# NATURAL RESOURCE ECOLOGY & MANAGEMENT: RANGELAND ECOLOGY & MANAGEMENT, BSAG

#### Requirements for Students Matriculating in or before Academic Year 2020-2021. 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 F	Requirements	
English Composition		
See Academic Regu	llation 3.5 (http://catalog.okstate.edu/	
university-academic	c-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 & 0	Government	
Select one of the fo	llowing:	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 1513	College Algebra (A) <sup>1</sup>	3
STAT 2013	Elementary Statistics (A) <sup>1</sup>	3
Humanities (H)		
Courses designated	l (H)	6
Natural Sciences (N)		
Must include one La	aboratory Science (L) course	
BIOL 1114	Introductory Biology (LN) <sup>1</sup>	4
Course designated	(N)	3
Social & Behavioral S	Sciences (S)	
AGEC 1113	Introduction to Agricultural Economics (S) <sup>1</sup>	3
Additional General Ed		
Courses designated	(A), (H), (N), or (S)	6
Hours Subtotal		40
Diversity (D) & Inter	national Dimension (I)	
	n any part of the degree plan	
Select at least one I	,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	
	nternational Dimension (I) course	
College Requiremen		
CHEM 1215	Chemical Principles I (LN) <sup>2</sup>	4
or CHEM 1314	Chemistry I (LN)	-1

Select one of the fo	llowing:	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	llowing:	3
AGCM 3203	Oral Communications in Agricultural Sciences & Natural Resources (S) <sup>4</sup>	
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 fo	llowing:	4
SOIL 2124	Fundamentals of Soil Science (N)	
ENTO 4484	Aquatic Entomology	
NREM 3013	Applied Ecology and Conservation	3
Departmental Requ	irements	
Select one of the fo	llowing:	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
	Natural Deservice Administration and	2
NREM 4043	Natural Resource Administration and Policy	3
NREM 4043 PBIO 1404		
	Policy	
PBIO 1404	Policy Plant Biology (LN)	4
PBIO 1404 Hours Subtotal	Policy Plant Biology (LN)	4
PBIO 1404 Hours Subtotal Major Requirement	Policy Plant Biology (LN)	4
PBIO 1404 Hours Subtotal Major Requirement Core Courses	Policy Plant Biology (LN) s	4
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543	Policy Plant Biology (LN) s Principles of Animal Nutrition	4
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225	Policy Plant Biology (LN) s Principles of Animal Nutrition Chemical Principles II (LN) <sup>2</sup>	4 40 3 5
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225 or CHEM 1515	Policy Plant Biology (LN) s Principles of Animal Nutrition Chemical Principles II (LN) <sup>2</sup> Chemistry II (LN)	4 40 3 5 3
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225 or CHEM 1515 NREM 3613	Policy Plant Biology (LN) s Principles of Animal Nutrition Chemical Principles II (LN) <sup>2</sup> Chemistry II (LN) Principles of Rangeland Management	4 40 3 5 3 3
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225 or CHEM 1515 NREM 3613 NREM 4023	Policy Plant Biology (LN) s Principles of Animal Nutrition Chemical Principles II (LN) <sup>2</sup> Chemistry II (LN) Principles of Rangeland Management Restoration Ecology	4 40 3 5 3 3 3 3
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225 or CHEM 1515 NREM 3613 NREM 4023 NREM 4033	Policy Plant Biology (LN) s Principles of Animal Nutrition Chemical Principles II (LN) <sup>2</sup> Chemistry II (LN) Principles of Rangeland Management Restoration Ecology Ecology Of Invasive Species	4 40 3 5 3 3 3 3 3 3 3
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225 or CHEM 1515 NREM 3613 NREM 4023 NREM 4033 NREM 4443	Policy   Plant Biology (LN)   s   Principles of Animal Nutrition   Chemical Principles II (LN) <sup>2</sup> Chemistry II (LN)   Principles of Rangeland Management   Restoration Ecology   Ecology Of Invasive Species   Watershed Hydrology and Water Quality	4 40 3 5 3 3 3 3 3 3 3 3 3
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225 or CHEM 1515 NREM 3613 NREM 4023 NREM 4033 NREM 4443 NREM 4603	Policy Plant Biology (LN) s Principles of Animal Nutrition Chemical Principles II (LN) <sup>2</sup> Chemistry II (LN) Principles of Rangeland Management Restoration Ecology Ecology Of Invasive Species Watershed Hydrology and Water Quality Rangeland and Pasture Utilization	4 40 3 5 3 3 3 3 3 3 3 3 3 3 3 3 3
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225 or CHEM 1515 NREM 3613 NREM 4023 NREM 4033 NREM 4443 NREM 4603 NREM 4613	Policy   Plant Biology (LN)   s   s   Principles of Animal Nutrition   Chemical Principles II (LN) <sup>2</sup> Chemistry II (LN)   Principles of Rangeland Management   Restoration Ecology   Ecology Of Invasive Species   Watershed Hydrology and Water Quality   Rangeland and Pasture Utilization   Rangeland Resources Planning	4 40 3 5 3 3 3 3 3 3 3 3 3 3 3 3 3 3
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225 or CHEM 1515 NREM 3613 NREM 4023 NREM 4033 NREM 4033 NREM 4443 NREM 4613 NREM 4783	PolicyPlant Biology (LN)ssPrinciples of Animal NutritionChemical Principles II (LN) 2Chemistry II (LN)Principles of Rangeland ManagementRestoration EcologyEcology Of Invasive SpeciesWatershed Hydrology and Water QualityRangeland and Pasture UtilizationRangeland Resources PlanningPrescribed FireField BotanySoil Genesis, Morphology, and	4 40 3 5 3 3 3 3 3 3 3 3 3 3 3 5
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225 or CHEM 1515 NREM 3613 NREM 4023 NREM 4023 NREM 4033 NREM 4443 NREM 4613 NREM 4613 NREM 4783 PBIO 4005 SOIL 3433 Related Courses Select courses from	Policy Plant Biology (LN) s Principles of Animal Nutrition Chemical Principles II (LN) <sup>2</sup> Chemistry II (LN) Principles of Rangeland Management Restoration Ecology Ecology Of Invasive Species Watershed Hydrology and Water Quality Rangeland and Pasture Utilization Rangeland Resources Planning Prescribed Fire Field Botany Soil Genesis, Morphology, and Classification	4 40 3 5 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225 or CHEM 1515 NREM 3613 NREM 4023 NREM 4023 NREM 4033 NREM 4443 NREM 4603 NREM 4613 NREM 4613 NREM 4613 SOIL 3433 <i>Related Courses</i> Select courses from consultation with a create a specialty e	Policy Plant Biology (LN) s Principles of Animal Nutrition Chemical Principles II (LN) <sup>2</sup> Chemistry II (LN) Principles of Rangeland Management Restoration Ecology Ecology Of Invasive Species Watershed Hydrology and Water Quality Rangeland and Pasture Utilization Rangeland Resources Planning Prescribed Fire Field Botany Soil Genesis, Morphology, and Classification n among the following or of other courses in faculty advisor for additional breadth, or to mphasis area: <sup>5</sup>	4 40 3 5 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
PBIO 1404 Hours Subtotal Major Requirement Core Courses ANSI 3543 CHEM 1225 or CHEM 1515 NREM 3613 NREM 4023 NREM 4023 NREM 4033 NREM 4443 NREM 4603 NREM 4613 NREM 4613 NREM 4783 PBIO 4005 SOIL 3433 <i>Related Courses</i> Select courses from consultation with a create a specialty e AGEC 3423	Policy Plant Biology (LN) s Principles of Animal Nutrition Chemical Principles II (LN) <sup>2</sup> Chemistry II (LN) Principles of Rangeland Management Restoration Ecology Ecology Of Invasive Species Watershed Hydrology and Water Quality Rangeland and Pasture Utilization Rangeland Resources Planning Prescribed Fire Field Botany Soil Genesis, Morphology, and Classification n among the following or of other courses in faculty advisor for additional breadth, or to mphasis area: <sup>5</sup> Farm and Agribusiness Management	3 4 40 3 5 3 3 3 3 3 3 3 3 3 3 3 3 3 8

1

ANSI 3433	Animal Breeding
ANSI 3443	Animal Reproduction
ANSI 3653	Applied Animal Nutrition
ANSI 4613	Beef Cow-Calf Management
BIOL 3034	General Ecology
BIOL 3513	Principles of Conservation Biology
BIOL 4113	Conservation Genetics
BIOL 4133	Evolution
BIOL 4174	Mammalogy
BIOL 4303	Organismal Ecotoxicology
BIOL 4413	Biology of Fishes
ENTO 2993	Introduction to Entomology (LN)
ENTO 3331	Insect Pests of Agronomic Crops
ENTO 4223	Ecological Methodology
ENVR 1113	Elements of Environmental Science
ENVR 4512	Environmental Impact Analysis
GEOG 3023	Climatology (N)
GEOG 3033	Meteorology (N)
GEOG 3153	Conservation of Natural Resources (S)
GEOG 3333	Spatial Analysis (A)
GEOG 4053	Biogeography
GEOG 4203	Fundamentals of Geographic Information Syst.
GEOG 4333	Remote Sensing
GEOG 4343	Geographic Information Systems: Resource Mngm
GEOL 3503	Environmental Geology (N)
NREM 2013	Ecology of Natural Resources
NREM 2134	Dendrology
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 4053	Natural Resource Recreation
NREM 4093	Natural Resources, People and Sustainable Development (I)
NREM 4403	Wetland Ecology and Management
NREM 4403	Pond Management
NREM 4453	Aquaculture
NREM 4464	Ornithology
NREM 4522	Course NREM 4522 Not Found
NREM 4523	Course NREM 4523 Not Found
NREM 4533	Wildlife Management for Game Species
NREM 4543	Wildlife Management for Biodiversity
NREM 4793	Advanced Prescribed Fire
NREM 4960	Undergraduate Internship
NREM 4980	Undergraduate Research
NREM 4990	Special Topics in Natural Resource Ecology
	and Management
PBIO 3024	Plant Diversity
PBIO 3114	Plant Taxonomy
PBIO 4463	Plant Physiology

PLP 3343	Principles of Plant Pathology		
PLNT 1213	Introduction to Plant and Soil Systems		
POLS 4593	Natural Resources and Environmental Policy		
SOIL 4463	Soil and Water Conservation		
SOIL 4483	Soil Microbiology		
SOIL 4683	Soil, Water, and Weather		
Hours Subtotal		45	
Electives			
Select 0 hours or hours to complete required total for degree		0	
Total Hours		125	

- College & Departmental requirements that may be used to meet GE requirements.
- <sup>2</sup> If used as (N) course above, then hours are reduced by course hours.
- <sup>3</sup> If ENGL 3323 Technical Writing is used to satisfy ENGL 1213 Composition II above; hours in this block are reduced by 3.
- <sup>4</sup> If used as (S) course above, then hours are reduced by three.
- <sup>5</sup> May not use a course used above in Core Courses.

### **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.