

# WILDLIFE ECOLOGY AND CONSERVATION

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Not all courses are offered every semester. Refer to the schedule of courses for each term's specific offerings.

More Info (<http://registrar.ufl.edu/soc/>)

*Courses at the University of Florida, with the exception of specific foreign language courses and courses in the online Master of Arts in Mass Communication program, are taught in English.*

## Department Information

The Department of Wildlife Ecology and Conservation fosters education, expands knowledge, and rewards scholarship, using multi-disciplinary approaches for the purpose of understanding, managing, and conserving biological resources.

Website (<https://wec.ifas.ufl.edu/>)

### CONTACT

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### Curriculum

- Combination Degrees
- Wildlife Ecology and Conservation
- Wildlife Ecology and Conservation Minor

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## Courses

### WIS 2040 Wildlife Issues in a Changing World 3 Credits

**Grading Scheme:** Letter Grade

The biological and ecological basis of wildlife issues and the pathways humans use to resolve these issues. Topics include major animal phyla; evolutionary history of vertebrates; state, federal and international agencies that manage wildlife worldwide; and the impact of human activities on wildlife. (B)

**Attributes:** General Education - Biological Science

### WIS 2552 Biodiversity Conservation: Global Perspectives 3 Credits

**Grading Scheme:** Letter Grade

The relationship between humans and the global biotic environment that supports them. This course explores human patterns of resource use and population biology that determine the status of the earth's biodiversity resources. Helps students understand how today's human society affects global life support systems, and how individuals can make lifetime contributions to environmental solutions. (B and N)

**Attributes:** General Education - Biological Science, General Education - International

### WIS 2920 Wildlife Colloquium 1 Credit

**Grading Scheme:** Letter Grade

Wildlife ecology and conservation as a major and career.

**Prerequisite:** Wildlife Ecology and Conservation major or minor.

### WIS 3401 Wildlife Ecology and Management 3 Credits

**Grading Scheme:** Letter Grade

Wildlife as a natural resource with emphasis on principles of conservation, ecology and management.

**Prerequisite:** BSC 2011 and BSC 2011L.

### WIS 3402 Wildlife of Florida 3 Credits

**Grading Scheme:** Letter Grade

The diversity of wildlife species in Florida with emphasis on amphibians, reptiles, mammals and birds.

### WIS 3402L Wildlife of Florida Laboratory 1 Credit

**Grading Scheme:** Letter Grade

Laboratory exploring the diversity of wildlife in Florida's ecosystems with emphasis on field identification, natural history and ecology of birds, mammals, amphibians and reptiles.

### WIS 3404 Natural Resource Ecology 3 Credits

**Grading Scheme:** Letter Grade

Application of ecological principles and natural history information to conserve and sustainably manage natural resources with an emphasis on animals and plants.

**Prerequisite:** BSC 2011 or equivalent.

### WIS 3434 Tropical Wildlife 3 Credits

**Grading Scheme:** Letter Grade

An interdisciplinary course that teaches the ecology of animals and the socio-economics of wildlife use. The first part of the course deals with the biology of tropical wildlife and the second with the historical, economic and political aspects of the use and management of tropical wildlife.

**Prerequisite:** BSC 2011 and BSC 2011L and Wildlife Ecology and Conservation major of junior standing or higher.

### WIS 3553C Introduction to Conservation Genetics 4 Credits

**Grading Scheme:** Letter Grade

Types of molecular polymorphisms found in nature, including how genetic information is organized, what evolutionary and demographic forces act to shape genetic polymorphisms, and how and why genetics are useful in population conservation and management.

**Prerequisite:** STA 2023 and (FOR 3153C or PCB 3601C or PCB 4043C).

### WIS 4203C Landscape Ecology and Conservation 3 Credits

**Grading Scheme:** Letter Grade

Central constructs and methods of landscape ecology are applied to wildlife ecology and conservation.

**Prerequisite:** STA 2023 and (FOR 3153C or PCB 3601C or PCB 4043C) and (FOR 3434C or GIS 3043 or GIS 3072C or URP 4273).

### WIS 4427C Wildlife Habitat Management 3 Credits

**Grading Scheme:** Letter Grade

Application of land management practices and their effects on wildlife habitats in Florida.

**Prerequisite:** WIS 3401.

### WIS 4443C Wetland Wildlife Ecology 4 Credits

**Grading Scheme:** Letter Grade

Ecological principles of conservation and management of wildlife in wetland environments, including a survey of the structure and function of major wetland types.

**Prerequisite:** WIS 3401.

### WIS 4454 Ecology of Bird Introductions and Invasions 3 Credits

**Grading Scheme:** Letter Grade

Ecology and conservation implications of introductions and invasions of birds. The course covers the invasion pathway model as well as the four levels of factors that can influence introduction outcomes.

**Prerequisite:** BSC 2010 and BSC 2011.

**WIS 4501 Introduction to Wildlife Population Ecology 3 Credits**

**Grading Scheme:** Letter Grade

The dynamics and regulation of biological populations and life-history theory.

**Prerequisite:** PCB 3034C and WIS 3401; and FOR 3153C, PCB 3601C or PCB 4044C.

**WIS 4523 Human Dimensions of Natural Resource Conservation 3 Credits**

**Grading Scheme:** Letter Grade

Local and international models are used to provide an interdisciplinary overview of the theory and practice of conservation education, environmental communication and integrated resource management and conservation.

**Prerequisite:** WIS 3401 or WIS 4554.

**WIS 4547C Avian Field Techniques 2 Credits**

**Grading Scheme:** Letter Grade

Intensive advanced field experience in scientific study design and ecology of wild bird populations and communities.

**Prerequisite:** 1 course each in ecology and vertebrate ecology.

**WIS 4554 Conservation Biology 3 Credits**

**Grading Scheme:** Letter Grade

Overview of the major problems in conservation and of the biological principles and theories to preserve this diversity.

**Prerequisite:** PCB 3063 or WIS 3553C; and FOR 3153C, PCB 3034C, PCB 3601C or PCB 4044C; and WIS 3401.

**WIS 4570C Wildlife Behavior and Conservation 3 Credits**

**Grading Scheme:** Letter Grade

Concise, current, and thorough grounding to the field (theory, practice, and relevance) of animal behavior, with a strong focus on applications of wildlife behavior to achieve successful wildlife conservation gains.

**Prerequisite:** BSC 2010

**WIS 4601C Quantitative Wildlife Ecology 3 Credits**

**Grading Scheme:** Letter Grade

Concepts and applications of quantitative techniques in ecology and wildlife management.

**Prerequisite:** STA 2023 and WIS 3401.

**WIS 4900 Supervised Extension Experience in Wildlife Ecology and Conservation 0-3 Credits**

**Grading Scheme:** S/U

Firsthand, authentic extension experiences in agricultural and life sciences under the supervision of a faculty member. Projects may involve program planning, development, implementation, and evaluation.

**WIS 4905 Individual Problems 1-4 Credits**

**Grading Scheme:** Letter Grade

Individual study of a selected topic related to wildlife ecology and conservation as contracted with the instructor at the start of the term.

**Prerequisite:** instructor permission.

**WIS 4911 Supervised Research in Wildlife Ecology and Conservation 0-3 Credits**

**Grading Scheme:** S/U

Provides firsthand, supervised research. Projects may involve inquiry, design, investigation, scholarship, discovery, or application. (S-U)

**WIS 4915 Honors Thesis Research in Wildlife Ecology and Conservation 0-3 Credits**

**Grading Scheme:** S/U

Independent research in wildlife ecology and conservation leading to an honors thesis. Student will be mentored by a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U)

**Prerequisite:** junior standing, upper division GPA of 3.75 or higher and completed honors thesis proposal on file.

**WIS 4934 Topics in Wildlife Ecology and Conservation 1-4 Credits**

**Grading Scheme:** Letter Grade

Variable current issues and in-depth study in wildlife, forestry, range, recreation and fisheries issues not covered in other courses.

**WIS 4941 Internship in Wildlife Ecology and Conservation 1-12 Credits**

**Grading Scheme:** Letter Grade

Practical teaching, research, and extension experience in the field of wildlife ecology and conservation. Offered every semester.

**Prerequisite:** instructor permission.

**WIS 4945C Wildlife Techniques 4 Credits**

**Grading Scheme:** Letter Grade

Practical training in wildlife research techniques, including radiotelemetry, trapping methods, immobilization and marking of birds, mammals and herps.

**Prerequisite:** WIS 3402.

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