

BIOLOGY PROGRAM

OVERVIEW OF THE PROGRAM:

Biology, the study of life, is a wide-ranging and rapidly growing discipline. Understanding biology requires a working knowledge of all the sciences, especially chemistry and mathematics. The biology program at Fairmont State strives to provide students with a broad-based education in all fields of biology as well as a fundamental knowledge of chemistry and mathematics. Students are required to complete basic courses in biology designed to provide a comprehensive understanding of living organisms. Electives allow students the flexibility to gain additional knowledge in an area of interest.

Programs for students who wish to specialize in biology include the B.S. degree with a major in biology and the B.A. in education where students may select biology as a teaching field. No minor is required for biology majors.

EMPLOYMENT OPPORTUNITIES:

A four-year B.S. degree in biology will prepare students to compete for entry level jobs such as lab technician, wildlife biologist, research scientist or naturalist, among others. While a bachelor's degree in biology will help students get a job, many careers require additional education beyond the B.S. degree. Many of our best students compete successfully for admission to graduate study at institutions across the country. A biology degree will also provide preprofessional training required by fields such as dentistry, medicine, pharmacy, and veterinary medicine.

Completing the B.A. degree in education with specialization in Biology and passing the appropriate certification exam(s) will certify you to teach biology at the high school level.

The annual median wage for a Biologist is \$55,300.00

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**FAIRMONT STATE
UNIVERSITY™**

College of Science & Technology



BIOLOGY PROGRAM

BACHELOR OF SCIENCE IN BIOLOGY MODEL SCHEDULE

FRESHMAN FIRST SEMESTER

BIOL 1105 BIOLOGICAL PRINCIPLES I	4
CHEM 1105 CHEMICAL PRINCIPLES I	5
ENGL 1101 WRITTEN ENGLISH I	3
MATH 2501 CALCULUS I	4
SOAR 1100 FIRST YEAR SEMINAR	1
TOTAL	17

FRESHMAN SECOND SEMESTER

BIOL 1106 BIOLOGICAL PRINCIPLES II	4
CHEM 2200 FOUNDATIONAL BIOCHEMISTRY	4
ENGL 1102 WRITTEN ENGLISH II	3
COMM 2200 (OR COMM 2201 OR COMM 2202)	3
TOTAL	14

SOPHOMORE FIRST SEMESTER

BIOL 2203 GENERAL ZOOLOGY	4
CHEM 2201 ORGANIC CHEMISTRY I	4
MATH 1550 APPLIED STATISTICS	3
CORE CURRICULUM	3
CORE CURRICULUM	3
TOTAL	17

SOPHOMORE SECOND SEMESTER

BIOL 2202 GENERAL BOTANY	4
CHEM 2202 ORGANIC CHEMISTRY II	4
BIOL 2240 MICROBIOLOGY	4
CORE CURRICULUM	3
TOTAL	15

JUNIOR FIRST SEMESTER

BIOL 3368 ANIMAL PHYSIOLOGY	
OR	4
BIOL 3370 PLANT PHYSIOLOGY	
BIOL 3380 GENETICS	4
CORE CURRICULUM	3
CORE CURRICULUM/ELECTIVE	3
TOTAL	14

JUNIOR SECOND SEMESTER

BIOL 3390 MOLECULAR BIOTECHNOLOGY	4
BIOLOGY ELECTIVE	4
CORE CURRICULUM/ELECTIVE	4
CORE CURRICULUM/ELECTIVE	4
TOTAL	16

SENIOR FIRST SEMESTER

BIOL 3306 FUNDAMENTALS OF ECOLOGY	4
BIOLOGY ELECTIVE	4
CORE CURRICULUM/ELECTIVE	3
CORE CURRICULUM/ELECTIVE	3
TOTAL	14

SENIOR SECOND SEMESTER

BIOL 4485 SENIOR SEMINAR	2
BIOLOGY ELECTIVE	4
BIOLOGY ELECTIVE	4
CORE CURRICULUM/ELECTIVE	3
CORE CURRICULUM/ELECTIVE	3
TOTAL	16

By selecting a minor or adding a second field of study, additional career opportunities become available. Combining a biology degree with additional study in business allows one to compete for management or marketing jobs in pharmaceutical firms and biological supply companies. Biology and computer science offers opportunities in the rapidly growing area of bioinformatics. Biology and English, journalism or art may lead to careers as a scientific writer or illustrator for highly technical journals or general (popular press) publications. The combinations are as diverse as biology itself, and you are encouraged to explore additional opportunities by consulting with your biology advisor.



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