

26-27 A.S. Biology (BIO)

ABOUT THIS MAJOR



Biology is the scientific study of life through the observation of structure, function, reproduction, growth, origin, evolution, and behavior of living organisms and their relation to each other and their environment. Biologists have deepened our understanding of processes and interactions on all levels of biological organization from elucidating cellular processes to fight cancer to assessing interactions in

communities that might help prevent the extinction of species. Studying biology provides a background for students to evaluate and understand new discoveries and to make informed decisions about the use of scientific knowledge to benefit all living organisms.

The Associate of Science in Biology prepares student for upper division biology courses, including general biology, cell or molecular biology, organism biology, marine biology, botany, zoology, ecology, evolution, genetics, anatomy, physiology, microbiology, and agricultural sciences.

For more information, visit [the Math and Science division](#).

TO EARN A DEGREE A STUDENT MUST COMPLETE THE FOLLOWING:

- [1] Completion of a minimum of 60-semester units or 90 quarter units of degree applicable courses
- [2] A minimum of 18-semester units in a major
- [3] Completion of 21 units AVC General Education Requirements
- [4] Minimum overall grade point average of 2.0
- [5] A "C" or better in all courses required for the major

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[Total Units Required for the Major 35-38]

Required Courses (Total 10 units)	
BIOL110 - General Molecular Cell Biology Prerequisite: Completion or concurrent enrollment in CHEM 110 or CHEM 110H	5
BIOL120 - General Organismal, Ecological and Evolutionary Biology	5

Program Electives: Complete (7-10 units) from the following	
BIOL201 - General Human Anatomy Prerequisite: Completion of BIOL 100 or 101 or 102 or 110 or 120	4
BIOL202 - General Human Physiology Prerequisite: Completion of BIOL 201 and CHEM 101	4
BIOL203A - General Human Anatomy and Physiology I Prerequisite: BIOL C1001 and BIOL C1001L or BIOL 102 or BIOL 110 & Chem 101 is required	4
BIOL203B - General Human Anatomy and Physiology II Prerequisite: Completion of BIOL 203A	4
BIOL204 - General Microbiology Prerequisite: BIOL 101 or 110 or 120, and CHEM 101 or CHEM 110 or CHEM 110H	5
BIOL206 - Introduction to Bioinformatics Prerequisite: BIOL 110	3
CHEM120 - General Chemistry Prerequisite: Completion of CHEM 110	5

Chemistry Program Elective: Choose one (Total 5 units)	
CHEM110 or CHEM 110H - General Chemistry/ Honors Prerequisite: Completion of Intermediate Algebra or higher or placement by multiple measures.	5

Math Program Electives: Choose one (Total 5 units)	
MATH150 or MATH 150H - Calculus and Analytic Geometry/Honors Prerequisite: Completion of MATH 140 or MATH 149 or placement by multiple measures.	5

Physics Program Electives: Complete all the following (Total 8 units)	
PHYS101 - Introductory Physics	4
PHYS102 - Introductory Physics Prerequisite: Completion of PHYS 101	4

RECOMMENDED PATHWAY

A.S. BIOLOGY

The Recommended Plan of Study is determined by the discipline faculty. Take classes in **Summer** or **Interession** if needed to complete your degree in a timely manner!

Fall/Spring: Max 19 units | Summer: Max 9 units | Interession: Max 6 units

SEMESTER 1	
Course	Units
AVC GE AREA 1A: ENGLC1000	4
AVC AREA 1C: ORAL COMMUNICATION	3
AVC AREA 4: SOCIAL & BEHAV. SCIENCES	3
MATH 150 OR MATH 150H (AVC GE AREA 2)	5
Total Units	15

SEMESTER 2	
Course	Units
BIOL 120	5
CHEM 110 (AVC GE AREA 5)	5
AVC GE AREA 6: ETHNIC STUDIES	3
AVC GE AREA 1A : ENGL C1000	4
Total Units	13

SUMMER 1	
Course	Units
PHYS 101	4
GENERAL ELECTIVE	1
Total Units	5

SEMESTER 3	
Course	Units
CHEM 120	5
BIOL 110	5
AVC GE AREA 3: ARTS & HUMANTIES	3
Total Units	13

SEMESTER 4	
Course	Units
PHYS 102	4
PROGRAM ELECTIVE : BIOL 201 OR 204 (rec.)	4-5
GENERAL ELECTIVE	3
GENERAL ELECTIVE	3
Total Units	14-15
TOTAL UNITS	61-62

Counseling Notes

*The Associate in Science in Biology (AS) degree - Please speak with a counselor and check the requirements for your transfer institution. Completion of this degree is only a partial fulfillment of the requirements for transfer as a Biology major to an institution granting a baccalaureate degree. (See Graduation Associate Degree Requirements.)

CHEM 110 : To succeed in CHEM 110, students are required to successfully complete CHEM 101 or one year of High School Chemistry. Algebra is used extensively to solve problems involving quantities.

HONORS COURSES: CHEM 110H, MATH 150H

Students may take either CHEM 110 , MATH 150 or CHEM 110H, MATH 150H. Duplicate credit will not be awarded. This honors course is intended for students in the Honors Transfer Program. For more information about Honors Transfer Alliance Program visit: <https://www.avc.edu/academics/programs-and-pathways/honors>