



Major in Biology, B.A.

(Elective Minor)

2017-2018

Additional Sources of Information

WEBSITE:

www.swau.edu

DEPARTMENT CONTACTS:

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Southwestern Adventist University offers two Biology degrees, the Bachelor's of Science (BS) and the Bachelor's of Arts (BA). Typically, students wishing to use their biology degree as a launching point toward professional school (medical, dental, physician's assistant, physical therapy, occupational therapy, etc.,) take the BS degree because it includes required chemistry classes that are prerequisites for professional school. Our department prepares students to competently sit admissions tests for these professions and our graduates have gone on to prestigious health professional schools as well as graduate schools. Students in the biology department are presented with rare leadership opportunities through the Biology Club and the potential to work with professors as laboratory and research assistants. Biology majors receive research experience which can include cancer research, molecular biology applications, microbiological investigation, plant studies, animal ecology and conservation, or dinosaur bone analysis, among other things, depending on the student's individual interests.

Potential Careers:

A solid science foundation is essential to many career paths. A degree in Biology can prepare students to become physicians, dentists, therapists, pharmacists, physician's assistants, teachers, researchers, innovators, and entrepreneurs. In fact, a degree in biology is the most common college degree of medical professionals. It is also the most common degree of scientists working on exciting and critical research questions such as the spread of infectious disease (ie, HIV, malaria, influenza), the cure for cancer, and why people age.

Job Market

The career potential for graduates with a B.A. degree in Biology is very large. If a student does not wish to pursue further education after the college degree, there are jobs available as technical assistants for biotech, academic, or government positions. Alternatively, when combined with a teaching certificate, biology graduates are prepared to teach high school biology. Another career option for biology graduates is to pursue further education in the form of graduate school. A.B.A. in Biology is an excellent entry point for many non-thesis, science-related master's degrees that prepare students to work in industry or government. Such students can become specialists in product development or testing, resource management, or resource policy to name a few.

General Education Requirements:

To view general education requirements for this major please visit catalog.swau.edu/Undergraduate/2017-2018.



BIOL 111, 112	General Biology.....	8
BIOL 180	Research Seminar	1
BIOL 230	Ecology.....	4
BIOL 320	Genetics	4
BIOL 340	Cell and Molecular Biology I.....	4
BIOL 419	Philosophy of Science	3
BIOL	Electives (2) (U.D.).....	6-8

TOTAL: 30-32

REQUIRED COGNATES:

CHEM 111	General Chemistry I.....	4
CHEM 112	General Chemistry II.....	4
COMM 111	Speech.....	3
CSIS 102	Microcomputer Literacy and Applications or	
CSIS 104	Spreadsheet and Database Applications.....	1-3
MATH 121	Precalculus <i>or</i>	
MATH 241	Introduction to Probability & Statistics	3

TOTAL: 15-17

RECOMMENDED COGNATES:

CHEM 231	Organic Chemistry I.....	4
CHEM 232	Organic Chemistry II.....	4

SAMPLE FOUR-YEAR SCHEDULE

	FIRST SEMESTER	SECOND SEMESTER
<i>First Year</i>	BIOL 111—General Biology I.....4 Language elective.....3 BIOL 180—Biology Research Seminar.....1 ENGL 121—Freshman Composition.....3 MATH 121—Precalculus.....3 TOTAL.....15	BIOL 112—General Biology II.....4 Language elective.....3 Computer Science Elective..... 1-3 Religion Elective.....3 UNIV 111—Wellness for Life.....2 TOTAL.....14-16
<i>Second Year</i>	BIOL 230—General Ecology.....4 CHEM 111—General Chemistry I.....4 ENGL 220—Research Writing.....3 COMM 111—Speech.....3 PSYC 212—General Psychology.....3 TOTAL.....17	CHEM 112—General Chemistry II.....4 BIOL 320—Genetics.....4 Religion Elective.....3 SOCI 111—Introduction to Sociology.....3 TOTAL.....14
<i>Third Year</i>	BIOL 340—Cell & Molecular Biology I.....4 CHEM 231—Organic Chemistry I.....4 PHYS 231—General Physics.....4 Religion Elective.....3 TOTAL.....15	BIOL 341—Cell and Molecular Biology II.....4 CHEM 232—Organic Chemistry II.....4 PHYS 122—General Physics.....4 Biology Elective (U.D.).....4 TOTAL.....16
<i>Fourth Year</i>	Biology Elective (U.D.).....4 Religion Elective (U.D.).....3 History Elective.....3 Kinesiology Elective.....1 Elective U.D.....3 TOTAL.....14	BIOL 419—Philosophy of Science.....3 Biology Elective (U.D.).....4 English Elective.....3 History Elective.....3 TOTAL.....13

= 122 Hours = 40 Hours Upper Division