

Biology Department – Ecology and Evolution

Students pursuing a BS in Biology: Ecology and Evolution will learn how populations interact with and adapt to their environment.

Ecology and Evolution focuses on how organisms interact with nature, and how these interactions shape communities and ecosystems. Students learn how these interactions change through time, leading to adaptation, the formation of new species, and extinction. Studying these fundamental biological interactions can help us predict population responses to environmental change at both local and global scales. This concentration is highly recommended for students planning to pursue a graduate degree (MS/PhD) in this field.

Coursework emphasizes hands-on experience with methods in field biology, experimental design, and statistics. Students will have the opportunity to capture and handle animals, observe their behavior in nature, design their own study to investigate why animals do what they do, and present their work to the broader community. They will study organismal interactions at both ecological and evolutionary timescales in microbes, plants, invertebrates, and vertebrates. Students will learn how such interactions have shaped the world in which we live.

Course Requirements

2-year Biology core

BIO 314 – General Ecology

BIO 430 – Biostatistics OR

BIO 411 – Field Methods

One course from the Organismal Biology Group

One course from the Taxon-Specific Group

BIO 437 – Evolutionary Biology

BIO 499 – Capstone Seminar

One Additional 300+ Biology Elective

Career Opportunities

- Wildlife Biologist
- Conservation Officer
- Forest and Land Manager
- Restoration Ecologist
- Park Ranger
- Field Research/Science Technician
- Environmental Consultant
- Environmental Advocate

Employers

- National and Private Parks (e.g. The National Parks Service)
- Government Agencies (Fish and Wildlife Service, NOAA, USGS, EPA)
- Environmental Consulting Firms
- Universities
- Zoos
- Natural History Museums
- Non-Profit Conservation Organizations

