

WILDLIFE ECOLOGY, B.S.

REQUIREMENTS

UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin–Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (<http://guide.wisc.edu/undergraduate/#requirementsforundergraduatestudytext>) section of the *Guide*.

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| General Education | <ul style="list-style-type: none"> • Breadth—Humanities/Literature/Arts: 6 credits • Breadth—Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits • Breadth—Social Studies: 3 credits • Communication Part A & Part B * • Ethnic Studies * • Quantitative Reasoning Part A & Part B * |
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* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies, Science, and Capstone), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

COLLEGE REQUIREMENTS FOR ALL CALS B.S. DEGREE PROGRAMS

Code	Title	Credits
	Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.	
	Residency: Students must complete 30 degree credits in residence at UW–Madison after earning 86 credits toward their undergraduate degree.	
	First Year Seminar (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirements)	1

International Studies (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirements)	3
Physical Science Fundamentals	4-5
CHEM 103 General Chemistry I	
or CHEM 108 Chemistry in Our World	
or CHEM 109 Advanced General Chemistry	
Biological Science	5
Additional Science (Biological, Physical, or Natural)	3
Science Breadth (Biological, Physical, Natural, or Social)	3
CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirements)	

MAJOR REQUIREMENTS

Code	Title	Credits
Mathematics and Statistics		
Select one of the following (or may be satisfied by placement exam):		5-6
MATH 112 Algebra	& MATH 113 and Trigonometry	
MATH 114 Algebra and Trigonometry		
MATH 171 Calculus with Algebra and Trigonometry I		
Select one of the following:		3
STAT 301 Introduction to Statistical Methods		
STAT 371 Introductory Applied Statistics for the Life Sciences		
STAT/B M I 541 Introduction to Biostatistics		
STAT/F&W ECOL/ HORT 571 Statistical Methods for Bioscience I		
Chemistry		
Select one of the following:		4-5
CHEM 103 General Chemistry I		
CHEM 108 Chemistry in Our World (only for Natural Resources track students)		
CHEM 109 Advanced General Chemistry		
Biology		
Select one of the following options:		10
Option 1 (recommended):		
BIOLOGY/ BOTANY/ ZOOLOGY 151 & BIOLOGY/ BOTANY/ ZOOLOGY 152	Introductory Biology and Introductory Biology	
Option 2:		
ZOOLOGY/ BIOLOGY 101 & ZOOLOGY/ BIOLOGY 102 & BOTANY/ BIOLOGY 130	Animal Biology and Animal Biology Laboratory and General Botany	
Option 3:		

BIOCORE 383 & BIOCORE 384 & BIOCORE 485 & BIOCORE 486	Cellular Biology and Cellular Biology Laboratory and Principles of Physiology and Principles of Physiology Laboratory	
Core		
<i>Wildlife Ecology</i>		
F&W ECOL 101	Orientation to Wildlife Ecology	1
F&W ECOL 306	Terrestrial Vertebrates: Life History and Ecology	4
F&W ECOL 318	Principles of Wildlife Ecology	3
F&W ECOL 379	Principles of Wildlife Management	3
F&W ECOL 561	Wildlife Management Techniques	3
F&W ECOL 655	Animal Population Dynamics	3
<i>Plant Taxonomy</i>		
BOTANY 400 or BOTANY 401	Plant Systematics Vascular Flora of Wisconsin	4
<i>Anatomy/Physiology</i>		
Select one of the following:		3-5
F&W ECOL 401	Physiological Animal Ecology (recommended)	
ANAT&PHY 335	Physiology	
ZOOLOGY 430	Comparative Anatomy of Vertebrates	
ZOOLOGY 611	Comparative and Evolutionary Physiology	
<i>Evolution/Genetics</i>		
Select one of the following:		3-5
ZOOLOGY/ ANTHRO/ BOTANY 410	Evolutionary Biology	
GENETICS 466	Principles of Genetics	
BIOCORE 381 & BIOCORE 382	Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory ¹	
<i>Wildlife Biology</i>		
Select one of the following:		5-6
ZOOLOGY/ AN SCI/ F&W ECOL 520 & ZOOLOGY/ AN SCI/ F&W ECOL 521	Ornithology and Birds of Southern Wisconsin ²	
ZOOLOGY/ ENVIR ST 510 & ZOOLOGY/ ENVIR ST 511	Ecology of Fishes and Ecology of Fishes Lab	
Breadth		
Select 3 credits from breadth courses (below)		3
Track Courses		
Select one of the following:		14-17
Natural Sciences Track		
Natural Resources Track		
Capstone		
Select one of the following (or see advisor):		3

F&W ECOL 577	Complexity and Conservation of White-tailed Deer (formerly 375, Complexity & Conservation of White-tailed Deer)	
F&W ECOL 599	Wildlife Research Capstone	
Total Credits		74-84
¹ Only allowed for students who completed the rest of the Biocore curriculum listed under Biology.		
² Required for TWS certification		
BREADTH COURSES		
Code	Title	Credits
AGRONOMY/ BOTANY/ SOIL SCI 370	Grassland Ecology	3
ENVIR ST/ LAND ARC 361	Wetlands Ecology	3
ENVIR ST 375	Field Ecology Workshop	3
F&W ECOL/ ENVIR ST/ ZOOLOGY 360	Extinction of Species	3
F&W ECOL 375	Special Topics (Conservation Genetics, Wildlife-Habitat Relationships)	1-4
F&W ECOL/ BOTANY 402	Dendrology	2
F&W ECOL 404	Wildlife Damage Management	3
F&W ECOL 424	Wildlife Ecology Summer Field Practicum (this course, taken for 2 credits, will complete the requirement)	2
F&W ECOL/ ENVIR ST 515	Natural Resources Policy	3
F&W ECOL/ SURG SCI 548	Diseases of Wildlife	3
F&W ECOL 550	Forest Ecology	3
F&W ECOL/ LAND ARC/ ZOOLOGY 565	Principles of Landscape Ecology	2
F&W ECOL/ AGRONOMY/ ENTOM/ M&ENVTOX 632	Ecotoxicology: The Chemical Players	1
F&W ECOL/ AGRONOMY/ ENTOM/ M&ENVTOX 633	Ecotoxicology: Impacts on Individuals	1
F&W ECOL/ AGRONOMY/ ENTOM/ M&ENVTOX 634	Ecotoxicology: Impacts on Populations, Communities and Ecosystems	1
F&W ECOL/ BOTANY/ENVIR ST/ ZOOLOGY 651	Conservation Biology	3
F&W ECOL/ ZOOLOGY 660	Climate Change Ecology	3

GEOG/CIV ENGR/ ENVR ST 377	An Introduction to Geographic Information Systems	4
ZOOLOGY/ ENVR ST 315	Limnology-Conservation of Aquatic Resources	2
ZOOLOGY 316	Laboratory for Limnology-Conservation of Aquatic Resources	2-3
ZOOLOGY 504	Modeling Animal Landscapes	3-5

Courses used in this category cannot be double counted toward any other major requirement.

TRACKS

NATURAL SCIENCES TRACK

Code	Title	Credits
Select one of the following:		5
MATH 211	Calculus	
MATH 217	Calculus with Algebra and Trigonometry II	
MATH 221	Calculus and Analytic Geometry I	
CHEM 104	General Chemistry II ¹	5
Select one of the following:		4-5
PHYSICS 103	General Physics	
PHYSICS 201	General Physics	
PHYSICS 207	General Physics	
Total Credits		14-15

¹ If CHEM 109 was taken instead of CHEM 103, CHEM 104 is not required.

NATURAL RESOURCES TRACK

Code	Title	Credits
Wildlife Resource Electives		
Select two of the following:		3-7
F&W ECOL 375	Special Topics (Wildlife-Habitat Relationships)	
F&W ECOL 375	Special Topics (Forest & Climate Change Policy)	
F&W ECOL 404	Wildlife Damage Management	
F&W ECOL 424	Wildlife Ecology Summer Field Practicum	
F&W ECOL/ ENVR ST 515	Natural Resources Policy	
Conservation Biology Electives		
Select one of the following:		3
F&W ECOL/ ENVR ST/ ZOOLOGY 360	Extinction of Species	
F&W ECOL/ BOTANY/ ENVR ST/ ZOOLOGY 651	Conservation Biology	
F&W ECOL/ ZOOLOGY 660	Climate Change Ecology	
Forest Management Electives		
Select one of the following:		2-4

F&W ECOL 410	Principles of Silviculture
F&W ECOL/ ENTOM 500	Insects in Forest Ecosystem Function and Management
F&W ECOL/A A E/ ENVR ST 652	Decision Methods for Natural Resource Managers
F&W ECOL 658	Forest Resources Practicum
Natural Resources Management Electives	
Select one of the following:	
2-4	
C&E SOC/ F&W ECOL/ SOC 248	Environment, Natural Resources, and Society
C&E SOC/ ENVR ST/ GEOG 434	People, Wildlife and Landscapes
C&E SOC/ SOC 541	Environmental Stewardship and Social Justice
F&W ECOL/ ZOOLOGY 335	Human/Animal Relationships: Biological and Philosophical Issues
F&W ECOL/A A E/ ECON 531	Natural Resource Economics
ENVR ST/ GEOG 339	Environmental Conservation
ENVR ST/A A E/ ECON 343	Environmental Economics
ENVR ST/ PL PATH 368	Environmental Law, Toxic Substances, and Conservation
ENVR ST/ ECON/POLI SCI/ URB R PL 449	Government and Natural Resources
ENVR ST/ SOIL SCI 575	Assessment of Environmental Impact
Total Credits	10-18

UNIVERSITY DEGREE REQUIREMENTS

Total Degree To receive a bachelor's degree from UW–Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.

Residency Degree candidates are required to earn a minimum of 30 credits in residence at UW–Madison. "In residence" means on the UW–Madison campus with an undergraduate degree classification. "In residence" credit also includes UW–Madison courses offered in distance or online formats and credits earned in UW–Madison Study Abroad/Study Away programs.

Quality of Work Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.