

# Bachelor of Science with Major in Fisheries and Wildlife Biology

The Department offers a four-year program leading to the degree of Bachelor of Science in Fisheries and Wildlife Biology. Students completing this program are qualified to obtain positions with state, federal and private fisheries and wildlife organizations.

Required 120 credits (36 of which must be numbered 300 or above, and 30 of which must be from UND) including:

I. Essential Studies requirements (see University ES listing, minimum 39 total credits). The following courses must be taken as part of the Essential Studies requirement:

Code	Title	Credits
ENGL 110	College Composition I	3
ENGL 130	Composition II: Writing for Public Audiences	3
COMM 110	Fundamentals of Public Speaking	3
<b>Total Credits</b>		<b>9</b>

II. The following curriculum:

55-58 major hours, including:

Code	Title	Credits
<b>Basic Courses</b>		
BIOL 121	Introduction to Fisheries and Wildlife Biology	1
BIOL 150 & BIOL 151	General Biology I and General Biology II *	6
BIOL 150L & BIOL 151L	General Biology I Laboratory and General Biology II Laboratory	2
BIOL 312	Evolution	3
BIOL 315	Genetics	3
BIOL 332 & 332L	General Ecology and Gen Ecology Lab	4
<b>Advanced Courses **</b>		
<b>Required</b>		
BIOL 333	Population Biology	3
BIOL 396	Fisheries and Wildlife Biology Pre-Internship Seminar	1
BIOL 397	Cooperative Education	1
BIOL 470	Biostatistics	4
BIOL 481	Fisheries Wildlife Senior Capstone ***	3
Select one of the following plant courses:		3-4
BIOL 336	Systematic Botany	
BIOL 350	Plant Ecology	
Select at least three of the following management courses:		9-11
BIOL 430	Human Dimensions of Wildlife and Fisheries	
BIOL 431	Wildlife Management	
BIOL 432	Techniques in Wildlife Population Assessment	
BIOL 438	Fisheries Management	
BIOL 439	Conservation Biology	
<b>Electives</b>		
Select minimum of 12 hours of the following: ****		12
BIOL 338	Animal Behavior	
BIOL 360	Soil Ecology	
BIOL 363	Entomology	
BIOL 364 & 364L	Parasitology and Parasitology Laboratory	

BIOL 376 & 376L	Animal Biology and Animal Biology Laboratory	
BIOL 380	Disease Biology	
BIOL 425	Ichthyology	
BIOL 427	Ornithology	
BIOL 428	Mammalogy	
BIOL 433	Aquatic Ecology	
BIOL 435	Large Mammal Ecology and Management	
<b>Total Credits</b>		<b>55-58</b>

\* Students who take BIOL 111 Concepts of Biology and BIOL 111L Concepts of Biology Laboratory and earn a grade of "B" or higher in both of those courses prior to becoming a Fisheries and Wildlife Biology major may complete the General Biology sequence by taking BIOL 150 General Biology I and BIOL 150L General Biology I Laboratory.

\*\* We strongly advise mastery of materials in all basic courses prior to enrolling in other 300 or 400 level Biology courses.

\*\*\*Three credits of an accepted Senior Honors Thesis (BIOL 489) can be substituted for the Fisheries and Wildlife Senior Capstone (BIOL 481) with prior approval of the thesis topic by the Chair of Biology

\*\*\*\*Management courses (BIOL 430, BIOL 431, BIOL 432, BIOL 438, or BIOL 439) taken beyond the three courses required to satisfy the management course requirement can be applied to the electives, up to a 4 credit maximum. If two plant courses are taken, the second plant course can be applied to the electives.

III Cognate courses required in other departments:

Code	Title	Credits
<b>Math</b>		
MATH 146 or MATH 165	Applied Calculus I or Calculus I	3-4
<b>Chemistry</b>		
CHEM 121 & 121L	General Chemistry I and General Chemistry I Laboratory	4
CHEM 122 & 122L	General Chemistry II and General Chemistry II Laboratory	4
<b>Physical Sciences</b>		
GEOL 101 & 101L or PHYS 161 or PHYS 211	Introduction to Geology and Introduction to Geology Laboratory or Introductory College Physics I or College Physics I	4
<b>Geography</b>		
GEOG 474 & 474L	Introduction to Geographic Information Systems (GIS) and GIS Laboratory	3
<b>Total Credits</b>		<b>18-19</b>