

Title: Fishery Biology

Designator number: FW454/554

Credit hours: 4, WIC

Term offered: Fall, HMSC/Main campus

Number of days meeting and hours/lab hours: 2 days/week 70 minutes, 3 hour lab

Instructor: Scott and Selina Heppell

Course Objectives: Fisheries and Wildlife 454/554 is a course designed to cover many of the facets of the biology of fishes relevant to the management of fish stocks. This is a writing intensive course (WIC). The primary focus is on the types of data necessary to conduct a biological assessment of fish populations, other aspects of fish life history relevant to management, and on an understanding of the importance of habitat and ecosystem interactions for sustainability in fisheries. Most commercially exploited stocks are marine in origin while inland fisheries are primarily recreational in nature so there will be an emphasis on saltwater species. However, we also discuss freshwater species, and knowledge gained and skills learned can apply regardless of the system.

Testing: Laboratory write-ups, one mid-term and one final for FW454

Term paper: There is a term project associated with this class. There are three components to the group project; development of a fishery management/recovery plan, development of a habitat assessment and management plan, and development of an ecosystem plan with that species as a focal point

Prerequisites: FW320

Testing: FW 454: Lab homework, Exam, Final, Project. FW 554: Lab homework, Project

Course references

1. Hilborn, R, and CJ Walters. 1992. Quantitative fisheries stock assessment: choice, dynamics, and uncertainty. Chapman and hall, New York.
2. Jennings, S., MJ Kaiser, and JD Reynolds. 2001. Marine Fisheries Ecology. Blackwell Science, Oxford UK.
3. Murphy, BR and DW Willis, Editors. 1996. Fisheries Techniques. Second edition. American Fisheries Society, Bethesda, Maryland.
4. Ross, MR. 1997. Fisheries Conservation and Management. Prentice Hall. U. Saddle River, NJ.
5. Royce, WF. Introduction to the Practice of Fishery Science. 1996. Second Edition. Academic Press, San Diego.
6. Wallace, RK, and KM Fletcher. 2000. Understanding Fisheries Management: A manual for understanding the Federal Fisheries Management Process, Including Analysis of the 1996 Sustainable Fisheries Act. Second Edition. Mississippi-Alabama Seagrant Consortium. Publication #MASGP-00-005.
7. Wallace, RK, W Hosking, and ST Szedlmayer. 1994. Fisheries Management for Fishermen: A Manual for Helping Fishermen Understand the Federal Management Process. Mississippi-Alabama Seagrant Consortium. Publication #MASGP-94-012.
8. <http://courses.ncsu.edu/classes/zo726001/Overview.html>

Students for whom this course is intended: All students enrolled to major in Fisheries