

College of the Environment, Forestry, and Natural Sciences 2020-2021

Department of Biological Sciences

Biology, Master of Science

Available Emphasis Areas:

Ecology, Evolution and Conservation Biology - Emphasis

This thesis-based Master's degree allows the student great flexibility in determining his/her course of study, with the guidance of an engaged research committee. NAU's well-known biology program and solutions-oriented professors provide a multitude of pathways through which to approach research and experimentation. This degree also prepares students for future Ph.D. work, either here, at NAU, or elsewhere.

Careers

What Can I Do with a Master of Science in Biology?

The biological sciences encompass numerous cutting-edge disciplines, with each offering a multitude of exciting career paths. Our Master of Science program helps you move further down one of those paths by training you in the biological sciences through coursework and research experience.

You'll receive plenty of personal attention from faculty-in the classroom, in research laboratories, and in our Biology Advisement Center. Our location on the Colorado Plateau offers high quality of life with many excellent destinations for field projects and recreation. Our graduates have exceptional placement rates in medical schools and government agencies. Whatever path you take after graduation, you will be ready to succeed.

Career opportunities that might be pursued:

With further education, one of these paths is possible:

Research assistant
Wildlife biology technician
Native fish specialist
Community college instructor

University Requirements

To receive a master's degree at Northern Arizona University, you must complete a planned group of courses from one or more subject areas, consisting of at least 30 units of graduate-level courses. (Many master's degree programs require more than 30 units.)

theoretical and empirical concepts in ecology and evolutionary biology to understand ecological patterns and the mediating processes that drive populations, communities and ecosystems. Students will become familiar with ecological sampling techniques and statistical methodologies necessary to characterize populations, communities and ecosystems over broad geographic regions, and will apply current approaches for identifying and mitigating the effects of invasive species and anthropogenic impacts on threatened and endangered species within the natural ecosystems they inhabit.

Student Learning Outcomes

Upon completion of the Biology M.S. degree, students will be able to:

Elucidate the major theories, research methods, approaches to inquiry and schools of practice in a biological discipline (genetics, physiology, anatomy, ecology, evolution, cell- or biochemistry, and microbiology), illustrating both the applications and relationships to other biological disciplines.

Communicate biological knowledge, including results of research undertakings, and the rationale underpinning their conclusions, to specialist and non-specialist audiences clearly and unambiguously.

Admission requirements over and above admission to NAU are required.

- NAU Graduate Online application is required for all programs. Details on admission requirements are included in the [online application](#).

f Physiological/Population/Community

f [BIO 568](#), [BIO 570](#), [BIO 571](#), [BIO 573](#), [BIO 663](#), [BIO 673](#), [ENV 540](#), [FOR 504](#), [FOR 517](#), [FOR 520](#), [FOR 543](#), [FOR 545](#), [FOR 550](#), [FOR 551](#), [FOR 552](#), [FOR 553](#), [FOR 560](#), [FOR 580](#), [FOR 582](#), [FOR 604](#), or other graduate-level coursework in physiological, population, or community ecology, at NAU, with your advisor's approval.

f Ecosystem/Global

f ([BIO 507](#) or [FOR 507](#)), [BIO 578](#), [ENV 571](#), [FOR 515](#), [FOR 521](#), [FOR 544](#), or other graduate-level coursework in ecosystem/global ecology at NAU, with your advisor's approval. ,