

# ECON 281 SYLLABUS

## MAS MARINE BIODIVERSITY & CONSERVATION PROGRAM

### FALL 2021

**Professor:** Mark Jacobsen ([m3jacobsen@ucsd.edu](mailto:m3jacobsen@ucsd.edu))

Office hours: Fridays, 11:30 am – 12:30 pm, Eckart 229

**TA:** Min Lee ([mslee@ucsd.edu](mailto:mslee@ucsd.edu))

Office hours: Mondays, 6:00 pm - 7:00 pm, Zoom

**Lecture:** Tuesdays & Thursdays 3:30-4:50 pm, Solis Hall 107  
Recordings will be available after class at <http://podcast.ucsd.edu>

**Section:** Thursdays, 2:00-3:00 pm (except for week of Thanksgiving; see below)  
Sequoyah Hall 244

Week	Section Type	Date
Week 1	Discussion	9/30
Week 2	Discussion	10/7
Week 3	Review	10/14
Week 4	Discussion	10/21
Week 5	Discussion	10/28
Week 6	Review	11/4
Week 7	Discussion	11/11
Week 8	Discussion	11/18
Week 9	Discussion	<b>Tuesday, 11/23</b>
Week 10	Review	12/2

## ECONOMICS OF THE ENVIRONMENT

Economics 281 introduces environmental economics: we begin with the theory, including cost-benefit analysis, externalities, and concepts of economic efficiency that combine standard economic consumption with environmental benefits. We then turn to practical applications of the theory to policy, for example in the contexts of air and water pollution, energy use, and sustainability. The questions will be treated mathematically using formal economic models, while at the same time the field is heavily influenced by the natural sciences and the role of politics.

### **Required Textbook**

*Markets and the Environment* (Keohane and Olmstead, 2<sup>nd</sup> ed. 2016)

## FORMAT AND PROCEDURES

In addition to the Econ 131 course lectures, there will be two types of sections: (1) discussion and (2) review.

During discussion sections, we will apply the lecture concepts to marine biodiversity and conservation topics by discussing assigned papers. Discussion section attendance is required and part of your participation grade. You are expected to come prepared with questions and comments about the readings.

You will also be organized into pairs to lead the discussion for one of the required readings during the quarter. The discussion leaders should summarize the main findings of the paper, explain how/why the authors reached their findings, connect the paper to material discussed in lecture, and generate a few thoughtful questions for a lively discussion. More details will be provided in Presentation and Discussion Guidelines.

Reviews will be held before exams to cover exam-type questions. If you would like to see particular topics or problems reviewed, please email your TA beforehand.

The problem sets of ECON 131 are not graded or required for 281. But it is encouraged to work on the problem sets as preparation for the exams. Solutions to the problem sets will be posted on Canvas.

## EXAMS

Exams account for 45% of your course grade. There will be two midterm exams and a final exam at the following times:

Midterm 1: October 19<sup>th</sup>, at 3:30 pm, Eckart 236

Midterm 2: November 9<sup>th</sup>, at 3:30 pm, Eckart 236

Final Exam: December 6<sup>th</sup>, at 3:00 pm, location TBD

The exams will cover questions related to the material in Econ 131 lectures, problem sets, and assigned readings from discussion sections.

Exams are closed book, and collaboration with other students is not permitted. It is Economics Department policy to turn over any issues concerning academic integrity to the University.

## FINAL PAPER

Your final paper will account for 40% of your course grade. Your paper should demonstrate your understanding of the economic concepts discussed in the course through the lens of a marine biodiversity or conservation issue that interests you.

Your paper should be about 8 pages double-spaced (~2,000 words) and must include citations.

**You are required to e-mail a one-paragraph proposal for your paper to your TA by Friday, November 12<sup>th</sup>.**

**Your final paper is due Monday, December 6<sup>th</sup> by 11:59 pm via Canvas.**

One option for the paper is to identify a challenge in marine biodiversity and conservation, discuss previous scholarly literature on the topic, propose a research question, methodology, and data

set (existing or proposed by you) to help address the challenge, and then discuss the economic topics from this course that are relevant to the project. The goal is to focus on aspects of environmental economics that are important to your marine or coastal topic, which may also be your Capstone topic.

Another option is to choose any course topic that interests you and discuss that topic using marine and coastal examples from scholarly literature. The discussion section articles may serve as helpful starting points in your literature search.

Whichever option you choose, your paper must convey that you understand the basic concepts of resource management, optimization, and economic tradeoffs covered in this course.

## PARTICIPATION

Participation in discussion sections will account for 15% of your grade. The score will be based on both your performance as a discussion leader and as a discussion participant. You should demonstrate that you have read the articles and are thinking critically about the material by offering insights and comments during discussions. Your presentation should demonstrate a thorough grasp of your assigned reading and its connection to lecture material and marine conservation.

## GRADING WEIGHTS

Your final grade will be determined as follows:

Course Component	Date	Percent of Grade
Midterm 1	10/19 at class time	10%
Midterm 2	11/9 at class time	15%
Final Exam	12/6 at 3:00 pm	20%
Presentation & Participation	Discussion sections	15%
Paper	12/6 at 11:59 pm	40%

## SCHEDULE (please check Canvas for announcements and changes)

9/23 Costs and benefits (Ch. 1-2) 9/28 Costs and benefits (Ch. 3) 9/30 Externalities (Ch. 4-5) 10/5 Externalities, Policy (Ch. 8) 10/7 Policy (Ch. 8-9) 10/12 Policy, applications (Ch. 9) 10/14 Tradable permits (Ch. 10) <b>10/19 Midterm 1, at class time</b>  10/21 Climate change 10/26 Valuing ecosystems and human risks 10/28 Cars and transportation 11/2 Cars and transportation	11/4 Sustainability (Ch. 11) <b>11/9 Midterm 2, at class time</b>  <i>11/11 Veteran's Day</i> <b>11/12 Paper Proposal Due</b>  11/16 Resources and energy (Ch. 6-7) 11/18 Resources and energy 11/23 Fisheries (Ch. 7) 11/25 Thanksgiving holiday 11/30 Fisheries 12/2 Concluding examples  <b>12/6 Final Exam and Final Paper Deadline</b>
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