Overview
The Global Ocean Science Education (GOSE) Workshops, facilitated by the international Consortium for Ocean Science Exploration and Engagement (COSEE) and the College of Exploration (CoE), bring together ocean scientists, education professionals, business and industry leaders, and decision makers from across the globe to foster international collaboration and partnerships and advance ocean science education and ocean literacy. The GOSE workshops also provide a forum to address ocean science issues and challenges that cross national borders.

2019 GOSE Workshop
Conducted in partnership with the Atlantic Ocean Research Alliance (AORA) and Seabed 2030 Project, the 2019 GOSE Workshop will be held in the Washington, DC area from November 13-15. A main 2019 GOSE Workshop goal is to build stronger connections and professional working relationships throughout the global ocean science research, education, and business communities as it focuses on three main themes:
• Global Ocean Observing
• Seabed Mapping
• Meeting the Needs of Business and Industry

Keynote presentations, panel discussions, and participant interactions will focus on the integration of the 2019 GOSE Workshop themes with K-12, undergraduate and graduate, and public education, including education in support of the Blue Economy. Discussions will also identify how workshop themes will support and contribute to the United Nations Decade of Ocean Science for Sustainable Development (2021-2030).

Specific Workshop goals include:
• Bringing together the ocean science, education, policy, and business/industry sectors;
• Fostering the integration of research results from the seabed mapping and ocean observing communities into education resources for enhanced ocean literacy and decision making; and
• Identifying business and industry needs that will lead to the development of an international certificate course for business leaders and policymakers.

History of the GOSE Workshops
Previous GOSE Workshops have identified and built consensus related to three major priorities for international collaborative ocean science education efforts:
• The Ocean and Human Health, including Coastal Resiliency;
• The Ocean’s Role in Climate Change and the Effect of Climate Change on Ocean Systems; and
• Biodiversity, including Food Security & Fisheries.
Priorities have also been identified for ocean science topics to be integrated into ocean science education initiatives:

- Climate Change and Weather
- Loss of Biodiversity
- De-oxygenation of Coastal Waters
- Microplastics/Pollution
- Ocean Stressors

Process priorities have been identified for the global ocean science education community:

- Communication and teaching training for scientists and graduate students;
- Education and resources for business and industry and decision makers;
- Reform of undergraduate ocean science education with special emphasis on identifying workforce needs and educating for Blue Economy careers;
- Support for ongoing global ocean literacy efforts;
- Increasing diversity in ocean science; and
- Establishment of a network of networks to support international ocean science initiatives.

GOSE Workshop participants develop strategies to:

- Conduct ocean science research that benefits society;
- Develop catalytic partnerships between ocean science sectors;
- Foster communication and coordination among ocean science education programs;
- Promote ocean science as an interdisciplinary tool for improving science education and decision making; and
- Foster strategies to increase the participation of students from populations that are underrepresented in the ocean sciences.

Collaborative international efforts, resulting from previous GOSE Workshops, have included a side event, *Ocean Literacy for All*, that was conducted during the first United Nations (UN) Ocean Conference at UN Headquarters in 2017. Priorities identified in previous workshops have also been addressed by the Intergovernmental Oceanographic Commission with support from the Swedish Ministry of the Environment and Energy.

**2019 GOSE Workshop Executive Planning Committee**

- Gail Scowcroft, University of Rhode Island
- Peter Tuddenham, College of Exploration
- Tina Bishop, College of Exploration
- Paula Keener, National Oceanic and Atmospheric Administration
- Vicki Ferrini, Lamont Geological Observatory
- Ana Norona, Ciencia Viva
- Liesl Hotaling, Eidos Education
- Andrea Gingras, University of Rhode Island