

## *Communicating Science*

### Fall 2019 Course Information

**Instructor**Adina Paytan [apaytan@ucsc.edu](mailto:apaytan@ucsc.edu)

308 Earth and Marine Science

**Units: 3**

**Course Description:** For graduate students interested in improving their conceptual understanding of climate science and climate change through engaging in activities, demonstrations and discussions, while also developing their science communication skills to advance the public's climate literacy. The course will combine science content, active teaching and learning methods based on how people learn, and how to engage in effective interactions.

**Course Objectives:** As a result of this course, students will be able to 1) describe and use models to illustrate the processes, interactions and mechanisms contributing to climate change; 2) demonstrate an understanding of how people learn, and the importance and impact of social, cultural and worldview belief systems on behavior related to climate change, through effectively communicating ideas and engaging in meaningful discussions with diverse, non-expert audiences.

**Location:** TBD**Time:** TBD**Office Hours:** by arrangement**Required Texts:*****Climate Change Science.***

1. Most current IPCC Report: [www.ipcc.ch](http://www.ipcc.ch)

**Learning Sciences.** For learning sciences content, we will occasionally use the following two books from the National Academies Press. Assigned chapters can be downloaded directly from the National Academies Press website (<http://www.nap.edu/>).

1. Fenichel, M and HA Schweingruber. (2009) [Surrounded by Science: Learning Science in Informal Environments](#). The National Academies Press.
2. Michaels, S., Shouse, A. and Schweingruber, H. (2007) [Ready, Set, SCIENCE!: Putting Research to Work in K-8 Science Classrooms](#). The National Academies Press.

**GRADING:**

Participation in whole-class and small group discussions is very important in this course, which means you need to attend class. Your Understanding of the learning research and science briefings will be assessed primarily through in-class discussion and a final project where you share climate science/climate change activities with others.