

# MAJOR IN FISH, WILDLIFE, AND CONSERVATION BIOLOGY, CONSERVATION BIOLOGY CONCENTRATION

## Major Completion Map

### Distinctive Requirements for Degree Program:

The curriculum for the Fish, Wildlife and Conservation Biology major – Conservation Biology concentration assumes students enter college

prepared to take calculus. Students who have not met the prerequisites for calculus, will be required to successfully complete the prerequisites in their first year. A minimum grade of C (2.000) is required in all biological, mathematical / statistical, physical science, fish, wildlife, and conservation biology, and natural resources courses used to meet graduation requirements for the fish, wildlife, and conservation biology major. The minimum applies to courses taken as substitutions for meeting degree requirements. NR 220 is a summer course in which students reside at CSU's Mountain Campus. Students must choose ONE of two CHEM + PH paths: (Path A) CHEM 107/CHEM 108 and PH 121/PH 122 or (Path B) CHEM 111, CHEM 112, CHEM 113, CHEM 114 and PH 110/PH 111. Students must also choose ONE biology group A) BZ 110/BZ 111 or B) LIFE 102/LIFE 103.

### Freshman

Semester 1	Critical	Recommended	AUCC	Credits
CO 150 College Composition (GT-CO2)			1A	3
FW 104 Wildlife Ecology and Conservation (GT-SC2)			3A	3
FW 179 New-to-the-Major Seminar				1
Select one group from the following:	X			4
Group A:				
BZ 110 Principles of Animal Biology (GT-SC2)			3A	
BZ 111 Animal Biology Laboratory (GT-SC1)			3A	
Group B:				
LIFE 102 Attributes of Living Systems (GT-SC1)			3A	
Select one path from the following:	X			5
Path A:				
PH 121 General Physics I (GT-SC1)			3A	
Path B:				
CHEM 111 General Chemistry I (GT-SC2)			3A	
CHEM 112 General Chemistry Lab I (GT-SC1)			3A	
MATH 117, MATH 118, and MATH 124 must be completed by the end of Semester 1.	X			
<b>Total Credits</b>				<b>16</b>

Semester 2	Critical	Recommended	AUCC	Credits
Select one course from the following:	X			4
BZ 120 Principles of Plant Biology (GT-SC1)			3A	
LIFE 103 Biology of Organisms-Animals and Plants (GT-SC1)			3A	
Select one path from the following:	X			8-10
Path A:				
CHEM 107 Fundamentals of Chemistry (GT-SC2)			3A	
CHEM 108 Fundamentals of Chemistry Laboratory (GT-SC1)			3A	
PH 122 General Physics II (GT-SC1)			3A	
Path B:				
CHEM 113 General Chemistry II				
CHEM 114 General Chemistry Lab II				
PH 110 Physics of Everyday Phenomena (GT-SC2)			3A	
PH 111 Physics of Everyday Phenomena Laboratory (GT-SC1)			3A	
Arts and Humanities ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities</a> )			3B	3
CO 150, AUCC 1B (Quantitative Reasoning), and MATH 125 must be completed by the end of Semester 2.	X			
<b>Total Credits</b>				<b>15-17</b>

**Sophomore**

<b>Semester 3</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
CHEM 245	Fundamentals of Organic Chemistry				4
CHEM 246	Fundamentals of Organic Chemistry Laboratory				1
FW 260	Principles of Wildlife Management		X		3
Select one course from the following:					3-4
BZ 220	Introduction to Evolution				
BZ 346	Population and Evolutionary Genetics				
BZ 350	Molecular and General Genetics				
SOCR 330	Principles of Genetics				
Select one course from the following:					4
MATH 155	Calculus for Biological Scientists I (GT-MA1)	X		1B	
MATH 160	Calculus for Physical Scientists I (GT-MA1)			1B	

**Total Credits****15-16**

<b>Semester 4</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
LIFE 320	Ecology		X		3
Select one course from the following:					3
HONR 499	Senior Honors Thesis				
SPCM 200	Public Speaking				
Select one course from the following:					3
STAT 301	Introduction to Applied Statistical Methods		X		
STAT 307	Introduction to Biostatistics				
Arts and Humanities ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities</a> )				3B	3
Social and Behavioral Sciences ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences</a> )				3C	3
FW 260 must be completed by the end of Semester 4.					
		X			

**Total Credits****15**

<b>Semester 5</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
NR 220	Natural Resource Ecology and Measurements	X			5

**Total Credits****5****Junior**

<b>Semester 6</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
Select one course from the following:					3-4
FW 310	Mapping Diverse Perspectives in Conservation				
NR 319	Geospatial Applications in Natural Resources				
Select one course from the following:					3
CO 300	Writing Arguments (GT-CO3)		X	2	
JTC 300	Strategic Writing and Communication (GT-CO3)			2	
CO 301A	Writing in the Disciplines: Arts and Humanities (GT-CO3)			2	
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)			2	
CO 301C	Writing in the Disciplines: Social Sciences (GT-CO3)			2	
CO 301D	Writing in the Disciplines: Education (GT-CO3)			2	
Select one group from the following:					4
Group A:					
BSPM 302	Applied and General Entomology				
BSPM 303A	Entomology Laboratory: General				
Group B:					
BSPM 445	Aquatic Insects				
Group C:					
BZ 212	Animal Biology-Invertebrates				
Select one group from the following:					3-4

Group A:  
 BZ 214 Animal Biology-Vertebrates  
 Group B:  
 BZ 329 Herpetology  
 Group C:  
 BZ 330 Mammalogy  
 Group D:  
 BZ 335 Ornithology  
 Group E:  
 FW 300 Biology and Diversity of Fishes  
 FW 301 Ichthyology Laboratory  
 STAT 301 or STAT 307 and LIFE 320 must be completed by the end of Semester 6.

X

<b>Total Credits</b>					<b>13-15</b>
<b>Semester 7</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
FW 370	Design of Fish and Wildlife Projects		X	4A,4B	3
Select one group from the following:					3-4
Group A:					
BZ 214	Animal Biology-Vertebrates				
Group B:					
BZ 329	Herpetology				
Group C:					
BZ 330	Mammalogy				
Group D:					
BZ 335	Ornithology				
Group E:					
FW 300	Biology and Diversity of Fishes				
FW 301	Ichthyology Laboratory				
Plant Biology Elective Course (See Department List on Concentration Requirements tab)					3-4
Diversity, Equity, and Inclusion ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion</a> )				1C	3
Historical Perspectives ( <a href="http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives">http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives</a> )				3D	3
Choose FW 300 / FW 301 if taking FW 401					

**Total Credits** **15-16**

<b>Senior</b>					
<b>Semester 8</b>		<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
Select one course from the following:					3-4
FW 471	Wildlife Data Collection and Analysis	X		4C	
FW 401	Fishery Science			4C	
Select one course from the following:					3
FW 455	Principles of Conservation Biology		X		
FW 472	Issues in Animal Conservation and Management				
Aquatic Biology Elective (See Department List on Concentration Requirements tab)					3-4
Human Dimensions Elective (See Department List on Concentration Requirements tab)					3
FW 370, BSPM 302 / BSPM 303A or BSPM 445 or BZ 212 must be completed by the end of Semester 8.					X

**Total Credits** **12-14**

<b>Semester 9</b>	<b>Critical</b>	<b>Recommended</b>	<b>AUCC</b>	<b>Credits</b>
Human Dimensions Elective (See Department List on Concentration Requirements tab)	X			3
Wildlife Elective (See Department List on Concentration Requirements tab)	X			3-4
Upper Division Guided Elective (See Department List on Concentration Requirements tab)	X			6
Elective	X			0-1
The benchmark courses for the 9th semester are the remaining courses in the entire program of study.	X			
<b>Total Credits</b>				<b>12-13</b>
<b>Program Total Credits:</b>				<b>120</b>