

Fish Ecology FW473/573

Credit hours: 4

Term offered: Spring

Instructor: Noakes

Course objectives:

1. To consider the factors affecting individual biology and behavior of fishes.
2. To consider the ecology of populations.
3. To consider proximate and ultimate factors of human influences on fish ecology and to demonstrate the relevance of basic ecological principles to fisheries management.
4. To provide opportunities for students to evaluate ecological models, including computer simulations.

Course content: This course is a hierarchical approach to the study of fish ecology. The course will stress the importance of communication in science, especially in the form of written summaries and reports. Written assignments will be marked on the basis of scientific content as well as style and format required for publication. Science is incomplete and unfinished unless and until it is published. Publication of science includes oral summaries and reports, monographs, edited books and individual refereed papers in the primary literature. No matter what career you eventually follow you will be required to communicate and publish to the general public, to your supervisors, to the broader scientific community or to those who will provide the funding and support for your work.

Prerequisite(s): Formal background in fish biology and aquatic science.

Text(s): Helfman, G., B. B. Collette, D. E. Facey & B. W. Bowen. 2009. The diversity of fishes: biology, evolution and ecology, 2nd edition. Wiley – Blackwell. 720 pp.

or:

Allen, L. G., D. J. Pondella II & M. H. Horn. 2006. The Ecology of Marine Fishes: California and Adjacent Waters. University of California Press. 670 pp.

Term paper(s): Lab reports, Abstracts, Essay

Testing: Weekly tests (no midterm or final tests or exams)

Students for whom the course is intended: Senior undergraduate and graduate students with some background in fish biology and aquatic sciences with strong interests or practical experience in ecology or marine science.