EGR 268: Fisheries Technologies and Monitoring Techniques

This course is designed to provide students with an understanding of the commercial fishing industry in the northwest Atlantic Ocean from the Gulf of Maine to Cape Hatteras, North Carolina. Students study the various fisheries and gain an understanding of the regulations and management practices that govern them. Student also learn about the various fishing gear and practices used to catch commercial marine fish, crustaceans, and shellfish. The concept of geographic and statistical fishing areas is taught. The collection of samples and data is critical to the management of the industry, and students learn the necessary sampling protocols and the proper completion of various data logs. Three hours of lecture and three hours of laboratory per week. Instructional Support Fee applies.

Course Student Learning Outcomes

1. Define what a fishery is. 2. Understand the basic ecology of fishing grounds. 3. Understand the basic concepts of fishery management. 4. Identify the fishing gear used in the Northeast groundfish fisheries. 5. Identify different types of fishing vessels. 6. Subsample from the total catch and calculate estimates of fish species weights in the total catch. 7. Identify 70 species of finfish and invertebrates in the US Northeast fisheries. 8. Identify 30 species of cetaceans sighted in the areas of the US Northeast fisheries. 9. Identify 5 species of seals sighted in the areas of the US Northeast fisheries. 10. I Identify 5 species of sea turtles sighted in the areas of the US Northeast fisheries. 11. Identify 15 species of seabirds sighted in the areas of the US Northeast fisheries. 12. Understand the role of the At-Sea Monitor on a commercial fishing vessel. 13. Be prepared to take the At-Sea Monitoring training and examinations offered by the National Marine Fisheries Service, Northeast Fisheries Science Center, Fisheries Sampling Branch for certification as an At-Sea Monitor.
Credits: 4
Program: Engineering