

SEA LEVEL RISE AND COASTAL ECOLOGY: SCIENCE, POLICY AND PRACTICE
2019 SPRING BREAK FIELD COURSE
3 CREDITS

**AN INTERDISCIPLINARY COURSE OFFERED BY THE COLLEGES OF LIBERAL ARTS & SCIENCES,
AGRICULTURE AND LIFE SCIENCES, COLLEGE OF JOURNALISM, AND LAW**

COORDINATED BY THE FLORIDA CLIMATE INSTITUTE

DRAFT SYLLABUS

Faculty Core Team: Dr. Micheal Allen, School of Forest Resources & Conservation, College of Agriculture and Life Sciences (IFAS), Dr. Francis E. "Jack" Putz (fep@ufl.edu), College of Liberal Arts & Sciences, Thomas Ruppert, Esq., Florida Sea Grant Coastal Law and Policy, and Alyson Larson, College of Journalism. To register, contact the faculty representative from your college.

Field & Lecture Contributors: Dr. John Jaeger, Department of Geology, Dr. Jack Putz, Department of Biology, Dr. Peter Frederick, School of Wildlife Ecology & Conservation, Dr. Elizabeth Pienaar, Department of Wildlife Ecology and Conservation, Dr. Andrea Dutton, Department of Geology, Dr. Mark Clark, Department of Soil and Water Science, Dr. David Kaplan, College of Engineering, Dr. Wendy Graham, UF Water Institute, Jon Dain, Director of the Natural Resources Leadership Institute (NRLI), Leslie Sturmer & Savannah Barry, Florida Sea Grant

Coordinating Entity: Florida Climate Institute, Carolyn Cox

Student Cap & Composition: 16 Graduate and Professional degree students comprising 4 students each from programs in CLAS, CALS, LAW, and JOU [*For law students priority registration will be given to ELULP Certificate students who are 3Ls*]

Course Listing: The course will be cross-listed with a graduate level course number but have different sections listed in each unit. CLAS (BOT6935), CALS (ALS6932), and JOU(TBD)

Fees: There will be a \$250 materials and supplies fee for lodging, gas, van, a few meals, and boats (BUDGET UNDER DEVELOPMENT)

Location: UF IFAS Nature Coast Biological Station and other locations in Florida Nature Coast area.

Course Objectives: To provide students a firm grounding in the science, law & policy, and economics associated with sea-level rise and climate change in the Nature Coast region through an interdisciplinary and experiential collaborative approach. This course will combine classroom lectures and disciplinary integration with an intensive field experience. Sessions will focus on ecological, coastal and marine issues through field-based immersion, practitioner lectures, and reflective discussions in an interdisciplinary context. Student teams will verbalize and defend their findings and recommendations in a open forum designed to highlight their learning.

Student learning outcomes:

At the conclusion of the course students will:

- Gain a basic understanding of the components of the climate and ecosystem and how they are connected and disrupted by climate change (atmosphere, hydrosphere, geosphere, biosphere, cryosphere)
- Understand the importance of data collection to predict the future, as well as its limitations
- Understand both ecological and societal risks and impacts of sea level rise, the interactions between these risks and options for adaptation
- Apply critical-thinking skills at the science / policy interface

- Learn to work in interdisciplinary teams to address specific problems and to effectively communicate science and policy to stakeholders

Grading: Students will be graded according to their individual college policies. Individual contributions to group work will be assessed individually. See rubric below.

General Format of Course

- a. This course will have 7 pre-spring break lecture sessions with lecture and background readings. After these sessions, there will be a predeparture exam on the lectures and readings.
- b. Students will be divided into 4 teams of 4 students representing each College and assigned pre-identified science and policy-relevant problems they must address during the field course
- c. During Spring Break 2019, students will participate in a 5-day field course centered at the UF IFAS Nature Coast Biological Station. The field experience will include practitioner lectures, field trips and time allocated for group work.

Attendance: Attendance is mandatory. Students are expected to read and attend all lectures and activities and be present for the duration of the field component.

Pre-Departure Lectures:

All pre-departure lectures will be held in **room 122 Frazier Rogers Hall from 5:00-7:30 pm on Wednesday evenings**. Readings to prepare for each of these session will be posted on the CANVAS site. The first segments of each evening session will be for lectures and last part for group work.