

BIOLOGY, B.S.

Academic Programs

The Biology degree program offers a vibrant and innovative alternative to most biology/preprofessional curricula. While providing students with a strong and well-rounded curriculum in the biological and physical sciences and mathematics, the program is structured so that students spend most of their last two years of study totally immersed within the sciences. This total saturation in upper division biology and chemistry coursework allows students to concentrate solely on their chosen fields. In addition, large tracks of time are available for advanced scientific study with other students, faculty mentors, and outside professionals.

The curriculum is delivered with an emphasis on the use of computer technology and computer-interfaced laboratory analytical tools. The combination of computer and technology-based instruction and an intensive immersion in the sciences, provides students with the necessary skills to pursue rewarding career opportunities in such diverse areas as zoology, biotechnology, clinical laboratory science, the pharmaceutical industry, and medical or veterinary schools. The Bachelor of Science in Biology degree program offers the following majors:

- Biochemistry
- Biology
- Biology/Secondary Education
- Neurobiology

Students must maintain a grade of C or better in the following courses to progress to the sophomore year within the Biology program: BIO 110 Biology I for Science Majors, BIO 112 Biology II for Science Majors (or NEU 200 Introduction to Neuroscience II for Neurobiology majors), CHE 120 Chemistry I, and CHE 121 Chemistry II. Additional requirements for continuing within the program beyond the sophomore year are indicated within the individual course descriptions.

- Biochemistry Major (<https://catalog.baypath.edu/traditional-undergraduate/academic-programs/biology/biochemistry-bs/>)
- Biology Major (<https://catalog.baypath.edu/traditional-undergraduate/academic-programs/biology/biology-bs/>)
- Biology/Secondary Education Major (<https://catalog.baypath.edu/traditional-undergraduate/academic-programs/biology/biologysecondary-education-bs/>)
- Neurobiology Major (<https://catalog.baypath.edu/traditional-undergraduate/academic-programs/biology/neurobiology-bs/>)

Student Learning Outcomes

The goal of the Science Department is to provide graduates with the requisite knowledge and skills to engage in technical careers in the biological and forensic sciences, and to proceed to graduate or professional school if desired. Upon completion of the Bachelor of Science in Biology program, graduates will be able to:

- Students will **integrate** gained knowledge in the following areas: evolution, structure & function, information flow, exchange and storage, and energy transformation systems.
- Students will **build** proficiency with instrumentation relevant to life science.
- Students will **compose** effective communication through scientific writing activities.

- Students will **construct** effective communication through scientific speaking activities.

Possible Career Options for B.S. Biology Graduates

- Forensic Analyst
- Lab Analyst/Supervisor
- Biology Instructor, Grades 8-12
- Researcher
- Teacher
- Pharmaceuticals
- Dental, Medical, or Veterinary School
- Graduate Study