B.S., WILDLIFE BIOLOGY AND CONSERVATION

B.S. Degree

The Wildlife Biology and Conservation B.S. program prepares students for a career focused on the study and management of wild animal populations and their habitats. Career paths include wildlife agency administration, development and implementation of management plans, and communication about wildlife to the public. The wildlife program also provides a solid foundation for further study at the graduate level. The curriculum meets requirements for certification as a Wildlife Biologist by The Wildlife Society.

The geographic location of the university is particularly advantageous for the study of wildlife biology. Alaska contains vast areas of wilderness with intact ecosystems housing large populations of vertebrate herbivores and predators. Spruce forest, aspen-birch forest, alpine tundra, bogs, and several types of aquatic habitats are within easy reach of UAF. Farther afield, studies can be conducted in other habitats, from the dense forests of southeastern Alaska to Arctic tundra.

Wildlife biology students at UAF may interact with the personnel of the Alaska Cooperative Fish and Wildlife Research Unit, the Institute of Arctic Biology, and several local offices of the federal and state conservation agencies. Opportunities for summer fieldwork assisting government agencies and university researchers arise frequently, providing a valuable opportunity to gain experience and to make job connections.

Minimum Requirements for Wildlife Biology and Conservation Degree: 120 credits

Learn more about the bachelor’s degree in wildlife biology and conservation (https://uaf.edu/academics/programs/bachelors/wildlife-biology-conservation.php), including an overview of the program, career opportunities and more.

College of Natural Science and Mathematics
Department of Biology and Wildlife

Program Requirements

Students must earn a C- grade or better in each course.

Minimum Requirements for Wildlife Biology and Conservation B.S.: 120 credits

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<tr>
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<tr>
<td>CHEM F105X</td>
<td>General Chemistry I</td>
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<tr>
<td>CHEM F106X</td>
<td>General Chemistry II</td>
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B.S. Degree Requirements

Complete the B.S. degree requirements. (http://catalog.uaf.edu/bachelors/summary-of-bachelors-degree-reqs/#bachelorofsciencetext) 15

As part of the B.S. degree requirements, complete:

- BIOL F115X Fundamentals of Biology I
- BIOL F116X Fundamentals of Biology II
- STAT F200X Elementary Statistics
  or STAT F300 Statistics

Wildlife Biology and Conservation Program Requirements

Complete the following:

- WLF F101 Survey of Wildlife Science 2
- WLF F301 Design of Wildlife Studies 3
- WLF F322 Principles and Techniques of Wildlife Management 3
- WLF F469 Landscape Ecology and Wildlife Habitat
  or WLF F305 Wildlife Diseases
  or WLF F385 Global Change Biology 3
- WLF F470 Human Dimensions of Wildlife Management 3
- BIOL F239 Introduction to Plant Biology 4
- BIOL F260 Principles of Genetics 4
- BIOL F310 Animal Physiology 4
  or BIOL F441 Animal Behavior 4
- BIOL F371 Principles of Ecology 4
- BIOL F471 Population Ecology 3
  or WLF F421 Ecology and Management of Large Mammals 3
- ENGL F314 Technical Writing 3
  or ENGL F414 Research Writing 3
- PHYS F123X College Physics I
  or CHEM F321 Organic Chemistry I 3
  or CHEM F449 General Biochemistry: Metabolism 3
  or GEOS F101X The Dynamic Earth 3
  or NRM F338 Introduction to Geographic Information Systems 3
  or NRM F380 Soils and the Environment 3
- STAT F401 Regression and Analysis of Variance
  or STAT F402 Scientific Sampling 4

Complete two of the following: 5-6

- BIOL F190 Introduction to Alaska Flora
- BIOL F331 Systematic Botany
- BIOL F430 Plant Physiology and Development
- BIOL F488 Arctic Vegetation Ecology/Geobotany

Complete three of the following: 9

- WLF F421 Ecology and Management of Large Mammals
- WLF F425 Ecology and Management of Birds
- BIOL F406 Entomology
- BIOL F425 Mammalogy
- BIOL F426 Ornithology
- BIOL F427 Ichthyology

Complete two of the following: 6
ECON F235X  Introduction to Natural Resource Economics
HIST F411  Environmental History
NRM F204  Public Lands Law and Policy
NRM F403  Environmental Decision-Making
NRM F407  Environmental Law
PS F447  U.S. Environmental Politics

Complete at least one additional course at the F300 level or higher (3 or 4 credits) in biology, wildlife biology, fisheries or natural resources management

Capstone 1
Satisfactory completion of course WLF F470 with either junior or senior standing

1 Fulfills the baccalaureate capstone requirement (junior or senior standing required)

Note: B.S. degree candidates are strongly urged to obtain work experience in wildlife-related positions with public resource agencies or private firms. Faculty members can help students contact potential employers.

Requirements for biology teachers (grades 7-12)

Note: We strongly recommend that prospective secondary science teachers seek advising from the Alaska College of Education early in their undergraduate degree program so they can be appropriately advised of the State of Alaska requirements for teacher licensure. Students will apply for admission to the Alaska College of Education’s postbaccalaureate teacher preparation program, a one-year intensive program, during their senior year. The above requirements apply to all candidates who apply to the Alaska College of Education for licensure in biology.

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<thead>
<tr>
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<tr>
<td>BIOL F342</td>
<td>Microbiology</td>
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<tr>
<td>BIOL F481</td>
<td>Principles of Evolution</td>
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<td>Organic Chemistry II</td>
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<td>PHIL F481</td>
<td>Philosophy of Science</td>
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