ECON 281 SYLLABUS

MAS MARINE BIODIVERSITY & CONSERVATION PROGRAM FALL 2022

Professor: Mark Jacobsen (<u>m3jacobsen@ucsd.edu</u>)

Office hours: Fridays 12 – 1 pm, Eckart 229 (except holidays 11/11, 11/25)

TA: Min Lee (<u>mslee@ucsd.edu</u>)

Office hours: Mondays 5 – 6 pm, Zoom

Lecture: Tuesdays & Thursdays 3:30-4:50 pm, CTL 0125

Section: Non-midterm weeks: Tuesdays 2:00 – 3:00 pm, Sequoyah Hall 244

Midterm weeks: Wednesdays 5:00 – 6:00 pm, SIO

Week	Section Type	Date
Week 1	Discussion	9/27
Week 2	Discussion	10/4
Week 3	Review	10/11
Week 4	Discussion	Wed, 10/19
Week 5	Discussion	10/25
Week 6	Review	11/1
Week 7	Discussion	Wed, 11/9
Week 8	Discussion	11/15
Week 9	Discussion	11/22*
Week 10	Review	11/29

^{*}Preliminary and subject to change.

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, 2nd 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 points of the paper, explain the evidence or arguments authors use to arrive at their points, and generate a few thoughtful questions for a lively discussion. When applicable, please also connect the paper to material discussed in lecture. Please email your presentation slides to the TA by noon on the day that you present your paper.

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 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 18th, at 3:30 pm, location TBD Midterm 2: November 8th, at 3:30 pm, location TBD Final Exam: December 5th 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 Monday**, **November 14**th.

Your final paper is due Wednesday, December 7th by 5 pm. Please email the paper to your TA.

One option for the paper is to propose a research question in marine biodiversity and conservation, explain the methodology and data (existing or proposed by you) that would be

used to investigate the question, and then discuss the economic topics from this course that are relevant to the project. You would also want to explain some previous literature on the topic as part of the background. The goal is to focus on aspects of environmental economics that are important to you, and to get you thinking about a potential Capstone project.

Another option is to choose an issue in marine biodiversity and conservation, and do a deep dive into the key concepts, debates, and challenges or opportunities associated with the issue. You would want to connect your discussion to topics from the course.

Finally, you could also choose a course topic that interests you and discuss that topic using several marine and coastal examples from literature.

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.

GRADING WEIGHTS

Your final grade will be determined as follows:

Course Component	Date	Percent of Grade
Midterm 1	10/18 at 3:30 pm	10%
Midterm 2	11/8 at 3:30 pm	15%
Final Exam	12/5 at 3:00 pm	20%
Presentation & Participation	Discussion sections	15%
Paper	12/7 by 5:00 pm	40%

SCHEDULE (please check Canvas for announcements and changes)

9/22 9/27	Costs and benefits (Ch. 1-2) Costs and benefits (Ch. 3)		Sustainability (Ch. 11) Midterm 2, at class time
9/29	Externalities (Ch. 4-5)		
10/4	Externalities, Policy (Ch. 8)	11/10	Resources and energy (Ch. 6-7)
10/6	Policy (Ch. 8-9)	11/14	Paper Proposal Due
10/11	Policy, applications (Ch. 9)		
10/13	Tradable permits (Ch. 10)	11/15	Resources and energy
10/18	Midterm 1, at class time	11/17	Fisheries (Ch. 7)
		11/22	No class this day
10/20	Climate change	11/24	Thanksgiving holiday
10/25	Valuing ecosystems and human risks	11/29	Fisheries
10/27	Cars and transportation	12/1	Concluding examples
11/1	Cars and transportation	12/5	Final Exam
	•	12/7	Final Paper Deadline