

MARINE, ESTUARINE AND FRESHWATER BIOLOGY (MEFB)

Course numbers with the # symbol included (e.g. #400) have not been taught in the last 3 years.

MEFB 817 - Lake Ecology

Credits: 4

Introduction to the ecology of freshwater systems with emphasis on lakes. Origins of lakes and the effects of watersheds on lake chemistry and nutrient cycling are explored. Other topics include the impact of human disturbances on productivity and aquatic food webs and methods used for the management and restoration of lakes. Comparisons are made of the structure and functions of lake ecosystems found in temperate, tropical and arctic regions.

Equivalent(s): PBIO 817, ZOO 817

Grade Mode: Letter Grading

MEFB #819 - Field Studies in Lake Ecology

Credits: 4

Ecology of lakes and other freshwater habitats examined through field studies. Emphasizes modern methods for studying lakes, analysis and interpretation of data, and writing of scientific papers. Seminars on research papers and student presentations of class studies. Field trips to a variety of lakes, from the coastal plain to White Mountains; investigate problems, such as eutrophication, acidification, biodiversity and biotoxins. Capstone experiences include interaction with state agencies, lake stakeholders and the submission of written manuscripts for publication. Lab.

Equivalent(s): PBIO 819, ZOO 819

Grade Mode: Letter Grading

Special Fee: Yes

MEFB 825 - Marine Ecology

Credits: 4

Marine environment and its biota, emphasizing intertidal and estuarine habitats. Includes field, laboratory, and independent research project. (Not offered every year.)

Equivalent(s): PBIO 825, ZOO 825

Grade Mode: Letter Grading

Special Fee: Yes

MEFB 847 - Aquatic Plants in Restoration/Management

Credits: 4

A field-intensive class focusing upon freshwater and marine vascular plants with an emphasis on species commonly associated with ecological restoration, the identification and conservation of rare species, and the adaptations and management of invasive species of aquatic habitats in New England. Field trips emphasize the flora of various wetland habitats, including open water and vegetated fresh water wetlands, as well as coastal and estuarine habitats. Lectures and readings examine the current trends in research and management focusing upon specific taxa and pertinent facets of their taxonomy, physiology, and natural history.

Equivalent(s): PBIO 847

Grade Mode: Letter Grading

Special Fee: Yes

MEFB 872 - Fisheries Biology: Conservation and Management

Credits: 4

Globally, many fished populations are declining, but 3.2 billion people eat fish and the average human eats >40 pounds of fish a year. This course identifies what biological characteristics are important to management and how they are measured. The course also explores quantitative methods describing fishery-population interactions and other management tools. Lastly, students will learn about the impacts of fishing on ecosystems.

Prerequisite(s): BIOL 411 with a minimum grade of D- and BIOL 412 with a minimum grade of D-.

Equivalent(s): ZOO 872

Grade Mode: Letter Grading