EFB 306: Wildlife Field Techniques

Cranberry Lake Biological Station ♦ Summer 2025

Dr. Nate Wehr ♦ nhwehr@esf.edu ♦ nathanielwehr@gmail.com

DESCRIPTION OF THE COURSE

This 3-credit course covers the theory and application of common field techniques for monitoring wildlife populations. Concepts and methods include identification of terrestrial vertebrates via visual cues, population monitoring techniques, techniques for ethical capture and handling of wild animals, and application of non-invasive research methods. This course satisfies the field study elective requirement for all Environmental Biology majors.

COURSE LEARNING OUTCOMES

1. Identify species of mammals, birds, reptiles, and amphibians common to the northeastern United States by sight and/or sound
2. Understand and apply passive and active detection methods used to survey wildlife populations
3. Describe, discuss, and demonstrate procedures for the safe, ethical, and legally permitted handling of wildlife
4. Monitor wildlife populations using radio telemetry, camera traps, acoustic devices, and other techniques

TEXTBOOKS AND SUPPLIES

Students are required to have a notebook and pencils for recording personal notes and field observations throughout the class. A waterproof "rite in the rain" notebook is recommended, but not required, as outdoor classes may occur in wet and rainy conditions. There is no required textbook for this course. Proper outdoor clothing, including rain gear, boots, and bug nets, is highly recommended.

STUDENTS WITH LEARNING AND PHYSICAL DISABILITIES

ESF works with the Center for Disability Services (CDS) at Syracuse University, who is responsible for coordinating disability-related accommodations. Students can contact CDS at 804 University Avenue, Suite 303, 315-443-4498 to schedule an appointment and discuss their needs and the process for requesting accommodations. Students may also contact the ESF Office of Student Affairs, 110 Bray Hall, 315-470-6660 for assistance with the process. To learn more about CDS, visit http://disabilityservices.syr.edu. Students who attempt to use accommodations without advance notice to faculty will be referred to the ESF Office of the Dean for Student Affairs. Since accommodations may require early planning and generally are not provided retroactively, please contact CDS as soon as possible.

ACADEMIC DISHONESTY

Academic dishonesty is a breach of trust between a student, one's fellow students, or the instructor(s). By registering for courses at ESF, you acknowledge your awareness of the ESF Code of Student Conduct (https://www.esf.edu/student-affairs/community-standards/student-handbook-2024-2025.pdf). Academic dishonesty includes, but is not limited to, plagiarism, cheating, and other forms of academic misconduct. Infractions of the academic integrity code may lead to academic penalties as per the ESF Grading Policy (https://www.esf.edu/provost/documents/GradingPolicy-11-12-2013.pdf).

INCLUSIVE EXCELLENCE STATEMENT

As an institution, ESF embraces inclusive excellence and the strengths of a diverse and inclusive community. During classroom discussions, we may be challenged by ideas different from our lived experiences and cultures. Understanding individual differences and broader social differences will deepen our understanding of each other and the world around us. In this course, all people (including but not limited to, people of all races, ethnicities, sexual orientation, gender, gender identity and expression, students undergoing transition, religions, ages, abilities, socioeconomic backgrounds, veteran status, regions and nationalities, intellectual perspectives and political persuasion) are strongly encouraged to respectfully share their unique perspectives and experiences. This statement is intended to help cultivate a respectful environment, and it should not be used in a way that limits expression or restricts academic freedom at ESF.

COURSE SCHEDULE

This 3-credit course is limited to two weeks of instruction. As such, students will be expected to engage with course materials continuously for the duration of the two weeks. This will include early morning activities prior to breakfast and evening activities after dinner in addition to activities occurring during traditional educational hours. This intensive schedule reflects the high volume of content demanded by the short instructional period as well as considerations for animal activity patterns and animal welfare as necessitated by the implemented field techniques.

GRADING

The following scale will be used to determine students' letter grades:

A	A-	B+	B	B-	C+	C	C-	D	F
≥ 93.0	90.0–92.9	86.7–89.9	83.0–86.6	80.0–82.9	76.7–79.9	73.0–76.6	70.0–72.9	60.0–69.9	≤ 59.9

Individual student course grades will be based on the following components:

Participation (20%): This class requires students to be engaged participants in field activities for their own safety as well as the welfare of study species. Additionally, students are expected to be on time for scheduled activities as many are time sensitive.

Application of Field Techniques (30%): Students will be asked to complete datasheets and other assignments during field activities. The quality of these submissions will be assessed based on instructor guidance for each activity.

Independent Field Techniques (20%): Students will be asked to complete some field activities independently or as part of small groups and will be expected to complete datasheets and other assignments during these field activities. Submission quality will be assessed based on instructor guidance for each activity.

Final Presentation (15%): At the beginning of the course, students will be asked to select a species of interest from among the birds, mammals, reptiles, and amphibians commonly observed at Cranberry Lake Biological Station. On the final day of the course, students will be expected to deliver a 5-minute presentation providing background information on the species and proposing a research study for the species that applies techniques learned during the course.

Final Exam (15%): A cumulative final exam covering the course content will be administered on the final day of the course.