# Economics 131, Section B00 Fall 2022

Professor: Mark Jacobsen (m3jacobsen@ucsd.edu)

Office Hours: Wednesdays 11:30am-12:30pm, Zoom

Thursdays 10:00-11:00am, Economics Building Room 227

Class: Tuesdays and Thursdays 12:30pm-1:50pm, Peterson 103

Web Page: http://canvas.ucsd.edu

#### **Economics of the Environment**

Economics 131 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.

# **Textbook**

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

# **Problem Sets**

The four problem sets will each start with graded questions, followed by an ungraded (but equally important for practice) section. Problem sets and due dates will be announced in class and also posted on Canvas. Grades will depend on showing your work and demonstrating you understand the question:  $\sqrt{+}$  (perfect),  $\sqrt{-}$  (good), and  $\sqrt{-}$  (mistakes and/or work not shown). Many problem set questions are old exam questions so hopefully will help both in understanding the material and in preparing for the exams. When finished, please take a photo or scan your work and submit it electronically on gradescope.com.

#### TAs

Your TAs will lead four sessions during the quarter in order to help review material needed for problem sets and to answer any other questions from lecture. These are optional but I encourage you to attend: many students find them very helpful. There will also be an additional review session before the final and extended office hours or reviews before midterms. Please check Canvas as the class progresses for the latest announcements from your TAs on office hours and the optional session times.

# Exams

Midterm 1: October 18<sup>th</sup>, in class 12:30-1:30pm Midterm 2: November 8<sup>th</sup>, in class 12:30-1:45pm Final exam: December 9<sup>th</sup>, 11:30am-2:00pm

# Grades

# Grades

Grades will be based on your best three problem sets (5% together), midterm 1 (20%), midterm 2 (30%), and final exam (45%).

The exams are cumulative and cover the material presented in class, problem sets, and assigned reading.

Exams are closed book and notes and calculators are not permitted. It is the policy of the economics department to turn any issues of academic integrity over to the university.

If you miss one of the midterms and are excused ahead of time we can transfer the weight to the final exam and other midterm. If you were not excused from an exam ahead of time a grade of 0 will be assigned. The final exam is required to complete the class; please contact me or a TA if you need to request an incomplete for medical or other reasons.

# Schedule and outline (please check Canvas for announcements and changes)

	Costs and benefits (Ch. 1-2)	11/3	Sustainability (Ch. 11)
	Costs and benefits (Ch. 3) Externalities (Ch. 4-5)	11/8	Midterm 2, in class
	Externalities, Policy (Ch. 8)	11/10	Resources and energy (Ch. 6-7)
	Policy (Ch. 8-9)	11/15	Resources and energy
10/11	Policy, applications (Ch. 9)	11/17	Fisheries (Ch. 7)
10/13	Tradable permits (Ch. 10)	11/22	No class this day
10/18	Midterm 1, in class	11/24	Thanksgiving holiday
10/20	Climate change	11/29	Fisheries
10/25	Valuing ecosystems and human risks	12/1	Concluding examples
10/27	Cars and transportation		
11/1	Cars and transportation	12/9	Final exam, 11:30am-2:00pm