

ENST 540: Coastal California Science and Policy

Units: 4 Fall 2019

Thursdays 3:30-6:20

Location: TBA

Instructor: Jill Sohm Office: CAS 116B Office Hours: TBA Email: sohm@usc.edu

Schedule an appointment: https://calendly.com/jill_sohm

Phone: 213-821-0534 (office)

818-824-4296 (Google Voice)

Course Description

This course will address current science and policy issues that are being used to characterize and manage coastal resources in California. Course goals include investigating coastal management issues from multiple perspectives, including legal, political, diverse stakeholders, and natural science. Key focus areas include: coastal pollution and public health; ecosystem management and marine protected areas; local and state infrastructure; and restoration ecology. Examples from a range of coastal zones will be studied around the Los Angeles region.

Learning Objectives

At the conclusion of the course students will be able to:

- 1. demonstrate the ability to recognize the inter-relationships of physical and human interactions in coastal areas and identify and describe the (1) environmental problems facing the oceans and (2) policy responses to those problems.
- demonstrate the ability to analyze and evaluate policy decisions from specific stakeholder perspectives by developing formal public comments on a real-world, proposed ocean policy and by writing an opinion piece on an ocean policy issue.
- 3. demonstrate the ability to interpret scientific data in support of a particular policy response by writing a policy briefing after an analysis of a specific issue or set of data.
- 4. demonstrate integrated knowledge that comes from an evaluation of peer reviewed journal articles related to course topics.
- 5. demonstrate the ability to formulate an integrated and interdisciplinary response to current ocean management issues by completing an individual report and group presentation on marine spatial planning for an assigned region.

Course Notes

This course will use Blackboard for communication, information and turning in assignments. Lecture slides will be made available after the lecture is given. Additional readings may be assigned periodically throughout the semester, and these will be announced in class, posted on Blackboard, and an email reminder sent to the class. Sometimes computers will be used in class to work with real life data and run simple simulations – students will be notified when computers

are needed. This course involves a lot of in depth reading and critical analysis outside of lecture, as it is a four unit course.

Required Readings and Supplementary Materials

- Griggs, G. Coasts in Crisis: A global Challenge. University of Califonria Press. ISBN 10: 0520293622
- All other readings will be posted on Blackboard

Description and Assessment of Assignments

Exams:

This class will have one takehome midterm made up of four essay questions.

Stakeholder evaluation:

Students will be presented a coastal management scenario and will write up an evaluation of the stakeholders involved and their positions.

Letter to Coastal Commission:

Students will write a letter to the Coastal Commission about an issue that they are currently deciding and detail your opinion on what the Coastal Commission should do on this matter. See http://www.coastal.ca.gov/meetings/coming.html or http://www.coastal.ca.gov/mtgcurr.html for details on the issues currently before the Commission. The letter should be formatted as a formal letter and you must use as much scientific evidence and as possible in your arguments.

Ballona Wetlands:

We will take a trip to the Baloona Wetlands to see the last remaining coastal wetlands in LA. Before the trip, students will be assigned to read a section of the recently published Environmental Impact Assessment for the wetland restoration. After the trip, students will write an analysis of the section they were assigned, using both the reading and their experience visiting the wetlands.

Presentation on California coast related agency:

Students will research and generate a 10 minute presentation on one of the many agencies in California that is involved in coastal policy, regulation, management, restoration, or development.

Marine spatial planning group project:

As a group, the class will tackle a marine spatial planning problem (specifically, siting an offshore aquaculture project). Through this, they will learn the process of marine spatial planning, from identifying the issue and the data needs to analyzing existing and future conditions and finally making a choice about where to locate your proposed project. The class will carry out this work together and make a short presentation in class about the final decision.

Final Presentation:

For your final presentation, you will present a case study of a topic that relates to coastal management. The topic can focus in coastal waters, the interface between land and water, or management issues on coastal land itself. Your goal is to get an in depth understanding of your topic, the science behind it, and the possible solutions through management decisions, and then to communicate that understanding to the class. Presentations for groups of 2 should be ~80 minutes (the class period) and ~40 minutes for those working alone. You will be graded on your presentation style and content. Be sure also to include citations for research you cite, and a bibliography page with your sources on the last slide.

Grading Breakdown

| Assignment | Points | % of Grade |
|---|--------|------------|
| Midterm exam | 60 | 20% |
| Final presentation | 100 | 33% |
| Stakeholder evaluation | 20 | 6.67% |
| Letter to Coastal Commission | 20 | 6.67% |
| Ballona Wetlands | 45 | 15.00% |
| Marine spatial planning group project | 15 | 5.00% |
| Presentation on California coast related agency | 15 | 5.00% |
| Class participation | 25 | 8.33% |
| TOTAL | 300 | |

Grading Scale (Example)

Course final grades will be determined using the following scale

- A 93-100
- A- 90-92
- B+ 87-89
- B 83-86
- B- 80-82
- C+ 77-79
- C 73-76
- C- 70-72
- D+ 67-69
- D 63-66
- D- 60-62
- F 59 and below

Additional Policies

Assignments will not be accepted late. Additionally:

- Come to class prepared
- Be respectful of me and other students in class
- Please leave cell phones outside the classroom or turned off
- If you have to miss class, make sure you arrange to get notes and announcements.

Course Schedule: A Weekly Breakdown

| | Topics/Daily Activities | Readings and Homework | Deliverable/ Due Dates |
|--------|--|---|---------------------------------|
| Aug 29 | Introduction and coastal dynamics and the CZMA Introduction to Coastal and Marine Spatial planning (discuss group project) | Griggs Chapter 4,17 Lester 2013 UNESCO 2009 (scan) | |
| Sep 5 | CZMA in California and the Coastal Commission Thinking about stakeholders Group project work | Lester 2013 Vogler et al. 2017 | |
| Sep 12 | Coastal Commission meeting LA | Read agenda for the day and familiarize yourself with at least one issue on agenda | Stakeholder analysis |
| Sep 19 | Guest lectures from Nick Sadropour and Linda Chilton (USC SeaGrant): Sea level rise | Griggs Chapter 5 | |
| Sep 26 | Aquatic invasive species and ballast water Challeneges of aquaculture | Griggs Chapter 16 Griggs Chapter 15 (297-304) | Letter to Coastal Commission |
| Oct 3 | San Francisco Bay Delta Region/CA Water Fix | CWF EIR ES (pg 1-6, 10-12, 21-27, skim 40-55) | |
| Oct 10 | Coastal Agency Presentations | | Coastal agency presentation |
| Oct 12 | SATURDAY : Ballona Wetlands trip (carpools to be organized) | Ballona Wetlands EIR (ES and your section only) | |
| Oct 17 | Fall Break: NO CLASS | | |
| Oct 24 | Guest lecture from Jessica Dutton (WIES): Interacting with the Coastal Commission Discuss Ballona wetlands restoration | | Ballona EIR analysis |
| Oct 25 | SATURDAY: Field trip | | |
| Oct 31 | Ocean acidification Guest lecture: winter storm epidemiology study | Griggs Chapter 13 Strong et al. 2014 | |
| Nov 7 | Biodiversity, Coastal zone ecosystem management, and, Conservation and MPAs | Cook et al., Ruttenberg and Granek, Nobre, Mora and Sale et al., Edgar et al. | Midterm due |
| Nov 14 | Guest lecture from Phyllis Griffman (USC SeaGrant): MPA development and stakeholder negotiation | | |
| Nov 21 | In class case study MSP project presentation | | Presentation on MSP project |
| Nov 28 | Thanksgiving: NO CLASS | | |
| Dec 6 | Presentations | | |
| Dec 6 | 11AM-1PM: Presentations | | |

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, "Behavior Violating University Standards" policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct.

Support Systems:

Student Counseling Services (SCS) – (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. engemannshc.usc.edu/counseling

National Suicide Prevention Lifeline – 1 (800) 273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. www.suicidepreventionlifeline.org

Relationship and Sexual Violence Prevention Services (RSVP) – (213) 740-4900 – 24/7 on call Free and confidential therapy services, workshops, and training for situations related to gender-based harm. engemannshc.usc.edu/rsvp

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: sarc.usc.edu

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. equity.usc.edu

Bias Assessment Response and Support

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. studentaffairs.usc.edu/bias-assessment-response-support

The Office of Disability Services and Programs

Provides certification for students with disabilities and helps arrange relevant accommodations. dsp.usc.edu

Student Support and Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. studentaffairs.usc.edu/ssa

Diversity at USC

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. diversity.usc.edu

USC Emergency Information

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible. emergency.usc.edu

USC Department of Public Safety – UPC: (213) 740-4321 – HSC: (323) 442-1000 – 24-hour emergency or to report a crime. Provides overall safety to USC community. dps.usc.edu