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

Requirements for Students Matriculating in or before Academic Year 2019-2020. 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		
<b>English Composition</b>		
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 & G	overnment	
Select one of the fol	lowing:	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
Analytical & Quantita	tive Thought (A)	
MATH 2103	Business Calculus (A) <sup>1</sup>	3
STAT 2013	Elementary Statistics (A) <sup>1</sup>	3
Humanities (H)		
Courses designated (H)		6
Natural Sciences (N)		
Must include one Laboratory Science (L) course		
BIOL 1114	Introductory Biology (LN) 1	4
Course designated (N)		3
Social & Behavioral Sciences (S)		
AGEC 1113	Introduction to Agricultural Economics (S) 1	3
Additional General Ed	lucation	
Courses designated (A), (H), (N), or (S) 6		6
Hours Subtotal		40
Diversity (D) & Interi	national 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/Departmental Requirements		

Agricultural Science	es and Natural Resources	
AG 1011	First Year Seminar	1
NREM 1012	Introduction to Natural Resource Ecology and Management	2
SOIL 2124	Fundamentals of Soil Science (N)	4
Natural Sciences		
BIOL 1604	Animal Biology	4
CHEM 1314	Chemistry I (LN) <sup>2</sup>	4
CHEM 1515	Chemistry II (LN) <sup>2</sup>	5
MICR 2123	Introduction to Microbiology	3
MICR 2132	Introduction to Microbiology Laboratory	2
PBIO 1404	Plant Biology (LN) <sup>2</sup>	4
PHYS 1114	College Physics I (LN) <sup>2</sup>	4
PHYS 1214	College Physics II (LN) <sup>2</sup>	4
Written and Oral Co		
Select one of the fo		3
AGCM 3103	Written Communications in Agricultural Sciences and Natural Resources	
BCOM 3113	Written Communication	
ENGL 3323	Technical Writing <sup>3</sup>	
Select one of the fo	-	3
AGCM 3203	Oral Communications in Agricultural Sciences & Natural Resources (S) <sup>4</sup>	
SPCH 2713	Introduction to Speech Communication (S)	
SPCH 3733	Elements of Persuasion (S) <sup>4</sup>	
Hours Subtotal		43
Major Requirement	ts	
Core Courses		
Core Courses ANSI 3543	Principles of Animal Nutrition	3
	·	
ANSI 3543	·	
ANSI 3543 Select one of the fo	ollowing:	
ANSI 3543 Select one of the fo BIOC 3653	ollowing: Survey of Biochemistry	
ANSI 3543 Select one of the fo BIOC 3653 BIOC 3713	Survey of Biochemistry Biochemistry I Biochemistry and Molecular Biology	3
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723	Survey of Biochemistry Biochemistry I Biochemistry and Molecular Biology Laboratory General Genetics	3
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723	Survey of Biochemistry Biochemistry I Biochemistry and Molecular Biology Laboratory General Genetics	3
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723 BIOL 3023 Select one of the for CHEM 3013	Survey of Biochemistry  Biochemistry I  Biochemistry and Molecular Biology Laboratory  General Genetics  Ollowing:  Survey of Organic Chemistry and Survey of Organic Chemistry	3
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723 BIOL 3023 Select one of the for CHEM 3013 & CHEM 3012	Survey of Biochemistry  Biochemistry I  Biochemistry and Molecular Biology Laboratory  General Genetics  Ollowing:  Survey of Organic Chemistry and Survey of Organic Chemistry	3
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723  BIOL 3023 Select one of the for CHEM 3013 & CHEM 3012  Or CHEM 3053 & CHEM 3153	Survey of Biochemistry  Biochemistry I  Biochemistry and Molecular Biology Laboratory  General Genetics  Ollowing:  Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory  Organic Chemistry I and Organic Chemistry II	3 5
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723 BIOL 3023 Select one of the for CHEM 3013 & CHEM 3012  Or CHEM 3053 & CHEM 3153 & CHEM 3112	Survey of Biochemistry Biochemistry I Biochemistry and Molecular Biology Laboratory General Genetics Ollowing: Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory  Organic Chemistry I and Organic Chemistry II and Organic Chemistry Laboratory	3 5 5
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723  BIOL 3023 Select one of the for CHEM 3013 & CHEM 3012  Or CHEM 3053 & CHEM 3153 & CHEM 3112  NREM 3012	Survey of Biochemistry  Biochemistry I  Biochemistry and Molecular Biology Laboratory  General Genetics  billowing:  Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory  Organic Chemistry I and Organic Chemistry II and Organic Chemistry Laboratory  Applied Ecology Laboratory	3 5 5
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723  BIOL 3023 Select one of the for CHEM 3013 & CHEM 3012  Or CHEM 3053 & CHEM 3153 & CHEM 3112  NREM 3012  NREM 3013	Survey of Biochemistry  Biochemistry I  Biochemistry and Molecular Biology Laboratory  General Genetics  Ollowing:  Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory  Organic Chemistry I and Organic Chemistry II and Organic Chemistry Laboratory  Applied Ecology Laboratory  Applied Ecology and Conservation Principles of Wildlife Ecology and	3 5 5
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723 BIOL 3023 Select one of the for CHEM 3013 & CHEM 3012 or CHEM 3053 & CHEM 3153 & CHEM 3112 NREM 3012 NREM 3013 NREM 3503	Survey of Biochemistry Biochemistry I Biochemistry and Molecular Biology Laboratory General Genetics Ollowing: Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory  Organic Chemistry I and Organic Chemistry II and Organic Chemistry Laboratory Applied Ecology Laboratory Applied Ecology and Conservation Principles of Wildlife Ecology and Management	3 5 5
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723  BIOL 3023 Select one of the for CHEM 3013 & CHEM 3012  Or CHEM 3053 & CHEM 3153 & CHEM 3112  NREM 3012  NREM 3013  NREM 303	Survey of Biochemistry Biochemistry I Biochemistry and Molecular Biology Laboratory General Genetics  Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory  Organic Chemistry I and Organic Chemistry II and Organic Chemistry Laboratory  Applied Ecology Laboratory  Applied Ecology and Conservation Principles of Wildlife Ecology and Management Issues In Global Change	3 3 5 2 3 3
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723  BIOL 3023 Select one of the for CHEM 3013 & CHEM 3012  Or CHEM 3053 & CHEM 3112  NREM 3012  NREM 3013  NREM 3503  NREM 4001  NREM 4524	Survey of Biochemistry  Biochemistry I  Biochemistry and Molecular Biology Laboratory  General Genetics  Ollowing:  Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory  Organic Chemistry I and Organic Chemistry II and Organic Chemistry Laboratory  Applied Ecology Laboratory  Applied Ecology and Conservation  Principles of Wildlife Ecology and Management Issues In Global Change  Wildlife Management Techniques  Physiology	3 3 5 2 3 3 3 1 4 4
ANSI 3543 Select one of the for BIOC 3653 BIOC 3713 BIOC 3723  BIOL 3023 Select one of the for CHEM 3013 & CHEM 3012  Or CHEM 3053 & CHEM 3153 & CHEM 3112  NREM 3012  NREM 3013  NREM 4001  NREM 4524 BIOL 3204	Survey of Biochemistry  Biochemistry I  Biochemistry and Molecular Biology Laboratory  General Genetics  Ollowing:  Survey of Organic Chemistry and Survey of Organic Chemistry Laboratory  Organic Chemistry I and Organic Chemistry II and Organic Chemistry Laboratory  Applied Ecology Laboratory  Applied Ecology and Conservation  Principles of Wildlife Ecology and Management Issues In Global Change  Wildlife Management Techniques  Physiology	3 3 3 5 2 3 3 3 1 4 4 7

Total Hours		130
Select 0 hours or hours to complete required total for degree		0
Electives		
Hours Subtotal		47
Select an option (p. 2	)	
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 <sup>5</sup>		
Related Courses		
BIOL 4174	Mammalogy	

- College & Departmental requirements that may be used to meet GE requirements.
- If used as (N) course above, then hours are reduced by course hours.
- If ENGL 3323 Technical Writing is used to satisfy ENGL 1213 Composition II above; hours in this block are reduced by 3.
- If used as (S) course above, then hours are reduced by three.
- May not use a course used above in Core Courses.

Title

# **Options**Option 1

Code

Code	riue	Hours
Select 9 hours of the following: 9		
AG 3010	Internships in Agriculture	
ANSI 1124	Introduction to the Animal Sciences	
ANSI 3443	Animal Reproduction	
ANSI 3523	Pet and Companion Animal Management	
ANSI 3653	Applied Animal Nutrition	
ANSI 3753	Basic Nutrition for Pets	
BIOC 3713	Biochemistry I <sup>3</sup>	
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 4223	Mammalian Physiology Laboratory	
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 4343	Geographic Information Systems: Resource Management Applications	
MICR 3033	Cell and Molecular Biology	
MICR 3143	Medical Mycology	

MICR 4123	Virology
NREM 2083	Geospatial Technologies for Natural Resources
NREM 3101	Forest Resource Field Studies
NREM 3111	Natural Resource Field Studies
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 4043	Natural Resource Administration and Policy
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 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

Hours

Complete the first year of professional program.

With the approval of the advisor, department head, and dean, a maximum of 9 hours from an accredited dental, medical, optometry, osteopathic, pharmacy, podiatry, or veterinary medical school may be used to complete hours.

### **Other Requirements**

- Students must earn minimum grades of "C" or "P" in each course listed in Major 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; onefourth 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 2025.