## BIOS Summer Courses in Bermuda

## Modern Observational Oceanography

## July 4 - July 22, 2016



Instructors: Prof. Nicholas Bates (BIOS & University of Southampton), Dr. Rod Johnson (BIOS), Dr. Andrew Peters (BIOS) and Ruth Curry (WHOI & BIOS)

This multidisciplinary course will provide students with a broad introduction to, and practical experience in, the field of observational oceanography utilizing a variety of state-of-the-art technologies and methods.

Themes will include carbon and nutrient cycling and the processes that affect biological production in the ocean, carbonate chemistry and ocean acidification, ocean-atmosphere interactions, and the spatial/temporal scales of physical ocean processes.

Through a combination of lectures, laboratory training and fieldwork, students will be introduced to current research guestions and the observational methods used to investigate them. Students will collect samples and utilize various sensors and instrumentation – locally at the BIOS dock, on a 2-day research cruise aboard the UNOLS vessel R/V Atlantic Explorer, and through a small fleet of autonomous underwater vehicles (AUVs) deployed offshore of Bermuda – to develop a practical understanding of both the science topics and the techniques used to study them.

This course is open to senior undergraduate and postgraduate students enrolled in oceanography programs. Adequate standing in university-level physics and chemistry courses is required. SCUBA certification is not required. Email education@bios.edu for more information.

Application deadline is April 17. For more information or to download an application visit: www.bios.edu/education/summer-courses/



Bermuda Institute of Ocean Sciences

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