



ENST 540: Coastal California Science and Policy

Units: 4

Fall 2021

Thursdays 3:30-6:20

Location: TBD

Instructor: Jill Sohm

Office: CAS 116B

Office Hours: By appointment

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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.
2. 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 California 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.

Coastal site description for Story Map

Students will pick a site in coastal southern California they find interesting (e.g., the site of an engineering or restoration project, a place where coastal dynamics and human come together or clash, site of historical interest, site where equity or justice issues are present, etc.) and write a short blurb to add to the So. California Coastal Site Story Map. Students will also collect and turn in pictures that can be displayed along with the text. Be sure the images are either open source or ones that can be used under fair use rules, and provide photo credit information.

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 Ballona 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
Wk 1	Introduction to coastal dynamics and the CZMA California Marine habitats Introduction to Coastal and Marine Spatial planning (discuss group project)	Griggs Chapter 4,17 Lester 2013 UNESCO 2009 (scan)	
Wk 2	CZMA in California and the Coastal Commission Thinking about stakeholders Group project work	Lester 2013 Vogler et al. 2017	
Wk 3	Guest lecture from Melodie Grubbs (USC SeaGrant): Sea level rise Discuss stakeholder analysis	Griggs Chapter 5	Stakeholder analysis
Wk 4	Watch live stream of Coastal Commission meeting for at least 4 hours (hopefully before class on the 10th.	Read agenda for the day and familiarize yourself with at least one issue on agenda	
Wk 5	Aquatic invasive species and ballast water Challenges of aquaculture	Griggs Chapter 16 Griggs Chapter 15 (297-304)	Letter to Coastal Commission
Wk 6	Coastal Agency Presentations		Coastal agency presentation
Wk 7	Guest lecture from Jessica Dutton (WIES): Interacting with the Coastal Commission Ocean acidification		
Wk 8	FALL BREAK		
Wk 9	San Francisco Bay Delta Region/CA Water Fix	CWF EIR ES: pg 1-6, 10-12, 18-29, 35-39, 40-55	Midterm due
	SATURDAY: Ballona Wetlands trip (carpools to be organized)	Ballona Wetlands EIR (ES: 1- 18, 51-59, Ch2: 8-14, 15-16, maps of alternatives 1-3, SLR maps 30-43, Ch3: your assigned section)	
Wk 10	Guest lecture: Mitigation banking to conserve coastal habitat (Sharon Lockhart, Lockhart & Asssoc) Discuss Ballona wetlands restoration	Griggs Chapter 13 Strong et al. 2014	Ballona EIR analysis
Wk 11	Biodiversity, Coastal zone ecosystem management, Conservation and MPAs	Cook et al., Ruttenberg and Granek, Nobre, Mora and Sale et al., Edgar et al.	
Wk 12	Guest lecture from Phyllis Griffman (USC SeaGrant): MPA development and stakeholder negotiation	Prepare for role play	
Wk 13	MSP project presentation Guest lecture: developing the science for coastal water quality policy (Josh Steele, SCCWRP)		Presentation on MSP project
Wk 14	THANKSGIVING		
Wk 15	presentations		Final presentations
Nov 19	FINAL period - 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