

Riverside City College

BIOLOGY

Associate Degree for Transfer (ADT)

Biology is the study of life! Students in the biological sciences will learn critical thinking and develop analytical and investigative skills. According to O-Net Online, career opportunities in the biological sciences are growing at a rate 10-14% faster than the national average. The Biology program map below includes all of your major coursework and recommended general education courses by term that is needed to fulfill your degree and transfer requirements. This pathway is geared toward students working toward transfer to CSU, but can be used for transfer to University of California (UC) System as well. Those students working toward transfer to UC should take CHE-12A and CHE-12B (Organic Chemistry I and II) instead of or in addition to PHY-2A and PHY-2B.

Biology - ADT (CSU and UC)

Interession (Winter or Spring term)		Units
Term 1	Chemistry prep for CHE 1A OR Math Prep for 1A	4
	0-15 units	Units
	English 1A or 1AH (General Education: CSU Area A2 or IGETC Area 1A)	4
	Math 1A (General Education: CSU Area B4 or IGETC Area 2)	4
	Chemistry 1A or 1AH (General Education: CSU Area B1 or IGETC Area 5A)	5
	Communication Studies 1 or 1H (General Education: CSU Area A1 or IGETC Area 1C)	3
	Interession (Winter or Spring term)	Units
Political Science 1/1H (General Education: CSU Area D or IGETC Area 4)	3	
16-30 units		Units
Term 2	English 1B or 1BH (General Education: CSU Area A3 or IGETC Area 1B)	4
	Math 1B	4
	Chemistry 1B or 1BH	5
	Interession (Winter or Spring term)	Units
Health Science 1 (CSU GE: Area E) or 1st Semester Foreign Language (IGETC LOTE*)	3-5	
<i>*LOTE can be met with 2 years of the same language in high school (C or better grade)</i>		
31-45 units		Units
Term 3	Biology 60 (General Education: CSU Area B2 or IGETC Area 5B)	5
	Physics 2A	4
	Philosophy 10/10H or Humanities 5/5H (GE: CSU Area C2 or IGETC Area 3B)	3
	Theater Arts 3, Music 23, or Dance 6/6H (GE: CSU Area C1 or IGETC Area 3A)	3
	Interession (Winter or Spring term)	Units
Psychology 1/1H or Sociology 1/1H (GE: CSU Area D or IGETC Area 4)	3	
45-60+ units		Units
Term 4	Biology 61	5
	Physics 2B	4
	History 7 or 7H (General Education: CSU Area C2 or IGETC Area 3B)	3
	Anthropology 2/2H or Sociology 10 (GE: CSU Area D or IGETC Area 4)	3

For alternative CSU/UC General Education options refer to the back of this page or in the RCC Catalog, under Requirements for College Transfer, page 79-81.

RCC Catalog website link:

<https://www.rcc.edu/departments/Pages/College-Catalog.aspx>

Biology Course Rotation

Fall Semester	Winter Interession	Spring Semester	Summer Interession
Bio 60		Bio 60	
Bio 61		Bio 61	

Milestones

Milestones are courses, co-curricular activities and **recommendations** from your Student Success Team that will keep you on track towards completion of your degree.

Check off your milestones as you complete them.

Biology Degree Completion Milestones

- Complete Chemistry 1A
- Complete English 1A (transfer-level English)
- Complete Biology 60
- Apply to Universities (CSU/UC application period Oct 1-Nov 30)
- Apply for ADT degree by beginning of spring term before transfer
- Complete RCC Graduation application (during your last term)

Student Success Team Milestones

- Meet with your counselor to complete your Comprehensive Student Education Plan (SEP)
- Complete FAFSA (Oct 1st- Mar 2nd for priority)
- Meet with STEM-K Faculty Advisor
- Meet with your counselor to update SEP (every semester)
- Meet with your counselor for pre-graduation check

Co-Curricular Activity Milestones

- Research potential clubs on campus
- Participate in tutoring, student success workshops or supplemental instruction
- Visit the Career Center for internship opportunities
- Research transfer institutions
- Attend Transfer Workshops and Transfer Fair
- Participate in an internship/ job shadowing
- Participate in a research activity (meet with Faculty Advisor)

Enrollment status will impact the completion time for your degree and/or transfer. Full Time students are recommended to take between 12-15 units per term. Part Time students are encouraged to take between 6-9 units per term (meet with a counselor to determine appropriate work/life/school balance). Program completion is dependent on your schedule availability and when courses are offered.

ALTERNATIVE CSU GENERAL EDUCATION OPTIONS FOR BIOLOGY (ADT)

RIVERSIDE CITY COLLEGE

California State University General Education Requirements 2018-2019

The courses listed below will fulfill the lower division general education requirements for all CSU campuses.

- A. English Language Communication and Critical Thinking (minimum 9 semester or 12 quarter units) **** Must be completed prior to transfer!**
 Select one course from each group. *Grades of 'C' or better are required.*
- A1. Oral Communication:** Communication Studies 1 or 1H,6,9 or 9H ****
A2. Written Communication: English 1A/1AH ****
A3. Critical Thinking: Communication Studies 2,3; English 1B or 1BH; Philosophy 11,32; Reading 4 ****
- B. Scientific Inquiry and Quantitative Reasoning (minimum 9 semester or 12 quarter units) **** Must be completed prior to transfer! Select one course from groups 1, 2 and 4.**
At least one of the science courses must have a lab – see underlined courses.
- B1. Physical Science:** Astronomy 1A,1B; Geography 1 or 1H,1/1L or 1H/1L, 5; Geology 1,1/1L,1B,2,3; Oceanography 1,1/1L; Physical Science 1,5; Physics 10,10/11
B2. Life Science: Anthropology 1 or 1H,1L; Biology 1/1H,5,6,7,8,9,10,14, 14/15, 18(formerly BIO 34),19 (formerly BIO 36),20,45 (formerly AMY 10), Psychology 2;
B3. Laboratory Activity: This requirement may be met by completion of any lab course listed above in areas B-1 or B-2.
 All underlined courses will meet this requirement.
B4. Mathematics/Quantitative Reasoning (grade of 'C' or better is required): Math 1A,5,12 or 12H,25, Psychology/Sociology 48****
- C. Arts and Humanities (minimum 9 semester or 12 quarter units) Select three courses, with at least one course from "Arts" and one course from "Humanities":**
- C1. Arts:** Art 1,2 or 2H, 6; Communication Studies 11; Dance 6 or 6H; Film Studies 1 or 1H,2,3,4,5; Film, Television and Video 65; Music 19, 89 or 89H; Theater Arts 3
C2. Humanities: American Sign Language 1; Arabic 1; Chinese 1,11; English 6,7,40,41,44,45,48; Film Studies 5,7,8; Film, Television and Video 12; French 1, 8,11; German 1,11; History 1,2 or 2H,6 or 6H,7 or 7H,14,15,31, 34; Humanities 16; Italian 1,11; Japanese 1,11; Korean 1,11; Latin 1; Philosophy 10 or 10H,12; Portuguese 1; Russian 1,11; Spanish 1 or 1H,3N,11
- D. Social Sciences (minimum 9 semester or 12 quarter units) Select three courses from at least two disciplines:**
 Anthropology 2 or 2H; Early Childhood Studies 20,42; Journalism 7; Political Science 1 or 1H; Psychology 1 or 1H,8,9,33,35,50; Sociology 1 or 1H, 2,3,10,12,15,20,25,50
- E. Lifelong Learning and Self-Development (minimum 3 semester or 4 quarter units)**
 Biology 35 (same as HES1); Early Childhood Studies 20,42; Guidance 47,48; Health Science 1; Kinesiology 4,36; Psychology 9,33; Sociology 12
Activity courses - Only 1 unit of activity coursework may be applied towards area E. Students may complete GUI-48 combined with 1 unit from the approved activity courses listed below in order to fulfill the 3 units required in area E. Military veterans who submit DD214 will be awarded 3 units towards Area E certification.

CAREER & TRANSFER INFORMATION FOR BIOLOGY MAJORS

Careers and National Median Salaries for Biology Majors

Veterinary Technician	\$33,400
Biological Technician*	\$43,800
Medical/Clinical Technician*	\$51,770
Biology Teacher (high school)*	\$59,170
Conservation Biologist/Forester*	\$60,970
Zoologist/Wildlife Biologist*	\$62,290
Agriculture and Food Scientist*	\$62,910
Environmental Scientist/Specialist*	\$69,400
Microbiologist*	\$69,960
Soil/Plant Scientist*	\$74,300
Physical Therapist**	\$86,850
Veterinarian***	\$90,420
Biology Teacher (college/university)**	\$96,440
Pharmacist***	\$124,170
Physician (varies widely by specialization)***	\$177,900

(*career typically requires a Bachelors degree)

(**career typically requires at least a Masters degree)

(***career typically requires a doctoral degree - MD, DVM or PhD)

Most careers in the biological sciences require a Bachelor's Degree or higher. According to PayScale.com, a Bachelor's of Science in Biological Sciences has a median starting salary of \$37,000 to \$46,000 depending on the industry and will vary by location

Salary and Career Information may vary based upon source and year. For updated Career and Salary information, contact the Career Center, located in the Charles A. Kane building, second floor.

Source: bls.gov/ooh/

Transfer Information for Biology Majors

UC Riverside, CSU San Bernardino and Cal Poly Pomona have excellent programs in the Biological Sciences and are popular choices for our transfer students. According to the 2018 US News & World Report, UCR ranks #73 nationally in Biological Sciences while according to Academic Analytics, UCR nationally ranks #3 in environmental sciences, #4 in entomology, #4 in soil science, #5 in natural resources and conservation and #10 in plant biology and plant pathology.

CSUSB was named a "Best Regional College in the West" by Princeton Review and is ranked #39 as a best value by US News & World Report. Meanwhile Money Magazine ranked Cal Poly Pomona #47 in its list of "The 50 Best Colleges in the US". Cal Poly is very well respected for its engineering programs (#14 nationally) and is ranked #9, nationally, for the number of Bachelors degrees awarded to minorities in Agriculture/Agriculture Operations/Related Science.

Contact your STUDENT SUCCESS TEAM!

STEM Engagement Center

MLK, room 222
951-328-3658

Counseling Department

Charles A. Kane building, second floor
951-222-8440

The Riverside Community College District does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to handle inquiries regarding the nondiscrimination policies or practices: District Compliance Officer, 3801 Market Street, Riverside, CA 92501, (951) 222-8039.