

Biology

Biology is the study of organisms, including the molecular and cellular basis of life, development of the individual and its genetic basis, maintenance of the individual, and interaction of organisms with their biotic and physical environment.

The Biology (BIO) major builds on a strong foundation in chemistry, mathematics and physics to introduce students to the concepts and methodologies associated with multiple levels of biological complexity. Students explore the Fundamentals of Biology through three foundational courses that provide a thorough introduction to organisms, ecosystems, cellular and molecular biology, and physiology. These courses are complemented by an innovative two semester, inquiry-based biology laboratory curriculum designed to develop skills in the collection and analysis of data from biological experiments, including explorations into the primary scientific literature and capstone student-designed experiments on human physiology. This core foundation is followed by advanced course and laboratory work with an opportunity to specialize in any of several areas, including: Developmental Genetics, Ecology and Evolution, Environmental Biology, Interdisciplinary Biology, Neuroscience, Quantitative Biology and Bioinformatics, and Bioengineering. Biology majors are encouraged to explore research opportunities in biology, typically beginning in their second or third year.



Transferable Skills

- Broad knowledge of the life sciences
- Operate scientific equipment
- Conduct and share research
- Organize and maintain accurate records
- Have detailed knowledge of lab techniques
- Solve problems and make detailed observations
- Knowledge of general medical conditions
- Clinical experience and classroom experience
- Thinking critically and analytically
- Operate scientific equipment

Career Communities to Consider

- Healthcare
- Research
- Education & Helping Professions
- Business