



CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

SPECIAL TOPICS IN BIOLOGY: THE AMERICAN OYSTER

Location: aboard the Skipjack *Stanley Norman*, Annapolis, MD

Description: Students on this course focus on the American Oyster, *crassostrea virginica*, as a lens to understand the greater biological system of the Chesapeake Bay. It is held aboard the skipjack *Stanley Norman*, one of the Chesapeake's last remaining oyster dredge boats. Built in 1902, it provides historical context for students to appreciating the economic and biological foundations of the Bay's ecology. The course involves physical data collection utilizing a variety of water sampling gear, from basic field chem-tests, to professional multi-parameter probes used by research scientists. Also available are several methods of biological sampling, such as an oyster dredge, trawl net, and plankton tow.

Course Concepts: The Special Topics in Biology: American Oyster course satisfies the following **AP Biology** topics:

- II. Heredity and Evolution, C. - Evolutionary Biology
 - Early evolution of life
 - Evidence for evolution
 - Mechanisms of evolution
- III Organisms and Populations
 - A – Diversity of Organisms
 - Evolutionary patterns
 - Survey of the diversity of life
 - Phylogenetic classification
 - Evolutionary relationships
 - B – Structure and Function of Plants and Animals
 - Reproduction, growth, and development
 - Structural, physiological, and behavioral adaptations
 - Response to the environment
 - C – Ecology
 - Population dynamics
 - Communities and ecosystems
 - Global issues

Program Capacity: 24 individuals (students and chaperones). High school level and above.