



Syllabus

BIO 210 Winter Ecological Adaptations and Field Techniques

General Information

Date

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Author

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Department

Science and Technology

Course Prefix

BIO

Course Number

210

Course Title

Winter Ecological Adaptations and Field Techniques

Course Information

Credit Hours

3

Lecture Contact Hours

0

Lab Contact Hours

0

Other Contact Hours

3

Catalog Description

A combination of lecture and field work will be used to gain a proficiency in the over wintering adaptations of organisms in the northeast, specifically the Finger Lakes region. Adaptations of mammals will be emphasized. Lectures will focus on identification, natural history, behavior, physiology and ecology of mammals. Laboratory will include field trips to various habitats in and around Honeoye, NY, identification of animal signs, and mark & recapture techniques to assess habitat selection of small mammals residing in the subnivean environment.

Key Assessment

This course does not contain a Key Assessment for any programs

Prerequisites

None

Co-requisites

None

Grading Scheme

Letter

First Year Experience/Capstone Designation

This course DOES NOT satisfy the outcomes applicable for status as a FYE or Capstone.

SUNY General Education

This course is designated as satisfying a requirement in the following SUNY Gen Ed category

None

FLCC Values

Institutional Learning Outcomes Addressed by the Course

None

Course Learning Outcomes

Course Learning Outcomes

1. Recall the natural history of various mammals whose home ranges include the Finger Lakes region
2. Describe morphological, physiological and behavioral adaptations to cold weather thermal regulation
3. Articulate the importance of attributes of snow, vegetation and landform to survival of mammals in winter
4. Demonstrate proficiency in field techniques associated with ecology, winter population processes, and the identification of small mammals
5. Apply knowledge in observational techniques and identification of animal signs during class field trips
6. Discuss proficiently concepts in small mammal ecology and habitat requirements that enhance winter survivorship

Program Affiliation

This course is not required as a core course in a program

Outline of Topics Covered

Being a residential course, the flexibility of time will be implemented throughout the 5 1/2 days at Muller. Time will be divided up between:

- a) field work, approximately four times per day baiting, setting and checking live traps, processing organisms, marking and releasing individuals;
- b) lecture on snow morphology, other physical characteristics of winter, and the various adaptation of organisms in the northeast, including, plants, amphibians, reptiles, birds, but emphasizing mammals;
- c) student oral presentation on specific adaptations related to cold weather thermal regulation;
- d) Students scientifically analyzing and summarizing data collected throughout week.