

SEA Semester:

Oceans & Climate

An Upper-Level Ocean Science Semester
offered by Sea Education Association



Understanding climate change is the predominant scientific challenge of our time, and the timely application of this knowledge to public policy is crucial to the future of the planet. This oceanography-focused semester examines how the global ocean functions in the climate system. Incorporating perspectives from the social sciences, we investigate how scientific knowledge is used in public policy. Together with SEA's experienced faculty, prominent visiting lecturers share their research and work directly with students. A 3000-mile research cruise offers a unique opportunity to study the remote open ocean environment through directed research projects.

On Shore in Woods Hole

During the 6-week shore component, intensive academic coursework prepares students for their research cruise. With full access to SEA faculty, distinguished guest lecturers, and the world-renowned Woods Hole Oceanographic Institution/Marine Biological Laboratory Library, students design original research projects to be completed at sea. Students also work towards establishing seamanship skills while exploring the anthropological connections to their research.

Courses and Credit

Oceans in the Global Carbon Cycle (4 credits); Ocean Science and Public Policy (3 credits); Nautical Science: Seamanship for Oceanographers (3 credits); Oceanographic Research Techniques (3 credits); Oceanography Research in Oceans and Climate (4 credits).

SEA Semester: *Oceans & Climate* carries 17 semester hour credits from Boston University for successful completion of the program. Course prerequisite: at least three lab courses, one at the 300-level or higher.

At Sea in the Equatorial Pacific

As full, working members of the scientific team and sailing crew aboard the SSV *Robert C. Seamans*, students deploy oceanographic sampling equipment, manage shipboard operations, navigate by the stars, and make port stops off the beaten path. Students work through the scientific method by investigating an oceanographic question, implementing their proposed experimental design, analyzing collected data, and finally, presenting their findings.



Academic Focus

An oceanography-focused semester that examines how the oceans function in the global climate system, incorporating perspectives from the humanities and public policy to learn how scientific knowledge is used in policy making.