

# WILDLIFE BIOLOGY B.S. - AQUATIC

## General Degree Requirements

To earn a baccalaureate degree, all students must complete successfully, in addition to any other requirements, the University of Montana General Education Requirements. Please refer to the General Education Requirements page (<https://catalog.umd.edu/academics/general-education-requirements/>) for more information.

Additional requirements for graduation can be found on the Degree/Certificate Requirements for Graduation page (<https://catalog.umd.edu/academics/graduation-requirements/>).

Unless otherwise noted in individual program requirements, a minimum grade point average of 2.00 in all work attempted at the University of Montana-Missoula is required for graduation. Please see the Academic Policies and Procedures page (<https://catalog.umd.edu/academics/policies-procedures/>) for information on how your GPA is calculated.

Courses taken to satisfy the requirements of a major, minor, or certificate program must be completed with a grade of C- or better unless a higher grade is noted in the program requirements.

## Bachelor of Science - Wildlife Biology; Aquatic Concentration

- This major requires a minimum GPA of 2.5.

### Course Requirements

Code	Title	Hours
<b>Major Required Courses</b>		
Complete all of the following courses:		
BIOB 160	Principles of Living Systems	3
BIOB 161N	Principles of Living Systems Lab	1
BIOB 170N	Principles of Biological Diversity	3
BIOB 272	Genetics and Evolution	4
BIOE 370	General Ecology	3
BIOE 371	General Ecology Lab (equivalent to 271)	2
BIOO 320	General Botany	4-5
or BIOO 335	Rocky Mountain Flora	
WILD 180	Careers in Wildlife Biology	2
WILD 274	Human Dimensions of Wildlife	3
WILD 346	Wildlife Physiological Ecology	3
WILD 398	Internship (fulfills the Wildlife Biology Experiential Learning requirement. Alternatives are possible. See the Wildlife Biology Advisor.)	2
WILD 410	Wildlife Policy	3
or NRSM 422	Natural Resources Policy	
or NRSM 427	Water Policy	
or NRSM 428	Climate Policy	
WILD 480	The Upshot--Applied Wildlife Management	3
or BIOB 480	Conservation Genetics	
or BIOB 486	Genomics	

or BIOM 460	Ecology of Infectious Diseases
or NRSM 379	Collaborations in Natural Resource Decisions
or PTRM 300	Recreation Behavior

WILD 494	Senior Wildlife Seminar	1
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### Major Required Courses - Aquatic Concentration

Complete all of the following courses:		
BIOE 428	Freshwater Ecology	5
BIOO 340	Biology and Management of Fishes	4
NRSM 385	Watershed Hydrology	3
WILD 280	Fisheries Techniques	3
WILD 408	Aquatic Habitat Conservation & Restoration	4
Complete one of the following courses:		
3-4		

BIOE 406	Behavior & Evolution
BIOM 427 & BIOM 428	General Parasitology and General Parasitology Lab
BIOO 462	Entomology
WILD 485	Aquatic Invertebrate Ecology

### Outside Major Required Courses

Complete all of the following courses:		
CHMY 121N	Introduction to General Chemistry	4
COMX 111A	Introduction to Public Speaking	3
M 162	Applied Calculus	4
or M 171	Calculus I	
STAT 216	Introduction to Statistics	4
or WILD 240	Intro to Biostatistics	

### Writing in the Disciplines Requirement

Complete any three of the courses from the following lists:

The following courses are required in the Aquatic Concentration:

BIOE 428	Freshwater Ecology
BIOO 340	Biology and Management of Fishes
WILD 408	Aquatic Habitat Conservation & Restoration

The following courses are additional options that can also be used to fulfill the Writing in the Disciplines requirement:

BIOB 483	Phylogenics and Evolution
BIOE 342	Field Ecology
BIOE 403	Comparative Vertebrate Anatomy
BIOO 340	Biology and Management of Fishes
BIOO 470	Ornithology
BIOO 475	Mammalogy
FORS 330	Forest Ecology
FORS 341	Timber Harvesting & Roads
FORS 349	Practice of Silviculture
FORS 440	Forest Stand Management
NRSM 344	Ecosystem Science and Restoration Capstone
NRSM 349E	Climate Change Ethics and Policy
NRSM 379	Collaborations in Natural Resource Decisions
NRSM 462	Rangeland Ecology
NRSM 475	Environment & International Development
PTRM 300	Recreation Behavior
PTRM 451	Tourism & Sustainability

PTRM 482	Wilderness & Protected Area Management
WILD 410	Wildlife Policy
WILD 470	Conservation of Wildlife Populations
WILD 499	Thesis

**Total Hours** **74-76**

## Four Year Plan

Course	Title	Hours
<b>Freshman</b>		
<b>Autumn</b>		
BIOB 160 & BIOB 161N	Principles of Living Systems and Principles of Living Systems Lab	4
CHMY 121N	Introduction to General Chemistry	4
WRIT 101 or COMX 111A	College Writing I or Introduction to Public Speaking	3-4
WILD 180	Careers in Wildlife Biology	2
Electives/General Education		2-3
<b>Hours</b>		<b>15-17</b>

<b>Spring</b>		
M 162 or M 171	Applied Calculus or Calculus I	4
BIOB 170N	Principles of Biological Diversity	3
COMX 111A or WRIT 101	Introduction to Public Speaking or College Writing I	3-4
Electives/General Education		5-6
<b>Hours</b>		<b>15-17</b>

<b>Sophomore</b>		
<b>Autumn</b>		
STAT 216 or WILD 240	Introduction to Statistics or Intro to Biostatistics	4
WILD 280	Fisheries Techniques	3
Experiential Learning		2
Electives/General Education		7
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
BIOB 272	Genetics and Evolution	4
WILD 274	Human Dimensions of Wildlife	3
Writing Across Curriculum Course		3
Electives/General Education		5
<b>Hours</b>		<b>15</b>

<b>Junior</b>		
<b>Autumn</b>		
BIOE 370 & BIOE 371	General Ecology and General Ecology Lab (equivalent to 271)	5
WILD 346	Wildlife Physiological Ecology	3
BIOE 406 or BIOM 427 <i>and</i> BIOM 428	Behavior & Evolution or General Parasitology <i>and</i> General Parasitology Lab	4
Elective/General Education Course		3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
NRSM 385	Watershed Hydrology	3
BIOO 335	Rocky Mountain Flora	4
BIOO 340	Biology and Management of Fishes	4
Electives/General Education		4
<b>Hours</b>		<b>15</b>

<b>Senior</b>		
<b>Autumn</b>		
NRSM 422 or WILD 410 or NRSM 427 or NRSM 428	Natural Resources Policy or Wildlife Policy or Water Policy or Climate Policy	3

WILD 494	Senior Wildlife Seminar	1
WILD 408	Aquatic Habitat Conservation & Restoration	4
Electives/General Education		7

**Hours** **15**

<b>Spring</b>		
BIOE 428	Freshwater Ecology	5
WILD 480 or BIOB 480 or BIOB 486 or BIOM 460 or NRSM 379 or PTRM 300	The Upshot--Applied Wildlife Management or Conservation Genetics or Genomics or Ecology of Infectious Diseases or Collaborations in Natural Resource Decisions or Recreation Behavior	3
Electives/General Education		7

**Hours** **15**

**Total Hours** **121-125**

*Last updated Autumn 2025*