

PREPROFESSIONAL

This major focuses on developing students' knowledge of the conservation and management of wildlife and habitats for the greatest aesthetic, ecological, economic, and recreational values. Students in the Wildlife Ecology and Conservation major study biology, chemistry, ecology, calculus, soil science, plant taxonomy, entomology, geography, zoology, and sustainability.

About this Program

- **College:** Agricultural and Life Sciences (<http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/>)
- **Degree:** Bachelor of Science
- **Specializations:** Preprofessional (p. 1) | Wildlife Ecology and Conservation (http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/WEC_BS/WEC_BS05/)
- **Credits for Degree:** 120
- **Contact**

To graduate with this major, students must complete all university, college, and major requirements.

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/>)

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Map (<http://campusmap.ufl.edu/#/index/0832>)

Curriculum

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

Related Programs

- Forest Resources and Conservation

The department also co-administers a major in natural resource conservation with the School of Forest Resources and Conservation. More Info (http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/NRC_BSF/)

Preprofessional

This specialization satisfies the coursework requirements for admission to the Doctor of Veterinary Medicine program. Students pursuing admission to the College of Veterinary Medicine must take six credits of general education composition, nine credits of humanities and six credits of social and behavioral sciences.

Wildlife Ecology and Conservation

Students in this specialization train in the biological, social, physical and management sciences, and excel at both the scientific and human

dimensions of managing wildlife and natural resources. With appropriate choice of electives and course options, graduates satisfy requirements for certification as an associate wildlife biologist with The Wildlife Society.

Preprofessional

This specialization satisfies the coursework requirements for admission to the Doctor of Veterinary Medicine program. Students pursuing admission to the College of Veterinary Medicine must take six credits of general education composition, nine credits of humanities and six credits of social and behavioral sciences.

Some students can also satisfy requirements for certification as an associate wildlife biologist by The Wildlife Society. Certification requirements and application material are available at www.wildlife.org (<http://www.wildlife.org>).

Critical Tracking

Critical Tracking records each student's progress in courses that are required for entry to each major. Please note the critical-tracking requirements below on a per-semester basis.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites (<http://www.flvc.org/cpp/displayRecord.jsp?cip=030501&track=01>) may be used for transfer students.

Semester 1

- Complete 2 of 7 critical-tracking courses, excluding labs: BSC 2010/BSC 2010L, BSC 2011/BSC 2011L, CHM 2045/CHM 2045L, CHM 2046/CHM 2046L, AEB 2014 or AEB 3103 or ECO 2023, MAC 2311, STA 2023
- 2.5 GPA on required math and science courses combined
- 2.0 UF GPA required

Semester 2

- Complete 2 additional critical-tracking courses, excluding labs
- 2.5 GPA on required math and science courses combined
- 2.0 UF GPA required

Semester 3

- Complete 1 additional critical-tracking course, excluding labs
- 2.5 GPA on required math and science courses combined
- 2.0 UF GPA required

Semester 4

- Complete 2 additional critical-tracking courses, including labs
- 2.5 GPA on required math and science courses combined
- 2.0 UF GPA required

Semester 5

- Complete 1 additional critical-tracking course
- 2.5 GPA on required math and science courses combined
- 2.0 upper division GPA required
- 2.0 UF GPA required

Semester 6

- Complete 1 additional critical-tracking course
- 2.0 upper division GPA required
- 2.0 UF GPA required

Semester 7

- Complete 1 additional critical-tracking course
- 2.0 upper division GPA required
- 2.0 UF GPA required

Semester 8

- Complete 1 additional critical-tracking course, including labs
- 2.0 upper division GPA required
- 2.0 UF GPA required

Model Semester Plan

To remain on track, students must complete the appropriate critical-tracking courses, which appear in bold. These courses must be completed by the terms as listed above in the Critical Tracking criteria.

This semester plan represents an example progression through the major. Actual courses and course order may be different depending on the student's academic record and scheduling availability of courses. Prerequisites still apply.

| Course | Title | Credits |
|---|---|-----------|
| Semester One | | |
| BSC 2010 & 2010L | Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 (Critical Tracking ; Gen Ed Biological Sciences) | 4 |
| CHM 2045 & 2045L | General Chemistry 1 and General Chemistry 1 Laboratory (Critical Tracking ; State Core Gen Ed Physical Sciences) | 4 |
| WIS 2920 | Wildlife Colloquium | 1 |
| State Core Gen Ed Composition (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext); Writing Requirement: 6,000 words | | 3 |
| State Core Gen Ed Humanities (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext) | | 3 |
| Credits | | 15 |
| Semester Two | | |
| Quest 1 (Gen Ed Humanities) | | 3 |
| BSC 2011 & 2011L | Integrated Principles of Biology 2 and Integrated Principles of Biology Laboratory 2 (Critical Tracking ; Gen Ed Biological Sciences) | 4 |
| CHM 2046 & 2046L | General Chemistry 2 and General Chemistry 2 Laboratory (Critical Tracking ; Gen Ed Physical Sciences) | 4 |
| Gen Ed Composition; Writing Requirement: 6,000 words | | 3 |
| Credits | | 14 |
| Semester Three | | |
| Quest 2 (Gen Ed Social and Behavioral Sciences) | | 3 |
| AEC 3033C | Research and Business Writing in Agricultural and Life Sciences (Writing Requirement: 6,000 words) | 3 |
| CHM 2210 | Organic Chemistry 1 | 3 |

| | | |
|--|---|--------------|
| MAC 2311 | Analytic Geometry and Calculus 1 (Critical Tracking ; Gen Ed Mathematics) | 4 |
| State Core Gen Ed Social and Behavioral Sciences (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext) | | 3 |
| Credits | | 16 |
| Semester Four | | |
| Select one: | | 3-4 |
| AEB 2014 | Economic Issues, Food and You (Critical Tracking) | |
| AEB 3103 | Principles of Food and Resource Economics (Critical Tracking) | |
| ECO 2023 | Principles of Microeconomics (Critical Tracking ; Gen Ed Social and Behavioral Sciences) | |
| CHM 2211 & 2211L | Organic Chemistry 2 and Organic Chemistry Laboratory | 5 |
| STA 2023 | Introduction to Statistics 1 (Critical Tracking ; State Core Gen Ed Mathematics) | 3 |
| WIS 3402 & 3402L | Wildlife of Florida and Wildlife of Florida Laboratory | 4 |
| Credits | | 15-16 |
| Semester Five | | |
| Select one: | | 3-4 |
| FOR 3153C | Forest Ecology | |
| PCB 3601C | Plant Ecology | |
| PCB 4043C | General Ecology | |
| WIS 3404 | Natural Resource Ecology | |
| PHY 2053 & 2053L | Physics 1 and Laboratory for Physics 1 | 5 |
| WIS 3401 | Wildlife Ecology and Management (Critical Tracking) | 3 |
| Elective | | 3 |
| Credits | | 14-15 |
| Semester Six | | |
| AGR 3303 or PCB 3063 | Genetics or Genetics | 3-4 |
| PHY 2054 & 2054L | Physics 2 and Laboratory for Physics 2 | 5 |
| WIS 4501 | Introduction to Wildlife Population Ecology (Critical Tracking) | 3 |
| Elective | | 4 |
| Credits | | 15-16 |
| Semester Seven | | |
| AEC 3030C | Effective Oral Communication | 3 |
| BCH 4024 or CHM 3218 | Introduction to Biochemistry and Molecular Biology (Critical Tracking) or Organic Chemistry/Biochemistry 2 | 4 |
| Select one: | | 3 |
| WIS 4523 | Human Dimensions of Natural Resource Conservation | |
| FNR 4070C | Environmental Education Program Development | |
| FOR 3202 | Society and Natural Resources | |
| FOR 4664 | Sustainable Ecotourism Development | |
| WIS 4554 or WIS 4203C | Conservation Biology or Landscape Ecology and Conservation | 3 |
| Elective | | 3 |
| Credits | | 16 |
| Semester Eight | | |
| Select 9-11 credits: | | 9-11 |

| | | |
|----------------------|---|--------------|
| ANS 3006 & 3006L | Introduction to Animal Science and Introduction to Animal Science Laboratory | |
| ANS 3440 | Principles of Animal Nutrition | |
| WIS 4203C | Landscape Ecology and Conservation | |
| WIS 4427C | Wildlife Habitat Management | |
| WIS 4601C | Quantitative Wildlife Ecology | |
| WIS 4941 | Internship in Wildlife Ecology and Conservation | |
| WIS 4945C | Wildlife Techniques | |
| MCB 3020 & 3020L | Basic Biology of Microorganisms and Laboratory for Basic Biology of Microorganisms (Critical Tracking) | 4 |
| Elective | | 2 |
| Credits | | 15-17 |
| Total Credits | | 120 |

Additional electives may be needed to complete the 120 credits required for graduation. Students can choose any courses as electives.

State core courses can be selected to meet the university's requirements for writing, international and diversity focused courses.

Academic Learning Compact

The primary focus of the wildlife ecology and conservation major is to develop students' knowledge of the conceptual and applied aspects of scientific, social and ethical thought in wildlife ecology and conservation. Emphasis is placed on the biology, ecology, natural history and behavior of Florida wildlife species and the management of wildlife, their habitats and their population dynamics for the greatest aesthetic, ecological, economic and recreational values. Students will learn to think critically about major problems in the conservation of biological diversity and to apply biological principles to the preservation of this diversity.

Before Graduating Students Must

- Pass the wildlife ecology and conservation competency exam, given as part of WIS 4203C or WIS 4554 .
- Achieve minimum grades of C in AEC 3030C and AEC 3033C. These courses are graded using rubrics developed by a faculty team.
- Complete requirements for the baccalaureate degree, as determined by faculty.

Students in the Major Will Learn to

Student Learning Outcomes (SLOs)

Content

1. Acquire knowledge of scientific, social and ethical arenas of wildlife ecology and conservation; acquire skills for critical reasoning in conservation management; acquire knowledge of Florida wildlife species and their biology, ecology, natural history and behavior; describe principles and applications of wildlife management practices, population dynamics and habitat management; and apply biological principles to solve problems in wildlife conservation and preserve biological diversity.

Critical Thinking

2. Apply ecological, mathematical and statistical concepts to interpret, understand and communicate wildlife ecology and conservation data.

Communication

3. Create, interpret and analyze written text, oral messages and multimedia presentations used in agricultural and life sciences.

Curriculum Map

I = Introduced; R = Reinforced; A = Assessed

| Courses | SLO 1 | SLO 2 | SLO 3 |
|------------------------|-------|-------|-------|
| AEC 3030C | | | I,R,A |
| AEC 3033C | | | I,R,A |
| WIS 2920 | I | I | I |
| WIS 3401 | R | R | R |
| WIS 3402 and WIS 3402L | R | | R |
| WIS 4203C or WIS 4554 | A | A | R |

Assessment Types

- Exams
- Final course grades