

# Biology

## Bachelor of Science

**NAU** NORTHERN ARIZONA UNIVERSITY



[nau.edu/transfer](http://nau.edu/transfer)



**MARICOPA**  
COMMUNITY COLLEGES



# Start at the community college

Northern Arizona University, in partnership with Arizona community colleges, allows you to complete your associate degree before transferring to NAU to earn your **Bachelor of Science in Biology**. Courses are offered through NAU at Scottsdale Community College.

## Gain new knowledge and skills

Biology is the study of living organisms—their development, evolution, interactions, structure, and organization. This major offers a balanced, comprehensive, and modern approach to biology, emphasizing a critical analysis of information and integration among subdisciplines.

## Advance your career

This comprehensive biology degree offers a multitude of exciting career paths and prepares you for professional opportunities in biology, including biological research, conservation biology, and wildlife management. This degree will also prepare you for admission to advanced programs in biology, dentistry, medicine, pharmacy, teaching, veterinary science, and academic research.

## Get started

Find your NAU coordinator at [nau.edu/coordinators](https://nau.edu/coordinators), or contact University Admissions at [admissions@nau.edu](mailto:admissions@nau.edu).

# **1** university in Arizona  
for return on investment  
— *LendEDU*

NAU was named to the 2022

**Education A-List**

— *PRNEWS*



# Finish your degree with NAU

## Complete your degree

Transfer to NAU and finish your bachelor's degree after completing an associate degree at Scottsdale Community College. NAU will accept up to 75 transfer credits for your biology degree.

What to expect as an NAU student:

- **class days and times:** typically two evenings per week (usually Mondays and Wednesdays, or Tuesdays and Thursdays, from 6–8 p.m.)
- **location:** NAU at Scottsdale Community College
- **course delivery:** hybrid format with each course incorporating in-person and online instruction
- **term schedule:** sessions in the spring and fall terms

Beginning fall 2023, the Access2Excellence (A2E) program at Northern Arizona University will guarantee tuition coverage for every undergraduate Arizona resident with a household income up to \$65,000, and for all eligible members of Arizona's 22 recognized Tribes, regardless of income. [nau.edu/A2E](https://nau.edu/A2E)

For more information on A2E or other financial aid opportunities, please contact us at [Financial.Aid@nau.edu](mailto:Financial.Aid@nau.edu).



**“** Our professors bring up controversies and encourage us to talk through them. They allow me to be myself—not just me but other students, too. And allow us to follow our interests. I don't feel like I'm stuck in a cookie-cutter position. They find our interests and present opportunities specifically for those interests. I think that's so special.”

– Sophia Alme, BS Biology, '22, NAU at Scottsdale Community College



# NAU courses

## Biology and chemistry courses

**BIO  
322**

### **Entomology**

Explore the classification, identification, ecology, physiology, and economic importance of insects.

**BIO  
325**

### **Foundations of Physiology**

Analyze the function and integration of animal tissues, organs, and organ systems in the maintenance of homeostasis.

**BIO  
344**

### **Cellular and Molecular Biology**

Learn the organization and function of biological molecules, cell diversity, cell structure and function, and cell interaction differentiation.

**BIO  
350**

### **Molecular Genetics**

Study genetics from a molecular and microbial perspective: gene structure, expression, control, mutation, and recombination; and advances in genetic engineering.

**BIO  
365**  
WRITING

### **Writing in the Biological Sciences**

Practice biological writing for both technical and non-technical audiences, with the goal of fostering effective communication of scientific information.

**BIO  
374**

### **Economic Botany**

Survey plants used by humans, including plant parts or products used, and their geographic origin and distribution.

**BIO  
424**

### **Evolutionary Vertebrate Biology**

Understand the vertebrate structure with emphasis on phylogeny and function.

**BIO  
435  
CAPSTONE**

**Advanced Evolutionary Theory**

Examine advanced concepts in evolution: the origin of variation, natural selection, population genetics, species concepts, patterns and rates of lineage diversification, methods of phylogenetic analysis, and mathematical approaches to understanding evolution such as neutral theory.

**BIO  
441**

**Conservation Biology**

Discover the scientific basis for conserving and managing biological diversity, emphasizing applications of ecology, drawing on other scientific disciplines, and integrating public policy and sociological issues.

**BIO  
467**

**Ecological Sampling and Monitoring**

Become familiar with general concepts and techniques in ecology. Survey species and phenomena that characterize aquatic, terrestrial, and/or transition ecosystems. Learn basic sampling, monitoring, hypothesis testing, and experimental procedures with an emphasis on data organization and analysis that exemplify best practices in ecology.

**BIO  
471C**

**Microbial Ecology**

Focus on the population, community, and ecosystem ecology of microorganisms. Emphasis is on interactions with plants and animals and the roles of microorganisms in ecosystem processes.

**BIO  
485**

**Undergraduate Research**

Conduct research under the supervision of a faculty research advisor. Must have research mentor approval prior to departmental consent.

**CHM  
360**

**Fundamental Biochemistry**

Gain an understanding of the principles of biochemistry, emphasizing biologically important compounds and their functions and metabolism in living cells.

Earn your biology degree and apply to medical school following the completion of these courses and their lab components:

BIO 201 Human Anatomy/Physiology I

BIO 202 Human Anatomy/Physiology II





## Plan for a smooth transfer to NAU

- Save time and money as you work toward your bachelor's degree.
- Maximize the credits that transfer to your degree program.
- Receive personalized guidance to stay on track.
- Potentially qualify for a 2NAU scholarship.

[nau.edu/2nau](https://nau.edu/2nau)

### Notes

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Northern Arizona University (NAU) and The Maricopa County Community College District (MCCCD) are EEO/AA institutions and do not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, age, disability, national origin, veteran status, or genetic information in their programs or activities. For Title IX/504 concerns regarding MCCCD, call the following number to reach the appointed coordinator: **480-731-8499**. For additional information, visit [maricopa.edu/non-discrimination](https://maricopa.edu/non-discrimination). For Title IX/504 concerns regarding NAU, call the following number to reach the appointed coordinator: **928-523-3312**. For additional information, visit [nau.edu/equity-and-access](https://nau.edu/equity-and-access). 836602/06.2022

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