

A minimum grade of C (2.000) is required in all biological, mathematical/ statistical, physical science, fish, wildlife, and conservation biology, and natural resource courses used to meet graduation requirements for the fish, wildlife, and conservation biology major. The minimum applies to courses taken as substitutions for meeting these requirements. Students choosing the Fisheries and Aquatic Sciences concentration are also required to complete at least 160 hours of paid or non-paid employment related to fishery and aquatic biology.

<u>Course</u>	<u>Title</u>	<u>Cr</u>	<u>AUCC</u>
FRESHMAN			
<i>Select one set of courses from the following:</i>			
BZ 110	Principles of Animal Biology	3	3A
BZ 111 ^P	Animal Biology Laboratory	1	3A
BZ 120	Principles of Plant Biology	4	3A
OR			
LIFE 102 ^P	Attributes of Living Systems ¹	4	3A
LIFE 103 ^P	Biology of Organisms—Animals and Plants ¹	4	
CO 150 ^P	College Composition	3	1A
<i>Select one set of chemistry and physics courses from the following:</i>			
CHEM 107 ^P	Fundamentals of Chemistry	4	3A
CHEM 108 ^P	Fundamentals of Chemistry Laboratory	1	3A
PH 121 ^P	General Physics I	5	3A
PH 122 ^P	General Physics II	5	3A
OR			
CHEM 111 ^P	General Chemistry I	4	3A
CHEM 112 ^P	General Chemistry Laboratory I	1	3A
CHEM 113 ^P	General Chemistry II	3	
CHEM 114 ^P	General Chemistry Laboratory II	1	
PH 110	Descriptive Physics	3	3A
PH 111 ^P	Descriptive Physics Laboratory	1	3A
FW 104	Wildlife Ecology and Conservation	3	3A
	Arts and Humanities ²	3	3B
	TOTAL	30-32	
SOPHOMORE			
<i>Select one course from the following:</i>			
BZ 220 ^P	Introduction to Evolution	3	
BZ 346 ^P	Population and Evolutionary Genetics ³	3	
BZ 350 ^P	Molecular and General Genetics	4	
SOCR 330 ^P	Principles of Genetics	3	
CHEM 245 ^P	Fundamentals of Organic Chemistry	4	
CHEM 246 ^P	Fundamentals of Organic Chemistry Laboratory	1	
FW 204	Introduction to Fishery Biology	3	
FW 260 ^P	Principles of Wildlife Management	3	
HONR 499 ^P	Senior Honors Thesis ⁴	3	
OR			
SPCM 200	Public Speaking ⁴	3	
LIFE 320 ^P	Ecology	3	
MATH 155 ^P	Calculus for Biological Scientists I	4	1B
OR			
MATH 160 ^P	Calculus for Physical Scientists I	4	1B
STAT 301 ^P	Introduction to Statistical Methods	3	

<u>Course</u>	<u>Title</u>	<u>Cr</u>	<u>AUCC</u>
OR			
STAT 307 ^P	Introduction to Biostatistics	3	
	Social and Behavioral Sciences ⁵	<u>3</u>	3C
	TOTAL		
		30-31	
SUMMER			
NR 220 ^P	Natural Resources Ecology and Measurements	<u>5</u>	
	TOTAL	5	
JUNIOR			
<i>Select four credits from the following courses and course pair:</i>			
BSPM 302	Applied and General Entomology	2	
BSPM 303A ^P	Entomology Laboratory--General	2	
OR			
BSPM 445 ^P	Aquatic Insects	4	
OR			
BZ 212 ^P	Animal Biology—Invertebrates	4	
<i>Select one course from the following:</i>			
BZ 214 ^P	Animal Biology—Vertebrates	4	
BZ 329 ^P	Herpetology	3	
BZ 330 ^P	Mammalogy	3	
BZ 335 ^P	Ornithology	3	
<i>Select one Plant Biology Course from the following:</i>			
BZ 223 ^P	Plant Identification	3	
BZ 321 ^P	Aquatic Vascular Plants ³	3	
BZ 325 ^P	Plant Systematics	4	
BZ 332 ^P	Introductory Phycology	4	
BZ 450 ^P	Plant Ecology	4	
F 310 ^{P/}	Forest and Rangeland Ecogeography	3	
RS 310 ^P			
F 311 ^P	Forest Ecology	3	
NR 326 ^P	Forest Vegetation Management	3	
<i>Select one course from the following:</i>			
CO 300 ^P	Writing Arguments	3	2
CO 301A-D ^P	Writing in the Disciplines	3	2
JTC 300 ^P	Professional and Technical Communication	3	2
FW 300 ^P	Ichthyology	2	
FW 301 ^P	Ichthyology Laboratory	1	
FW 370 ^P	Design of Fish and Wildlife Projects	3	4A, 4B
<i>Select four credits from the following:⁶</i>			
GEOL 120	Exploring Earth: Physical Geology	3	3A
GEOL 121 ^P	Introductory Geology Laboratory	1	3A
GEOL 122	The Blue Planet: Geology of Our Environment	3	3A
GEOL 124	Geology of Natural Resources	3	3A
GEOL 150	Physical Geology for Scientists and Engineers	4	
GR 304 ^{P/}	Sustainable Watersheds ⁶	3	3A
WR 304 ^P			
NR 319 ^P	Geospatial Applications in Natural Resources	4	
NR 322	Introduction to Geographic Information Systems	4	
SOCR 240 ^P	Introductory Soil Science	4	
NR 320	Natural Resources History and Policy	3	3D
	Global and Cultural Awareness ⁷	<u>3</u>	3E
	TOTAL		
		28-31	
SENIOR			
<i>Select one course or course pair not taken elsewhere from the following:</i>			
BZ 471 ^P	Stream Biology and Ecology	3	

<u>Course</u>	<u>Title</u>	<u>Cr</u>	<u>AUCC</u>
BZ 472 ^P	Stream Biology and Ecology Laboratory	1	
	OR		
BZ 474 ^P	Limnology	3	
	OR		
NR 370 ^P	Coastal Environmental Ecology	3	
<i>Select one Ecosystem Course not taken elsewhere from the following:</i>			
F 310 ^{P/}	Forest and Rangeland Ecogeography	3	
RS 310 ^P			
F 311 ^P	Forest Ecology	3	
F 324 ^P	Fire Effects and Adaptations	3	
F 424 ^P	Wildland Fire Behavior and Management	3	
FW 477 ^P	Wildlife Habitat Use and Management	3	
GR 304/	Sustainable Watersheds	3	3A
WR 304			
NR 300 ^P	Biological Diversity	3	
NR 326 ^P	Forest Vegetation Management	3	
NR 370 ^P	Coastal Environmental Ecology	3	
NR 440 ^P	Applications in Conservation Planning ³	3	
NRRT 439 ^P	Open Space and Natural Area Management ³	3	
RS 478 ^P	Ecological Restoration	3	
WR 416 ^P	Land Use Hydrology	3	
WR 418 ^P	Land Use and Water Quality	3	
<i>Select two courses from the following:</i>			
FW 400 ^P	Conservation of Fish in Aquatic Ecosystems	3	
FW 402 ^P	Fish Culture	4	
FW 405 ^P	Fish Physiology	3	
FW 401 ^P	Fishery Science	3	4C
<i>Select one Human Dimensions Course not taken elsewhere from the following:</i>			
HIST 355 ^P	American Environmental History ³	3	
NR 400 ^P	Public Relations in Natural Resources	3	
NRRT 330	Social Aspects of Natural Resource Management	3	
NRRT 400 ^P	Environmental Governance ³	3	
NRRT 440 ^P	Applications in Environmental Communication ³	3	
PHIL 320	Ethics of Sustainability	3	
PHIL 345 ^P	Environmental Ethics	3	
POLS 361 ^P	U.S. Environmental Politics and Policy	3	
SOC 320 ^P	Population-Natural Resources and Environment	3	
SOC 322 ^P	Introduction to Environmental Justice	3	
SOC 460 ^P	Society and Environment	3	
SOC 461 ^P	Water, Society, and Environment	3	
<i>Select from 0 to 5 credits of Fisheries and Aquatic Sciences coursework not taken elsewhere:⁸</i>			
BZ 300 ^P	Animal Behavior	3	
BZ 310 ^P	Cell Biology	4	
BZ 401 ^P	Comparative Animal Physiology	3	
BZ 415 ^P	Marine Biology ³	4	
CIVE 413 ^P	Environmental River Mechanics	3	
FW 375 ^P	Field Wildlife Studies	3	
FW 455 ^P	Principles of Conservation Biology	3	
FW 465 ^P	Managing Human-Wildlife Conflicts	3	
FW 467 ^P	Wildlife Disease Ecology	3	
FW 469 ^P	Conservation and Management of Large Mammals	3	
FW 471 ^P	Wildlife Data Collection and Analysis	4	
FW 472 ^P	Issues in Animal Conservation and Management	3	
FW 475 ^P	Conservation Decision Making	3	

<u>Course</u>	<u>Title</u>	<u>Cr</u>	<u>AUCC</u>
FW 477 ^P	Wildlife Habitat Use and Management	3	
FW 544 ^P	Ecotoxicology	3	
FW 573 ^P	Travel Abroad—Wildlife Ecology/Conservation	3	
FW ***	Travel Abroad Course ⁹	3	
MIP 300 ^P	General Microbiology	3	
NR 300 ^P	Biological Diversity	3	
	Arts and Humanities ²	3	3B
	TOTAL	22-28	

PROGRAM TOTAL = 120-121 credits

^P This course has at least one prerequisite. Check the Courses of Instruction section of the catalog at <http://catalog.colostate.edu/> to see the course prerequisites.

¹ Students taking this biology selection should choose a botany-related course in the department electives options to meet botany/plant course requirements for certain federal positions related to wildlife, fisheries and/or conservation biology.

² Select from the list of courses in category 3B of the All-University Core Curriculum (AUCC). Only 3 of the 6 credits required for Arts and Humanities may come from intermediate (L*** 200 and L*** 201) foreign language courses.

³ Students will need to obtain a registration override from the appropriate department to take this course.

⁴ Students in the Honors Track 1 program must take HONR 499.

⁵ Select from the list of courses in category 3C of the AUCC in consultation with advisor.

⁶ Students selecting WR 304 only need select three credits. Students selecting one of the geosciences lecture courses (GEOL 120, GEOL 122, GEOL 124) also need to take GEOL 121.

⁷ Select from the list of courses in category 3E of the AUCC.

⁸ Select enough Fisheries and Aquatic Sciences Elective credits to bring the program total to 120-121, of which at least 42 must be upper-division (300- to 400-level).

⁹ Restricted to FW subject code, department travel abroad courses, taught by FWCB faculty. No transfer or substitute courses will be accepted.