biology for Transfer (35110)

The Associate in Science in Biology for Transfer degree prepares students for transfer to a four-year institution leading to a baccalaureate degree in biology or disciplines such as microbiology, botany, zoology, and careers in teaching, medicine and health sciences.

#### Learning Outcome(s)

Upon successful completion of the major requirements for this degree, students will be able to

- Demonstrate an understanding of the basic theories of biology.
- Demonstrate a knowledge of and an ability to apply and effectively communicate the scientific method.

Major requirements*	Units
Biology 211, Cellular and Molecular Biology	5
Biology 221, Animal Diversity and Evolution	5
Biology 231, Plant Diversity and Ecology	5
Chemistry 200A/200AH, General Chemistry A	5
Chemistry 200B, General Chemistry B	5
Mathematics 180/180H, Single Variable Calculus I	4
Physics 150A, Introductory Physics I	4
Physics 150B, Introductory Physics II	4
<b>TOTAL</b>	<b>37</b>

**NOTE: Only the CSU GE Breadth for STEM or IGETC for STEM patterns will be accepted towards the completion of the general education portion of this degree. Unlike other Associate Degrees for Transfer, traditional CSU GE Breadth (Plan B) and traditional IGETC for the UC and CSU (Plan C) will not be accepted.**