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

Department of Biological Sciences

Biology, Minor

This minor is a natural companion to careers in chemistry, psychology, environmental studies, genetics, science education, or perhaps even computer science and engineering. Students in other fields, including marketing, government, politics, or law, will find that biology coursework encourages critical thinking and observation skills as well as providing rich content.

Careers

What Can I Do with a Minor in Biology?

The biological sciences encompass numerous cutting-edge disciplines; each offering a multitude of exciting career paths. You can supplement your major with a Biology minor, which will help you prepare for graduate study, admission to medical, dental, or veterinary school, or for other professional training.

You will also receive plenty of personal attention from faculty--in the classroom, in research laboratories, and in our Biology Advisement Center. Numerous undergraduate research opportunities involve you in the process and application of science. Our graduates have exceptional placement rates in medical schools, government agencies, and graduate programs. Whatever path you take after graduation, you will be ready to succeed.

University Requirements

• A minor is earned in conjunction with a bachelor's degree.

To receive a minor (18 to 24 units) at Northern Arizona University, you must complete a planned group of courses from one or more subject matter areas with a cumulative grade point average of at least 2.0. At least 12 units of the minor must be unique to that minor and not applied to any other minor.

Overview

In addition to University Requirements:

• Complete individual plan requirements.

Please note that you may be able to use some courses to meet more than one requirement. Contact your advisor for details.

No more than 50% of the units used to satisfy minor requirements may be used to satisfy major requirements.

Minimum Units for Completion 18 Major GPA 2.0

Student Learning Outcomes

- Students will be able to communicate scientific information effectively in written and oral forms (including using standard practices in scientific writing), addressing basic biological concepts encompassing a range of sub-disciplines within the field of biology.
- Students will be able to apply the scientific method as a demonstration that they understand the basic paradigm of scientific inquiry as it relates to general biological problems.
- Students will be able to describe fundamental principles of biology e.g., central dogma, diversity of life, inheritance.
- Students will understand that evolution is the central principle uniting the field of biology, and apply the theory of evolution to explain diverse biological phenomena spanning molecular to organismal biology.
- Students will be able to access and interrogate the primary scientific literature in the biological sciences.
- Students will be able to synthesize material from across a biological sub-discipline and apply this to advanced-level course material (i.e., a Capstone experience); specifically, students will draw from their learning experiences in the fields of ecology, evolution, behavior, physiology, systematics, etc as related to the topic of their capstone course.
- Students will develop an appreciation for the interdisciplinary role of science as applied to human and environmental challenges across both local and global scales.

Details

Minor Requirements

- Take the following 18 units with a Grade of "C" or better in each course:
 - o <u>BIO 181, BIO 181L, BIO 182, BIO 182L</u> (8 units)

Select one additional lab course from the following (1-4 units):

BIO 201, BIO 201L, BIO 202, BIO 202L, BIO 205, BIO 205L, BIO 221, BIO 222, BIO 223, BIO 227, BIO 322, BIO 343, BIO 349L, BIO 369, BIO 374, BIO 401C, BIO 410, BIO 411, BIO 414, BIO 415, BIO 424, BIO 426C, BIO 431, BIO 475, BIO 477, BIO 478, BIO 479, BIO 488C, BIO 488L, BIO 516, BIO 517, BIO 525, BIO 526, BIO 527, BIO 528, BIO 570, BIO 571, BIO 573

Select biology courses, which may include up to 3 units of non-duplicating <u>BIO 300</u> (6-9 units).

Please note that you may not use BIO 100, BIO 100L, BIO 310, or any BIO recitation (R)

courses toward this minor.

At least 6 units must be taken at NAU.

• Be aware that some courses may have prerequisites that you must also take. For prerequisite information click on the course or see your advisor.

Campus Availability

- <u>Flagstaff</u>
- Yuma