



Biology A.S. Degree - Local GE

What do Ebola, hemophilia, DNA fingerprinting, sequoias, cuttlefish, intertidal zones, and global climate change have in common? These are a few examples of the diverse topics explored in Biology, which is the scientific study of living organisms, including their structure, function, evolution, and interactions with other organisms and the environment.

Total Units: 61-64

First Year

Semester 1

15-16 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
CHEM 400 Z General Chemistry I	5	Intermediate Algebra or equivalent AND CHEM 300 or CHEM 305 or CHEM 309	F, S, Su	CRC Area L5
MATH 400 Z Calculus I or	5	MATH 370 or MATH 372 AND Math 373	F, S	CRC Area L2
MATH 355 Z Calculus for Biology and Medicine I	4	MATH 373, OR MATH 384	F, S	CRC Area L2
Local Area 1A-English Composition Z	3	Recommend meeting with a counselor	F, S, Su	CRC Area L1A
Local Area 3-Arts & Humanities Z	3		F, S, Su	CRC Area L3

Z At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the [ZTC page of the college website](#).

Semester 2

14-15 Units

Career

Options/Outlook:

Biologists research or study the basic principles of plant and animal life, such as origin, relationship, development, anatomy, and functions. Tasks may include collecting and analyzing biological data about relationships among and between organisms and their environment; prepare technical and research reports, such as environmental impact reports, and communicate the results to individuals in industry, government, or the general public. **Career opportunities require more than an associate degree.**

A sample of reported job titles:

Aquatic Biologist, Aquatic Scientist, Biological Scientist, Biologist, Botanist, Horticulturist, Marine Biologist, Research Biologist, Research Scientist, Scientist

Projected job openings nationally (2020-2030):

1,640

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
BIOL 400 Z Principles of Biology	5	CHEM 400 or 305 and MATH 120; Advisory: Eligibility for ENGWR 300	F, S	CRC Area L5
MATH 401 Z Calculus II or	5	MATH 400	F, S	CRC Area L2
MATH 356 Z Calculus for Biology and Medicine II	4	MATH 355	F, S	CRC Area L2
CHEM 401 Z General Chemistry II	5	CHEM 400		CRC Area L5

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Year 2

Semester 3

16-17 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
BIOL 410 Z Principles of Botany	5	BIOL 400; Advisory: Eligibility for ENGWR 300	F, S	CRC Area L5
CHEM 420 Z Organic Chemistry I	5	CHEM 401	F, S	CRC Area L5
Local Area 4-Social & Behavioral Science Z	3		F, S, Su	CRC Area L4
Local Area 7A-Living Skills (PE) Z	1		F, S, Su	CRC Area L7A
Local Area 7B-Living Skills Z	2-3		F, S, Su	CRC Area L7B

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Projected growth nationally (2020-2030):

21% growth

Median Salary in California with advanced degree (2021):

\$97,260/yr

Source:

<https://www.onetonline.org/link/summary/19-1020.01>

Transfer notes:

Please meet with a counselor for specific transfer course evaluation or transferring to a specific 4-year institution.

General Education (GE):

Non-specified GE courses identified by CRC or Cal-GETC Area without pre- or co-requisites can be taken at any semester.

Honors option:

The CRC Honors Program is designed specifically for academically accomplished students and for students with the potential for high achievement. Students who complete 15 units or more in honors-designated courses will earn special recognition as an Honors Scholar, a distinction that may entitle the student to guaranteed transfer and scholarship opportunities at select transfer colleges and universities.

requirement. Use the Free Textbook filter to find these courses. Learn more on the [ZTC page of the college website](#).

Semester 4

16 Units

COURSE	UNITS	PRE-REQS [^]	SEMESTERS OFFERED*	GE AREA
BIOL 420 Z Principles of Zoology	5	BIOL 400; Advisory: Eligibility for ENGWR 300	F, S	CRC Area L5
CHEM 421 Z Organic Chemistry II	5	CHEM 420	F, S	CRC Area L5
Local Area 1B-Oral Communication & Critical Thinking Z	3		F, S, Su	CRC Area L1B
Local Area 6-Ethnic Studies Z	3		F, S, Su	CRC Area L6

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[^]You must have passed the prerequisite course(s) with a "C" or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

*(O) = online available (P) = partially online

About this map:

This program map represents one possible pathway to complete the program. Please see a counselor to create an education plan that is customized to meet your needs. This map is not a guarantee of course availability or financial aid applicability.

Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the [Zero Textbook Costs page](#) of the college website.