

Want to get out of Maine in January?

This is your chance...

NEW FALL 2017 COURSE OFFERING

BIO 387 with Dr. Allie Gardner Sustainability on the Front Lines of Climate Change Eleuthera, Bahamas • January 2 – 14, 2018



Experience a sub-tropical island ecosystem! Snorkel reefs, visit nature preserves, and explore realworld problems in the science of sustainability *Anticipated course fee \$2,950 + 3 credits tuition*

Interested? Visit <u>http://tinyurl.com/mainebahamas</u> or e-mail <u>allison.gardner@maine.edu</u> for info! 3 credits, one lab credit, partially satisfies Area V

About the Course

A complex dual relationship exists between climate change and sustainable development. Through its detrimental effects on food security, fresh water access, and human and environmental health, climate change weakens the basis for social and economic development. Meanwhile, misplaced societal priorities regarding sustainable development influence greenhouse gas emissions and exacerbate the conditions leading to socioeconomic vulnerability. The solutions to these intractable problems lie in **interdisciplinary research efforts**. This course uses **Eleuthera**, **Bahamas**, a subtropical island ecosystem of enormous conservation value, as a case study to examine the nexus between sustainability and climate change. Students will **explore social and cultural dimensions of sustainability** and **innovations to promote sustainability** in a developing country under stress due to climate change. The **class size is limited to 12 students** with application-based enrollment. **3 credits**.

Learning Outcomes

The goal of the course is to integrate the knowledge, interests, and perspectives of University of Maine students from different disciplines to train all students in interdisciplinary research and problem-solving in the context of sustainability. By the end of the course, you will be able to:

- 1. **Discuss the concept of sustainability** in biological, engineering, and cultural contexts, with specific attention to the dual relationship between climate change and sustainable development
- 2. Appreciate the unique environmental, technological, and societal challenges in developing nations
- 3. **Understand and compare perspectives** on the challenges of sustainable development from different disciplines that may not regularly interact in the classroom
- 4. **Develop skills necessary to collaborate** in interdisciplinary teams to analyze a particular environmental challenge to sustainability by completing a field project in Eleuthera, Bahamas
- 5. **Effectively communicate** the results of these student-driven projects to various audiences.

Course Format

During the Fall semester, the class will hold **six, two-hour pre-trip meetings** to orient you to the study abroad portion of the course. In January, we will visit <u>The Island School</u> at the <u>Cape Eleuthera Institute</u>, Eleuthera, Bahamas. At The Island School, you will experience firsthand the challenges and tradeoffs of sustainable living, staying in communal dorm rooms with all electricity generated, food produced, and fresh water harvested on-site. In collaboration with instructors, researchers, and community members at the Cape Eleuthera Institute and in nearby settlements, you will conduct team research projects on aspects of sustainability in island ecosystems under stress due to climate change, culminating in reports, short written reflections, and group presentations.

I'm Interested! How Do I Apply?

The course is **limited to 12 students** (open to sophomores, juniors, and seniors), who will be selected by a competitive application process with preference to students who have had limited opportunity for international travel. To apply for the course, **send a short essay** (~250 words) describing your interest in the course and your prior experience with international travel to either Allie (<u>allison.gardner@maine.edu</u>) or Brandon (<u>brandon.lieberthal@maine.edu</u>). For full consideration, applications must be submitted by **5:00 pm on May 5** (the last day of classes). After that, applications will be considered on a rolling basis. Please don't hesitate to contact us with any questions or concerns!