

BIOLOGY COMPREHENSIVE MAJOR: FISHERIES AND AQUATIC ECOLOGY EMPHASIS

Fisheries and Aquatic Ecology Emphasis

The Fisheries and Aquatic Ecology Emphasis requires a minimum of 69 credits, including the 26-credit Biology Nucleus, 22 additional credits in Biology, and 21 credits of supporting courses:

Code	Title	Credits
Required Biology courses:		
BIOL 302	Ecology Laboratory and Recitation	2
BIOL 467	Biology of Fishes	3
BIOL 468	Ichthyology Laboratory	1
BIOL 470	Fisheries Management (with laboratory)	4
BIOL 476	Aquatic Ecology (with laboratory)	4
One of the following organismal courses:		3-4
BIOL 320	Ornithology (with laboratory and recitation)	
BIOL 322	Mammalogy (with laboratory and recitation)	
BIOL 325	Invertebrate Zoology with Laboratory	
BIOL 327	Field Entomology (with laboratory)	
BIOL 352	Botany (with laboratory)	
BIOL 353	Rocky Mountain Flora	
BIOL 355	Spring Fungi Rocky Mountains (with laboratory)	
One of the following:		3
BIOL 362	Evolution	
BIOL 440	Conservation Biology	
At least two credits of Capstone Experience courses:		2
BIOL 495	Senior Seminar (may be repeated)	
BIOL 496	Senior Thesis	
Minimum supporting courses:		
CHEM 231	Introduction to Organic Chemistry and Biochemistry	3
CHEM 234	Introductory Organic and Biochemistry Laboratory	1
MATH 151	Calculus I (GT-MA1)	4
MATH 213	Probability and Statistics (GT-MA1)	3
PHYS 140	Introductory Physics (with laboratory) (GT-SC1)	4
At least three credits of the following communications and writing courses:		3
COM 274	Public Relations Communication	
COM 346	Multimedia Communication	
COM 371	Small Group and Conflict Management	
COM 375	Social Media Skills	
ENG 302	Technical Writing	
ENVS 200	Writing the Environment	
At least three credits of the following human dimensions courses:		3
BIOL 430	Wildlife Ecology and Management (with laboratory)	4
ECON 215	Environmental Economics	
ENVS 210	Introduction to Climate Policy	
ENVS 260	Introduction to Public Lands Management	

ENVS 320	Quantitative Skills for Climate Action Planning
ENVS 350	U.S. and Western Environmental Politics
ENVS 370	Water Policy and Politics
ENVS 373	The Water Planet
ENVS 376	The Colorado Water Workshop
ENVS 380	Advanced Climate Policy

Total Credits **47-48**

Sample Plan

Course	Title	Credits
Year One		
Fall		
BIOL 151	Diversity and Patterns of Life (with laboratory)	4
CHEM 111	General Chemistry I (GT-SC2)	3
CHEM 112	General Chemistry Laboratory I (GT-SC1)	1
ENG 102	Writing and Rhetoric I (GT-CO1)	3
HWTR 100	First Year Seminar	1
MATH 140	College Algebra (GT-MA1)	3
Credits		15
Spring		
BIOL 150	Biological Principles (with laboratory) (GT-SC1)	4
CHEM 113	General Chemistry II	3
CHEM 114	General Chemistry Laboratory II	1
MATH 141	Precalculus (GT-MA1)	4
ENG 103	Writing and Rhetoric II (GT-CO2)	3
Credits		15
Year Two		
Fall		
BIOL 301	General Ecology	3
BIOL 302	Ecology Laboratory and Recitation	2
MATH 213	Probability and Statistics (GT-MA1)	3
Gen Ed	General Education (Area I)	3
Gen Ed	General Education (Area III)	3
Credits		14
Spring		
BIOL 310	Cell Biology	3
CHEM 231	Introduction to Organic Chemistry and Biochemistry	3
CHEM 234	Introductory Organic and Biochemistry Laboratory	1
MATH 151	Calculus I (GT-MA1)	4
Gen Ed	General Education (Area I)	3
Credits		14
Year Three		
Fall		
BIOL 312	Genetics (with recitation)	4
PHYS 140	Introductory Physics (with laboratory) (GT-SC1)	4
BIOL elective	BIOL upper division elective	3
Elective	Communications/Writing Elective	3
Gen Ed	General Education (Area I)	3
Credits		17
Spring		
BIOL 467	Biology of Fishes	3
BIOL 468	Ichthyology Laboratory	1
Elective	Human Dimensions elective course	3
Gen Ed	General Education (Area III)	3
Gen Ed/Elective	Other GE or Upper Division Biology Electives	6
Credits		16
Year Four		
Fall		
BIOL 470	Fisheries Management (with laboratory)	4
BIOL 476	Aquatic Ecology (with laboratory)	4

BIOL 495 or BIOL 496	Senior Seminar or Senior Thesis	1
Elective	Upper division elective course	3
Gen Ed	General Education (Area III)	3
Credits		15
Spring		
BIOL 440	Conservation Biology	3
BIOL 495 or BIOL 496	Senior Seminar or Senior Thesis	1
Elective	Remaining elective courses	3-10
Credits		7-14
Total Credits		113-120