

Biology

Biology is the study of life. . .

Since we are living beings, dependent on other living organisms, the study of biology is both relevant and exciting -- whether it is pursued in the classroom, laboratory, or field and whether it involves work at the molecular, organismal, or ecosystem level. If you are interested in exploring exciting frontiers of biology and preparing for a professional career, a major in the Department of Biology at the University of North Dakota may be for you.

What you can do with a degree in Biology. . .

- Medicine and Health Sciences
- Physician
- Dentistry
- Veterinary medicine
- Medical laboratory research
- Conservation Biology and Natural Resource Management (state, federal and private agencies)
- Education (secondary and higher education)
- Biotechnology
- Scientific Research

Unique characteristics of UND's Biology program. . .

The Biology Department's program provides a well rounded, balanced education, which focuses on the development of essential skills for professional and personal success and a broad exposure to all levels of biological organization. Essential skills fostered in the program include critical and creative thinking, quantitative reasoning, written and oral communication, and information literacy. The Biology Department at UND also places equal emphasis on the importance of undergraduate instruction and nationally recognized, cutting edge research. Our philosophy is that class instruction benefits from having enthusiastic, engaged scholars working at the forefront of their disciplines. At the same time, faculty research benefits from having enthusiastic undergraduate students integrally involved in faculty research projects. The overall culture of the department emphasizes an approachable and personalized educational experience involving both formal classroom instruction and individual research experiences for highly motivated students.

Getting in. . .

Students may be admitted to the College of Arts and Sciences and may elect a biology major after completing 24 semester hours at UND or other accredited institutions. All candidates for admission must have a satisfactory academic record (generally a C or 2.0 grade point average).

Program Options. . .

The Biology program at the University of North Dakota is fully accredited and offers the potential for different emphases and options, depending on your particular area of interest. These include a B.S. in Biology, with options in General Biology; in Molecular, Cellular and Developmental (MCD) Biology; and in Ecology and Evolutionary (EE) Biology. The General Biology option is designed for students interested in obtaining a broad background in biology, with maximum flexibility in program design. The MCD is especially appropriate for students anticipating graduate studies, professional programs, or a career in biotechnology or biomedical research. The EE option is for students who are preparing for graduate study or careers in ecological, evolutionary, and related fields, including those in conservation biology and the environment. We also offer a B.S. in Biology with a Pre-health Science emphasis and a B.S. in Fisheries and Wildlife Biology. The Pre-Health Science emphasis is for students interested in applying for professional schools in medicine or allied medical fields such as dentistry, veterinary medicine, or medical research. The B.S. in Fishery and Wildlife Biology prepares students for positions with state, federal, and private fisheries and wildlife organizations.

Students seeking secondary teacher certification in Biology must complete the Department of Teaching and Learning requirements in Secondary Education (<http://www.und.nodak.edu/dept/tl/>) These students must also complete one of the Biology majors described above.

Biology is SMART Grant Eligible. . .

Students majoring in this field may be eligible for \$4,000 to help cover costs for the third and fourth year at UND! U.S. citizens eligible for a Pell Grant, enrolled full time as 3rd or 4th year Biology majors, may be eligible for this new grant program. Specific eligibility rules apply. For more details about UND's administration of the federal S.M.A.R.T. grant and a UND listing of other "SMART-eligible" programs, visit www.financialaid.und.edu.

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Biology continued. . .

It's A Fact. . .

- The Department maintains well equipped teaching and research laboratories, including a 1000 ft² Biology Core Molecular Facility, to allow instruction and research in the modern techniques used in biology.
- The Department maintains field stations for education and research that represent prominent regional habitats, including both unplowed native prairie and natural riparian habitat.
- The Department maintains a Herbarium, Vertebrate Museum, Invertebrate Museum, and Greenhouse for teaching and research activities.
- In addition to University, state, and national scholarships, the department offers nine awards and scholarships to students on the basis of merit. Candidates are nominated by faculty and selected by committee.
- Additional costs for the program are textbooks and laboratory fees ranging from \$5 to \$25.
- The average class size for Introductory Biology is 200; for Sophomore Level Core courses it is 100-180; for Upper Division courses it is 15-60. Laboratory sections at all levels have a maximum of 30.
- There are 17 faculty in the department, with over 400 majors plus 26 graduate students.
- Biology has been taught since 1884 when the University opened and was the first department devoted to a single science.
- The Student Chapter of the Wildlife Society is active on campus.

Opportunities for Independent Study & Research Exist . . .

Well qualified biology majors are urged to participate in independent studies, honors work, or undergraduate research. Normally studies of this nature are initiated by invitation from a faculty member. Students selected for these programs usually carry out their studies in the research laboratories of the individual professors. Research apprenticeships or assistantships financed by private foundation support or faculty research grants may be available for part-time employment. The department participates in the University Honors Programs through certain interdisciplinary colloquia, by honors credit in advanced courses, and by independent studies and tutorials in advanced topics.

Alums of the Department have been successful . . .

Prominent alums are university professors, physicians, and natural resource directors and managers, including the Director of the US Fish and Wildlife Service, and the Superintendent of Theodore Roosevelt National Park.

For more information. . .

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