NATURAL RESOURCE ECOLOGY & MANAGEMENT: FISHERIES & AQUATIC ECOLOGY, BSAG

Requirements for Students Matriculating in or before Academic Year 2025-2026. Learn more about University Academic Regulation 3.1 (http://catalog.okstate.edu/university-academic-regulations/#matriculation).

Minimum Overall Grade Point Average: 2.00
Total Hours: 125

Code	Title	Hours
General Education Requirements		
English Composition		
See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/#english-composition/)		
ENGL 1113	Composition I	3
or ENGL 1313	Critical Analysis and Writing I	
Select one of the following:		3
ENGL 1213	Composition II	
ENGL 1413	Critical Analysis and Writing II	
ENGL 3323	Technical Writing	
American History & Government		
Select one of the following:		3
HIST 1103	Survey of American History	
HIST 1483	American History to 1865 (H)	
HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
Quantitative Thought & Logical Reasoning (Q)		
MATH 1513	College Algebra (Q) [1]	3
STAT 2013	Elementary Statistics (Q) [1]	3
Understanding Humanities-Human Heritage & Cultures (H)		
Courses designated (H)		3
Courses designated (DH)		3
Reasoning in the Natural Sciences (N)		
Must include one Laboratory-Based Inquiry (L) course		
Select four hours from the following:		4
BIOL 1113 & BIOL 1111	Introductory Biology (N) and Introductory Biology Laboratory (LN) [1]	
BIOL 1114	Introductory Biology (LN) [1]	
Course designated (N)		2
Exploring Society & Human Behavior (S)		
AGEC 1113	Introduction to Agricultural Economics (S) [1]	3
Diversity (D)		
Courses designated (D)		
May be paired with another designated course		
Global Cultural Competency (G)		
Courses designated (G)		3
Additional General Education		
Additional general education credit hours (at least 4 hours) are required to meet the total 40-hour minimum. If courses carry more than one general education designation and can be used to meet multiple minimum general education designation hours above, more than 4 hours of additional general education will be required here to meet the 40-hour minimum.		
Courses designated (Q), (H), (N), (S), (D), (G), or (F).		4
Hours Subtotal		**40**
College Requirements		
CHEM 1215	Chemical Principles I (LN)	4
or CHEM 1314	Chemistry I (LN)	
Written and Oral Communications		
Select one of the following:		3
AGCM 3103	Written Communications in Agricultural Sciences and Natural Resources	
BCOM 3113	Written Communication	
ENGL 3323	Technical Writing [3]	
Select one of the following: [4]		3
AGCM 3203	Oral Communications in Agricultural Sciences & Natural Resources (S)	
SPCH 2713	Introduction to Speech Communication (S)	
SPCH 3733	Elements of Persuasion (S)	
UNIV 1111	First Year Seminar (or other approved first year seminar course)	1
Select one of the following:		4
ENTO 4484	Aquatic Entomology	
SOIL 2124	Fundamentals of Soil Science (N)	
NREM 3013	Applied Ecology and Conservation	3
Departmental Requirements		
Select one of the following:		4
BIOL 1604	Animal Biology	
NREM 2134	Dendrology	
NREM 1012	Introduction to Natural Resource Ecology and Management	2
NREM 2083	Geospatial Technologies for Natural Resources	3
NREM 3012	Applied Ecology Laboratory	2
NREM 3503	Principles of Wildlife Ecology and Management	3
NREM 4001	Issues In Global Change	1
NREM 4043	Natural Resource Administration and Policy	3
PBIO 1404	Plant Biology (LN)	4
Hours Subtotal		**40**
Major Requirements		
Core Courses		
ANSI 3423	Animal Genetics	3
BIOL 4413	Biology of Fishes	3
BIOL 4434	Limnology	4
CHEM 1225	Chemical Principles II (LN)	5
or CHEM 1515	Chemistry II (LN)	
Select one of the following: [2]		4
GEOL 1114	Physical Geology (LN)	
PHYS 1014	Descriptive Physics (N)	

NREM 3523	Fish and Wildlife Population Biology	3
NREM 4414	Fisheries Management	4
NREM 4424	Fisheries Techniques	4
NREM 4443	Watershed Hydrology and Water Quality	3
NREM 4452	Pond Management	2
NREM 4453	Aquaculture	3
STAT 3013	Intermediate Statistical Analysis	3
or STAT 4013	Statistical Methods I (Q)	
Related Courses		
Select one of the following administration, policy & law classes:		2
AGEC 3503	Natural Resource Economics	
AGEC 3723	Environmental Law for Agriculture and Natural Resources	
ENVR 4512	Introduction to National Environmental Policy Act	
GEOG 3153	Conservation of Natural Resources (S)	
HIST 4523	American Environmental History (H)	
NREM 3502	Wildlife Law Enforcement	
NREM 4053	Natural Resource Recreation	
POLS 4363	Environmental Law And Policy	
POLS 4593	Natural Resources and Environmental Policy	
SOC 4433	Environmental Sociology (S)	
Select 2 hours of the following or of other courses in consultation with a faculty advisor for additional breadth, or to create a specialty emphasis area: [5]		2
ANSI 3543	Principles of Animal Nutrition	
BIOL 3114	Vertebrate Zoology	
BIOL 3153	Animal Behavior	
BIOL 3513	Principles of Conservation Biology	
BIOL 4113	Conservation Genetics	
BIOL 4133	Evolution	
BIOL 4174	Mammalogy	
BIOL 4303	Organismal Ecotoxicology	
BIOL 4363	Principles of Toxicology	
ENVR 4512	Introduction to National Environmental Policy Act	
GEOG 4203	Fundamentals of Geographic Information Systems	
GEOG 4263	Geospatial Applications for Unmanned Aerial Systems	
GEOG 4333	Remote Sensing	
GEOG 4343	Geographic Information Systems: Resource Management Applications	
NREM 3063	Natural Resource Biometrics	
NREM 3091	Field Applications of Geospatial Technologies for Natural Resources	
NREM 3101	Forest Resource Field Studies	
NREM 3111	Natural Resource Field Studies	
NREM 3143	Forest Biology	
NREM 3224	Silviculture	
NREM 3502	Wildlife Law Enforcement	
NREM 3613	Principles of Rangeland Management	
NREM 4023	Restoration Ecology	
NREM 4033	Ecology Of Invasive Species	
NREM 4053	Natural Resource Recreation	
NREM 4093	Natural Resources, People and Sustainable Development (G)	
NREM 4403	Wetland Ecology and Management	
NREM 4522	Wildlife Management Applications and Planning	
NREM 4523	Wildlife Management Techniques	
NREM 4533	Wildlife Management for Game Species	
NREM 4543	Wildlife Management for Biodiversity	
NREM 4960	Undergraduate Internship	
NREM 4980	Undergraduate Research	
NREM 4990	Special Topics in Natural Resource Ecology and Management	
PBIO 4005	Field Botany	
Hours Subtotal		**45**
Electives		
Select 0 hours or hours to complete required total for degree		0
Total Hours		**125**

1

College & Departmental requirements that may be used to meet General Education requirements.

2

If used as (N) course above, then hours are reduced by course hours.

3

If ENGL 3323 Technical Writing is used to satisfy ENGL 1213 Composition II above; hours in this block are reduced by 3.

4

If used as (S) course above, then hours are reduced by three.

5

May not use a course used above in Core Courses. Also may not use the same class for credit in both groups below.

Other Requirements

- A minimum of 40 semester credit hours and 100 grade points must be earned in courses numbered 3000 or above.

Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 and 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2031.