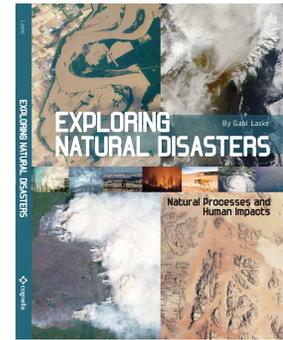


Fall 2015



Course Book

Description:

This course is an introduction to environmental perils and their impact on everyday life. We explore how geological processes such as earthquakes and volcanic eruptions work and how they change our environment. We explore the mechanisms of meteorological processes and the conditions under which extreme weather such as major storms, tornadoes and hurricanes form. We cannot prevent these conditions but we can learn how to monitor them and take precautionary measures. The discussion of extreme weather also includes the causes and consequences of floods, droughts and the conditions that lead to devastating wildfires. Global climate changes also have a large impact on the biosphere. These can be short-term events such as El Nino, or long-term such as major ice ages. We discuss causes of mass extinctions throughout Earth's history. Finally, we explore the involvement of human activity in the cause and prevention of natural disasters.

Class Website, lecture schedule and lecture notes:

<http://igppweb.ucsd.edu/~gabi/sio15>

The class website provides: lecture schedule, announcements, lecture notes, handouts to facilitate note-taking in class, supplemental material. A Coursera site is planned to provide regular tests and short videos. Midterms and the final exam are based on lecture notes, web material, homeworks, field trips and pop quizzes. In-calls polling will be done through polleverywhere.com.

Text Book:

"Exploring Natural Disasters: Natural Processes and Human Impacts" by Gabi Laske. The course will mostly follow the book in preparation, and students are advised to get the preliminary edition (available in various forms) and read the corresponding chapters (particularly important to study the figures used in class).

Lectures:

Lectures are held by Prof. Gabi Laske
Galbraith Hall 242, MWF 3:00 - 3:50pm

Office hours:

Tue 4:00 - 5:20pm, GH 364, starting Sep 29



Contact Information:

Gabi Laske (858) 534-8774, glaske@ucsd.edu, SIO Munk Lab room 324, IGPP at SIO
Email is the best way to communicate. Please add "SIO15" to your subject lines, using your UCSD email account.

Discussion Sessions:

Optional weekly discussion sessions on to discuss material and homework with TAs:
Wed 5:00-5:50pm and/or Thu 5:00-5:50pm, York 3030 (starting Sep 30)



Neal Arakawa



Lawrence Lew



Mackenzie Roberts



Colby Nicholson



Lana Graves

TBD

Grading and tests:

Grades are based on weekly problem sets, midterm 1, midterm 2, the final exam and pop quiz credits. Please see the class website for detailed breakdown. No late homework will be accepted. Homeworks in violation of UCSD policy of academic integrity will receive 0 points. Hand-written 8.5x11" note sheets will be allowed in the exams (1 for the midterms, 2 for the final). The grade scale is posted on the class website.

Pop quizzes:

Open-notes pop-quizzes will be given randomly during lectures. A fully correct answer will give 1% credit that is added to the cumulative final grade. Pop quiz credits can only be earned when attending the lectures. See class website for details.

Field Trips:

There will be a REQUIRED field trip to the SIO Beach and 2 self-guided tours to the Birch Aquarium in November. Please check the class website for info. These three trips will make 3 of the required problem sets.

Submit your personal experience:

Natural disasters may have affected many of us. You are encouraged to discuss these in the weekly discussion sessions. In addition, you can submit stories and photos to the course website as well as the Facebook page (see class website for details).