

Biology (Bachelor of Science)

at Benedictine University

What is biology?

Biology is the study of living organisms. It is a broad-based science, one that has areas of specialization for almost anyone interested in science. From the structure and function of molecules to the remarkable interaction of plants and animals with their environment, from animal behavior to toxicology, biology is an excellent major for you if you have an inquisitive mind, are interested in science and enjoy hard work. Biologists use mathematics and their knowledge of physical and chemical sciences as tools to study living things. They routinely work cooperatively and need to possess good communication skills to present their ideas to others.

Why study biology at Benedictine?

Reputation. All of the full-time faculty members in the department hold the highest degree in their field. The Howard Hughes Medical Institute has awarded science education and research grants to the department three times. Benedictine University has an excellent placement record for graduates applying to medical and dental schools.

Learn by doing. You have the opportunity to participate in research with faculty in the department, or you may want to gain a practicum experience with the doctors at Edward Hospital in Naperville or with other health specialists in the area. Many biology majors work in our own Jurica-Suchy Nature Museum.

Faculty who care. All of the full-time faculty in the department teach their own courses and laboratories and hold study sessions with their students. The faculty are your academic advisors and mentors during the years you are in the department.

Success. After graduation, our majors matriculate into medical, dental and other health professional schools, as well as graduate schools such as Harvard, Yale, University of Chicago, Northwestern and Benedictine University. We are very proud of those majors who have chosen teaching as a career.

What can a biology major do?

- Study the function, development, interaction and evolution of diverse living organisms
- Investigate genetic, cellular and molecular mechanisms in the laboratory
- Learn about all the factors (e.g. scientific, economic, political, philosophical and societal) that go into making an educated decision about global warming and what is good for the environment
- Participate in a practicum (on-the-job experience with a health care professional)
- Work in one of the finest university natural history museums in the Midwest
- Gain research experience by working side-by-side with a faculty member in the department studying evolutionary and molecular ecology of plants, insect/plant interactions, bone loss, RNA editing, antibiotic resistance, biomechanics of gait and genetic engineering

What careers are available with a Bachelor of Science in Biology?

The biology major, coupled with an excellent background in the liberal arts, will prepare you for graduate studies in biology leading to a career in research and university teaching; professional studies in medicine, dentistry, veterinary medicine, other biomedical specialties and law school; or a career in teaching at the elementary or high school level.

How do I become a biology teacher?

Students desiring to be certified to teach biology at the secondary level (grades 6-12) are to declare themselves as biology majors and education minors and register with the Benedictine University Education Program as teaching certificate candidates. Students must complete the requirements for a Bachelor of Science in Biology major as well as the requirements of the Teacher Certification Program in Secondary Education which includes an education minor.

“Benedictine University’s balanced liberal arts education and excellence in the sciences provided me with a solid academic foundation that enabled me to excel in graduate school.”

William Chura, C02, B.S. Health Science,
Ph.D. in Physiology (Rosalind Franklin University, 2009)

Recommended Program

Bachelor of Science in Biology

FRESHMAN

Writing Colloquium	3
Mathematics (MATH 111 or higher)	3/5
General Chemistry I and Lab	4
Principles of Biology and Lab	4
	14/16

Research Writing	3
Math (Biocalculus and Lab)	5
Principles of Organismal Biology	3
General Chemistry II and Lab	4
	15

JUNIOR

Systems Biology course	4
College Physics I and Lab	4
Anthropology/Political Science core elective	3
Biochemistry	3
	14

Philosophy core elective	3
Cell Biology and Lab	4
College Physics II and Lab	4
Cultural Heritage (HUMN 230)	3
Elective	3
	17

SOPHOMORE

Speech Communication	3
Genetics and Lab	4
Organic Chemistry I and Lab	4
Biostatistics	3
	14

Organismal Biology course	3
Organic Chemistry II and Lab	4
Literature core elective	3
Religious Studies core elective	3
Cultural Heritage (HUMN 220)	3
	16

SENIOR

Ecology and Lab	4
Economics/Business core elective	3
Sociology/Psychology core elective	3
Cultural Heritage (HUMN 240)	3
General elective	3
	16

Biology elective (300-level)	3
Biology elective	3
Biology elective	3
Cultural Heritage (HUMN 250)	3
Fine Arts/Music core elective	3
	15

4+1 Master of Science in Clinical Exercise Physiology Program

This program offers the student the possibility of earning a Bachelor of Science degree in biology in four years of full-time study, while starting courses to meet the requirements of the Master of Science in Clinical Exercise Physiology program as an undergraduate. Admission to the graduate program is not automatic. The student must meet the requirements for graduate school which include a 3.2/4.0 grade point average.

Demonstrate your concern for the environment with a certificate in environmental studies

Students with an interest in the environment can earn a certificate in environmental studies by choosing specific environmental-focused courses from the anthropology, biochemistry, biology, environmental science, geography, global studies, humanities, literature, management, natural science, philosophy, political science, religious studies, sociology and theology disciplines. Students will learn about the scientific, humanistic, educational and business aspects of sustainability.