

Bachelor of Science in Biology

The biology degree program at Williams Baptist University provides a strong background for students interested in pursuing careers in biology and in health professions. This degree is designed to give students a broad background in biology with personalized help in focusing studies toward career goals. Upon completion of this degree, students will be able to

- Demonstrate deep understanding of scientific knowledge sufficient to succeed in professional programs (such as medical school), pursue graduate study in biology, or work in a biological field.
- Demonstrate their knowledge and critical thinking skills by using their scientific knowledge to analyze complex scientific data related to research results and to solve complex scientific problems.
- Interpret models of complex biological data and identify flaws and limitations.
- Create their own experiments to address or investigate issues raised by existing research.

General Education Requirements (45 hrs.)

The Biblical World (6 hrs.)

The Biblical Story	3 hrs.
The Christian Worldview	3 hrs.

The Cultural World (15 hrs.)

English Composition I and II	6 hrs.
World Literature I or II	3 hrs.
Humanities electives (choose two) (<i>Any appreciation course, philosophy, or speech communication</i>)	6 hrs.

The Social World (9 hrs.)

American History & Politics (<i>U.S. History Before 1865 or Since 1865 or Am. Govt.</i>)	3 hrs.
The West & Global Cultures (<i>Western Civilization I or II or World Geography</i>)	3 hrs.
Social Sciences (<i>Sociology, government, psychology, or economics</i>)	3 hrs.

The Natural World (15 hrs.)

Health and Physical Education (<i>one hour must be physical activity</i>)	4 hrs.
Mathematics (<i>College Algebra or higher, excluding Contemporary Math</i>)	3 hrs.
Bio. Science & Lab or Principles of Biology I	4 hrs.
General Chemistry I	4 hrs.

Interdisciplinary Liberal Arts Electives (19 hrs.)

Biology majors are required to take at least 19 elective hours outside of the Department of Natural Sciences.

Available emphases in the B. S. in Biology include Health Studies: Gerontology, Pre-Dentistry, Pre-Medicine, Pre-Nursing, Pre-Pharmacy, Pre-Physical Therapy, and Pre-Veterinary Medicine. Contact the department chair for details.

Natural Sciences Core (38 hrs.)

*Botany or Zoology	4 hrs.
*Principles of Biology II (or second organismal class)	4 hrs.
Genetics	3 hrs.
Organic Chemistry I	4 hrs.
Organic Chemistry II	4 hrs.
Special Topics in Science and Faith	2 hrs.
Biology Seminar	2 hrs.
General Chemistry II	4 hrs.
General Physics I or Physics I	4 hrs.
General Physics II or Physics II	4 hrs.
Trigonometry (or more advanced math elective)	3 hrs.

Both Botany and Zoology (organismal classes) are required for students who did not take Principles of Biology I and II. Principles of Biology II is not required for students who took Biological Science and lab.

Biology Electives (18 hrs. with 15 upper level from the Following Options)

Anatomy and Physiology I	4 hrs.
Microbiology	4 hrs.
Science and Faith	3 hrs.
Entomology	4 hrs.
Biochemistry	4 hrs.
Cell Biology	4 hrs.
Comparative Anatomy	4 hrs.
Advanced Anatomy and Physiology	4 hrs.
Environmental Science & Ecology	4 hrs.
Ecology	4 hrs.
Pharmacology	3 hrs.
Neuroscience	4 hrs.
Internship	1-2 hrs.
Special Problems	1-2 hrs.
Special Topics	2 hrs.

Total Required Hours: 120 hrs.