

NATURAL RESOURCE ECOLOGY & MANAGEMENT: WILDLIFE BIOLOGY & PREVETERINARY SCIENCE, BSAG

Requirements for Students Matriculating in or before Academic Year 2023-2024. 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: 130

Code	Title	Hours
General Education Requirements		
<i>English Composition</i>		
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	
<i>American History & Government</i>		
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
<i>Analytical & Quantitative Thought (A)</i>		
MATH 2103	Business Calculus (A) ¹	3
STAT 2013	Elementary Statistics (A) ¹	3
<i>Humanities (H)</i>		
Courses designated (H)		6
<i>Natural Sciences (N)</i>		
Must include one Laboratory Science (L) course		
Select four hours from the following:		4
BIOL 1113	Introductory Biology (N)	
& BIOL 1111	and Introductory Biology Laboratory (LN) ¹	
BIOL 1114	Introductory Biology (LN) ¹	
Course designated (N)		3
<i>Social & Behavioral Sciences (S)</i>		
AGEC 1113	Introduction to Agricultural Economics (S) ¹	3
<i>Additional General Education</i>		
Courses designated (A), (H), (N), or (S)		6
Hours Subtotal		40
Diversity (D) & International Dimension (I)		
May be completed in any part of the degree plan		
Select at least one Diversity (D) course		

Select at least one International Dimension (I) course		
College Requirements		
CHEM 1314	Chemistry I (LN) ²	4
or CHEM 1215	Chemical Principles I (LN)	
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:		3
AGCM 3203	Oral Communications in Agricultural Sciences & Natural Resources (S) ⁴	
SPCH 2713	Introduction to Speech Communication (S) ⁴	
SPCH 3733	Elements of Persuasion (S) ⁴	
AG 1011	First Year Seminar	1
Select one of the following:		4
SOIL 2124	Fundamentals of Soil Science (N)	
ENTO 4484	Aquatic Entomology	
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) ²	4
Hours Subtotal		40
Major Requirements		
<i>Core Courses</i>		
ANSI 3543	Principles of Animal Nutrition	3
Select one of the following:		3
BIOC 3653	Survey of Biochemistry	
BIOC 3713	Biochemistry I	
BIOC 3723	Biochemistry and Molecular Biology Laboratory	
BIOL 3023	General Genetics	3
CHEM 1515	Chemistry II (LN) ²	5
Select one of the following:		5
CHEM 3013 & CHEM 3012	Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory	
or		
CHEM 3053 & CHEM 3153 & CHEM 3112	Organic Chemistry I and Organic Chemistry II and Organic Chemistry Laboratory	

NREM 4523	Wildlife Management Techniques	3
BIOL 3204	Physiology	4
MICR 2123	Introduction to Microbiology	3
MICR 2132	Introduction to Microbiology Laboratory	2
PHYS 1114	College Physics I (LN) ²	4
PHYS 1214	College Physics II (LN) ²	4
<i>Related Courses</i>		
Select courses from among the options, or other courses in consultation with a faculty advisor for additional breadth, or to create a specialty emphasis area ⁵		11
Select an option (p. 2)		
Hours Subtotal		50
<i>Electives</i>		
Select 0 hours or hours to complete required total for degree		0
Total Hours		130

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.

Options

Option 1

Code	Title	Hours
Select two of the following:		7
NREM 4464	Ornithology	
BIOL 4184	Herpetology	
BIOL 4413	Biology of Fishes	
BIOL 4174	Mammalogy	
Select 4 hours of the following:		4
AG 3010	Internships in Agriculture	
ANSI 1021 & ANSI 1023 or ANSI 1124	Introduction to the Animal Sciences Lab and Introduction to the Animal Sciences	
ANSI 3444	Animal Reproduction	
ANSI 3653	Applied Animal Nutrition	
ANSI 3753	Basic Nutrition for Pets	
BIOC 3713	Biochemistry I ³	
BIOC 3723	Biochemistry and Molecular Biology Laboratory	
BIOC 3813	Biochemistry II	
BIOL 3114	Vertebrate Zoology	
BIOL 3153	Animal Behavior	
BIOL 3163	Environmental Biology	
BIOL 3513	Principles of Conservation Biology	

BIOL 4104	General Parasitology
BIOL 4113	Conservation Genetics
BIOL 4215	Mammalian Physiology
BIOL 4273	Environmental Physiology
BIOL 4283	Endocrinology
BIOL 4293	Behavioral Neuroendocrinology
BIOL 4303	Organismal Ecotoxicology
BIOL 4363	Principles of Toxicology
ENTO 2993	Introduction to Entomology (LN)
ENTO 3003	Livestock Entomology
ENTO 4854	Medical and Veterinary Entomology
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
MICR 3033	Cell and Molecular Biology
MICR 3143	Medical Mycology
MICR 3223	Advanced Microbiology
MICR 4123	Virology
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 3153	Forest Health and Disturbance Ecology
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 4093	Natural Resources, People and Sustainable Development (I)
NREM 4403	Wetland Ecology and Management
NREM 4414	Fisheries Management
NREM 4424	Fisheries Techniques
NREM 4452	Pond Management
NREM 4453	Aquaculture
NREM 4464	Ornithology
NREM 4522	Wildlife Management Applications and Planning
NREM 4533	Wildlife Management for Game Species
NREM 4543	Wildlife Management for Biodiversity
NREM 4613	Rangeland Resources Planning
NREM 4783	Prescribed Fire
NREM 4793	Advanced Prescribed Fire
NREM 4960	Undergraduate Internship
NREM 4980	Undergraduate Research
NREM 4990	Special Topics in Natural Resource Ecology and Management

PBIO 4005	Field Botany
PLNT 1213	Introduction to Plant and Soil Systems

Option 2

Complete the first year of professional program.

With the approval of the advisor, department head, and dean, a maximum of 11 hours from an accredited dental, medical, optometry, osteopathic, pharmacy, podiatry, or veterinary medical school may be used to complete hours.

Other Requirements

- A minimum of 40 semester credit hours and 100 grade points must be earned in courses numbered 3000 or above.
- A 2.00 GPA or higher in upper-division hours.

Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 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 2029.