ESF Course Proposal Form
Committee on Instruction - ESF Faculty Governance
Office of Instruction & Graduate Studies

Date: January 29, 2010
Course Number: FTC 232
Course Title: Wildlife Techniques

☑ New Course  OR  ☐ Changes in existing course (check all that apply):

☐ Prefix  ☐ Description  ☐ Shared Resources
☐ Number  ☐ Pre-requisite(s)  ☐ Course Format
☐ Credits  ☐ Co-requisite(s)  ☐ Content
☐ Title  ☐ Semester Offered

This course meets the General Education standards in the following knowledge and skills area (check all that apply):

☐ American History  ☐ Humanities  ☐ Other World Civilizations
☐ The Arts  ☐ Mathematics  ☐ Social Sciences
☐ Basic Communication  ☐ Natural Sciences  ☐ Western Civilization

Prerequisites or co-requisite requirements:

☑ Prerequisites: FTC 200 Dendrology, FTC 202 Introduction to Surveying, FTC 204 Introduction to Natural Resources Measurements  ☑ Co-requisites: FTC 232 Wildlife Conservation

Institutional Impact:

Anticipated Enrollment: 25
Technology and Classroom Resource Demands: Standard Classroom space with computer, document camera, screen, whiteboard, and DVD player is sufficient. Standard forest measurement tools and equipment. Some specialized wildlife equipment for radio telemetry, live-animal trapping and remote monitoring.

Computing Resources: Computers, printers, computer network with access to internet, and word processing software required.

Library Resources: Ranger School Library/Summit system.

Transportation Requirements: Van transportation to nearby field sites and for field trips throughout northern New York.

Forest Properties or Field Practicum Facilities Wanakena Campus (Ranger School), James F.
Required: Dubuar Memorial Forest, Newcomb Campus (AEC), Huntington Wildlife Forest.

**Health and Safety Considerations:**

Conditions or situations present in association with the course? Yes / No

1. **Will substances with any of the following properties be used during instruction:** flammability, toxicity, corrosivity, reactivity, registered pesticide, legally controlled, or other characteristics with the potential to cause harm or injury? No

2. **Will any physical hazards be present during instruction?** (e.g., machines that need safety guards; razor blades or syringes; compressed gases, etc.). No

3. **Will any biological hazards be present during instruction?** (e.g., handling animals (rabies or hantavirus); cultures or stocks of infectious agents (fungal spores, viruses, bacteria, etc.). Yes

4. **Will any radiation hazards be present during instruction?** (e.g., radioisotopes, X-rays, ultraviolet rays, lasers, etc.). No

5. **Will any electrical equipment that, due to its design, location, or method of use, pose any threat to safety during instruction?** (Give considerable thought to electrical use outdoors, or any potentially wet location.). No

6. **Will there be any personal safety issues related to the class?** (e.g., due to time of day or location, at the end of any organized class exercise, will students be in danger of physical assault, etc.). Yes

7. **Will any students be driving official state or research sponsored land or water vehicles during any class or instructional exercise?** No

8. **Will any type of personal protective equipment be necessary during class exercises?** (e.g., hard-hats, eye/face protection, hearing protection, hand/foot protection, lab coat, visibility clothing, etc.) Yes

If the answer was "Yes" to any of the **HEALTH AND SAFETY** questions, please explain:

3. As part of a field trip to the Huntington Wildlife Forest, students have the opportunity to briefly handle small mammals and amphibians. Students may have other opportunities to briefly handle songbirds and/or common reptiles, such as turtles or garter snakes. Students will receive proper training on safe and ethical handling of wildlife as part of the course, and ESF policies regarding the same will be strictly followed.

6. This course involves several outdoor, field-oriented lab exercises. Other than the conditions normal to exercises in forested settings, students will rarely be exposed to any special hazardous conditions.

8. Due to the potential for falling debris in forested settings, students will be required to wear orange hardhats that meet or exceed the ANSI Z89.1-1986, Class A and B standards. Due to the uneven terrain encountered in many field laboratory sites, students will be required to wear boots that provide ankle support and protection. Due to the abrasiveness of low-level forest vegetation, students will be required to wear long pants during all field exercises. Because of the dispersed nature of the field activities, all faculty and staff will be required to carry two-way radios and/or cell phones to maintain contact with the administrative site in the event of emergencies.

**CATALOG DESCRIPTION**

FTC 232. Wildlife Techniques (2)
Fourteen hours of lecture and forty-eight hours field and laboratory time. Standard methods and techniques for measuring, monitoring, controlling and evaluating wildlife populations are discussed, demonstrated and/or practiced. Further practice in measuring and evaluating wildlife habitat. Identification of common birds, amphibians, reptiles and mammals by sight and sound.

Prerequisites: FTC 200, FTC 202, and FTC 204

Corequisite: FTC 232
DETAILED COURSE DESCRIPTION

COURSE: FTC 232 – Wildlife Techniques
2 Credit Hours – Spring Semester
14 hours lecture
48 hours laboratory
Prerequisite(s): FTC 200, FTC 202, FTC 204

SCOPE:

1. Level of Instruction:
   a. FTC 232 is an introductory course intended for students seeking an A.A.S. degree in Environmental and Natural Resources Conservation at the Ranger School (Wanakena Campus).

2. Relation to curriculum or to other ESF or Syracuse University courses:
   a. FTC 232 is required of all students enrolled in the Ranger School’s Environmental and Natural Resources Conservation curriculum.
   b. Shared resource requirements: none, a graduate offering is not planned.

STUDENT LEARNING OUTCOMES:

After completing this course the student should be able to:

1. Identify, by sight and/or sound, 20 species of birds, 5 species of amphibians, 5 species of reptiles, and 10 species of mammals common to the northeastern United States.
2. Understand and assist with the methods of live trapping animals, especially small mammals and birds.
3. Measure wildlife habitat features according to accepted standards and methods, and using standard tools.
4. Monitor wildlife populations using radio telemetry, satellite telemetry and/or other remote technologies.
5. Understand and apply direct and indirect methods used to count animals and estimate population size or density.
6. Describe the use of wildlife harvesting as a wildlife conservation tool.
7. Describe, discuss and/or demonstrate procedures for the safe and ethical handling of wild animals.

MAJOR CONCEPTS OR METHODOLOGIES:

This course serves as an introduction to the numerous methods used to measure, monitor, control and/or evaluate wildlife populations and wildlife habitat. It is largely a field/laboratory course focused on the technical aspects of wildlife management. Students first learn to identify several species of mammals, birds, amphibians and reptiles. Identification by sight and sound is stressed. Students learn about standard ways of live trapping, marking and measuring individual animals, and they then learn how to monitor individual animals and/or populations using remote cameras, telemetry techniques, citizen observations and standard inventory techniques.

CATALOG DESCRIPTION

FTC 232. Wildlife Techniques (2)

Fourteen hours of lecture and forty-eight hours field and laboratory time. Standard methods and techniques for measuring, monitoring, controlling and evaluating wildlife populations are discussed,
demonstrated and/or practiced. Further practice in measuring and evaluating wildlife habitat. Identification of common birds, amphibians, reptiles and mammals by sight and sound.

Prerequisites: FTC 200, FTC 202, and FTC 204

COURSE HISTORY:

This is a new course, created as part of a new 45-credit hour Environmental and Natural Resources Conservation curriculum in 2010.

Revised Draft: January 12, 2010 (form in protected format: 1/29/10)