



*Spend your fall term doing research in wetlands, bays, and coastal forests on Cape Cod, Massachusetts.*



To meet inspiring and like-minded student colleagues



To get wet and muddy, have fun, and work hard!

*“My experience at MBL is what put me on the path to pursuing research in the first place and connected me with the opportunities that made me the scientist I am today.”*

—Sarah Messenger, SES 2016; SES TA 2018; MBL RA 2019-2022

**Applications for Fall terms are due at the end of March each year.**

For more information, visit:

**[mbl.edu/SES](http://mbl.edu/SES)**

OR SCAN HERE



**(508) 289-7777**  
**ses@mbl.edu**

Approved for credit at more than fifty colleges and universities.

# SES

## Semester in Environmental Science

IN WOODS HOLE, MASSACHUSETTS

## Why study in Woods Hole, MA?

To deepen your knowledge about global change and the complex feedbacks and unexpected consequences of human impacts on the planet

## To learn by doing



To do independent research in the field and lab



To learn about ecosystem responses to climate change



THE UNIVERSITY OF CHICAGO  
**MARINE BIOLOGICAL LABORATORY**

# What distinguishes SES?



## Hands-on Learning and Academic Rigor

If you're a student who likes a challenge and is serious about pursuing a career in environmental science, engineering or management, SES will not disappoint. You'll spend more than 20 hours each week in the lab and field learning state-of-the-art techniques for measuring biogeochemical processes and understanding trophic structure and food webs in both terrestrial and aquatic ecosystems. Special seminars and guest speakers will explore disproportionate impacts of pollution, climate change and other environmental stresses on socioeconomically disadvantaged communities. During the last six weeks of the program, you will apply these ideas and techniques to an independent research project of your own design and present your discoveries at a research symposium.

Past projects have included work on distribution of plastics in the environment, effects of oil pollution on microbial communities, diets of sea turtles, strategies for remediating nutrient pollution in coastal ponds, effects of long-term soil warming on forests, and many other exciting topics.

## Join The Woods Hole Community of Science

Since 1888, the Marine Biological Laboratory (MBL) has pioneered the integration of scientific research with education. The laboratory, affiliated with the University of Chicago, is dedicated to scientific discovery and improving human welfare through advances in biology, biomedicine and environmental science. In addition to the MBL, five other independent research and educational institutions are located in the seaside village of Woods Hole, including the National Marine Fisheries Service, the Woods Hole Oceanographic Institution, the U.S. Geological Survey, Sea Education Association and Woodwell Climate Research Center.

Over 58 Nobel Laureates have studied, taught or conducted research at the MBL, including current SES faculty member, Jerry Melillo, a Distinguished Scientist at the Ecosystems Center.

## Opportunities for Research and Internships after SES

The strength of the on-going research programs at MBL provides many opportunities for post-course research. SES faculty members are leading National Science Foundation funded work at sites around the globe ranging from the Arctic to the Amazon, saltmarshes to the deep sea. About one-in-five SES students return to the Ecosystems Center or other labs in Woods Hole to work as interns, research or teaching assistants after the program. Approximately 70% of SES graduates go on to graduate school and positions in environmental sciences or policy.

## A Beautiful Setting for Environmental Study

Formed from glacial deposits laid down over 10,000 years ago, Cape Cod is dotted with freshwater kettle ponds and fringed with salt marshes, bays and estuaries. Human activities are transforming Cape Cod; thus it provides an ideal site for studying environmental challenges such as loss of native habitat and biodiversity, groundwater contamination, eutrophication, sea level rise and coastal erosion.

## SES Courses

- Aquatic and Terrestrial Ecosystem Analysis Core
- An elective in either Mathematical Modeling of Ecosystems or Microbial Methods in Ecology.
- A Science Journalism Seminar
- An Independent Research Project

## Approved for credit at more than 50 colleges, including:

Allegheny, Amherst, Bard, Bates, Beloit, Brandeis, Bryn Mawr, Carleton, Clark, Clarkson, Colby, Colgate, Colorado College, Connecticut College, Cornell, Dickinson, Earlham, Franklin & Marshall, Gettysburg, Grinnell, Hamilton, Hampshire, Harvey-Mudd, Kenyon, Lafayette, Lawrence, Lake Forest, Lynchburg, Middlebury, Mt. Holyoke, Northwestern, The New School for Liberal Arts, Oberlin, Pomona, Ripon, Rhodes, Sarah Lawrence, Skidmore, Southwestern, Swarthmore, Syracuse, Trinity College (CT), Trinity University (TX), Univ. of Chicago, Univ. of South (Sewanee), SUNY-ESF, Washington and Lee, Wellesley, Wesleyan, Wheaton (IL), Wheaton (MA).

*If you don't see your college listed contact us.*

*“Participating in SES was one of the best decisions of my college career.”*

—Jonah Benning-Shorb, SES'17, University of Chicago, '20