

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

Code	Title	Credits
General University Requirements		
Complete the general university requirements. (http://catalog.uaf.edu/bachelors/)		
General Education Requirements		
Complete the general education requirements. (http://catalog.uaf.edu/bachelors/general-education-requirements/)		35-40
As part of the general education requirements, complete:		
CHEM F105X	General Chemistry I	
CHEM F106X	General Chemistry II	

MATH F251X	Calculus I	
	or MATH F230X Essential Calculus with Applications	
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	3
	or WLF F305 Wildlife Diseases	
	or WLF F385 Global Change Biology	
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	
BIOL F371	Principles of Ecology	4
BIOL F471	Population Ecology	3
	or WLF F421 Ecology and Management of Large Mammals	
ENGL F314	Technical Writing	3
	or ENGL F414 Research Writing	
PHYS F123X	College Physics I	3-4
	or CHEM F321 Organic Chemistry I	
	or CHEM F449 General Biochemistry: Metabolism	
	or GEOS F101X The Dynamic Earth	
	or NRM F338 Introduction to Geographic Information Systems	
	or NRM F380 Soils and the Environment	
STAT F401	Regression and Analysis of Variance	4
	or STAT F402 Scientific Sampling	
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		3-4
Capstone ¹		
Satisfactory completion of course WLF F470 with either junior or senior standing		3

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.

Code	Title	Credits
Complete all the requirements of the wildlife biology B.S. degree.		
All prospective biology teachers must complete the following:		
BIOL F342	Microbiology	4
BIOL F481	Principles of Evolution	4
CHEM F321 and CHEM F325	Organic Chemistry I and Organic Chemistry II	8
All prospective science teachers must complete the following:		
PHIL F481	Philosophy of Science	3