
ECON 281 SYLLABUS – FALL 2015

Professor: Mark Jacobsen: office hours for 281 on Wednesdays 4-5pm (Economics 227),
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TA: Isla Globus-Harris: office hours on Mondays, 5-6pm, Economics 124,
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Lecture: Mondays and Wednesdays 6:30-7:50pm

Discussion: Wednesdays 5-6pm, Economics Building, room 300

Note: Week 4 (10/19) and week 9 (11/23) section will be on MONDAY, 5-6pm in Economics 300.

SPECIFIC LEARNING OUTCOMES

By the end of this course you will be able to:

- Explain the process of implementing a cost-benefit analysis and describe the potential uses and shortcomings of cost benefit analyses
- Understand how behavioral responses affect outcomes of various policies
- Critically assess the quality of economic arguments and results related to various environmental issues
- Analyze in depth the economic issues relevant to an environmental topic of your choosing
- Solve applied problems relating to the theory of environmental economics

FORMAT AND PROCEDURES

In addition to attending lectures, we will hold weekly discussion sections in which we will apply lecture concepts to marine biodiversity and global change.

During a typical week we will spend our time discussing three assigned readings. These discussions will be led by students as assigned at the start of the quarter. However, every week all students are expected to arrive having read and being prepared to discuss the required readings—marked with ** on the list at the end of this syllabus. The assigned discussion leader should summarize the main ideas of the paper, raise a handful of critical points about the paper, connect the paper to the material discussed in class, and generate two or three questions for lively discussion. Student participation in these discussions will be graded along with presentation of assigned readings.

We will also dedicate three entire sessions to reviewing exam-type questions and homework problems. To the extent that there are particular topics or problems you would like to cover during these sessions, please email your requests by Monday of the same week.

COURSE REQUIREMENTS

Exams

There will be two midterm exams (each 75 minutes, see schedule below). There will also be a short final exam (date and time to be announced), with questions related to the readings as well as lectures.

Readings

Participation in the discussion sections focused on readings will count for 15% of your grade. Each student will present an assigned reading to the rest of the class during a discussion section. During the presentation, you should summarize the key questions, methodologies, and conclusions of the reading, provide a thoughtful critique of the material, and pose questions designed to generate lively discussion. The presentation plus discussion should run for a total of approximately 15 minutes.

Your participation score will be based on both your performance as a discussion leader and as a discussion participant. The highest grades will go to students who show through their comments that they are keeping up with the readings and thinking critically about the material and whose presentations of their assigned readings show a good grasp of the material and a thorough level of preparation.

Paper

You are assigned an 8-page (double-spaced, not including graphics or references) paper, which will count for 40% of the grade. You are required to submit a one-paragraph proposal for the paper, due November 18. The final draft of the paper is due December 4th by email to both Isla and Mark and a hard copy to Isla. A portion of the paper can be preliminary work and background information on your Capstone project, but at least half of the paper must develop a well-reasoned economic argument about the issue you are discussing.

One option for the paper is to identify a problem, discuss previous literature on the issue, propose a research question, methodology, and/or data (existing or yet-to-be gathered by you) to address the problem, and discuss how topics from this course are relevant. In other words, your paper may be a modified Capstone proposal that focuses on aspects of economics that are important for your topic. Alternatively, you may choose any course topic that interests you, and explicate that topic using further examples from the literature. You may use the papers listed below as a jumping-off point. Either way, your paper must convey that you understand the basic concepts of resource management, optimization, and economic tradeoffs that are covered in this course.

GRADING PROCEDURES

Course Component	Percent of Grade
Midterm I – Wednesday, October 21, 5-6:15pm, Econ 300	10%
Midterm II – Monday, November 16, 6:30-7:45pm, Econ 300	15%
Final exam – Monday, December 7, time TBD	20%
Participation in section (incl. presentation)	15%
Paper	40%

Note: For students who wish to focus more on the paper there will be an option to increase the grading weight from 40 to 55% (reducing the importance of the exams). However, a greater weight on the paper means a stronger paper will be required to receive the same grade (on the paper portion). We'll remind you of this after midterms are complete.

TENTATIVE READING SCHEDULE (ORGANIZED BY TOPIC)

Week 1: Introduction and Economics Review 9/30

Week 2: Cost-Benefit Analysis and Environmental Risk 10/7

****Hunt, Colin.** 2013. "Benefits and opportunity costs of Australia's Coral Sea marine protected area: A precautionary tale." *Marine Policy*, 39: 352-360.

****Pascoe, Sean and Andy Revill.** 2004. "Costs and Benefits of Bycatch Reduction Devices in European Brown Shrimp Trawl Fisheries" *Environmental and Resource Economics*, 27(1): 43-64.

****Carson, Richard T. and Brigitte Roth Tran.** 2009. "Discounting Behavior and Environmental Decisions" *Journal of Neuroscience, Psychology, and Economics*, 2(2): 112-130.

Arrow, K.J., Maureen L. Cropper, George C. Eads, Robert W. Hahn, Lester B. Lave, Roger G. Noll, Paul R. Portney, Milton Russell, Richard Schmalensee, V. Kerry Smith, and Robert N. Stavins. 1996. "Is there a role for benefit-cost analysis in environmental, health, and safety regulation?" *Science*. 272: 221-222.

Norton-Griffiths, Michael and Clive Southey. 1995. "The Opportunity Costs of Biodiversity Conservation in Kenya" *Ecological Economics*, 12(2): 125-139.

Chapters 5 and 9: Sinden, J. A., and D.J. Thampapilai. 1995. *Introduction to Benefit-Cost Analysis*. Melbourne : Longman.

Week 3: Externalities and Market Solutions 10/14

****Costello, Christopher, Steven D. Gaines, and John Lynham.** 2008. "Can Catch Shares Prevent Fisheries Collapse?" *Science*, 321(5896): 1678-1681.

****Hilborn, Ray, J. M. Orensanz, and Ana M. Parma.** 2005. "Institutions, Incentives and the Future of Fisheries" *Philosophical Transactions of the Royal Society B: Biological Sciences*, 360(1453): 47-57.

****Oosterhuis, Frans, Elissaios Papyrakis, and Benjamin Boteler.** 2014. "Economic instruments and marine litter control." *Ocean & Coastal Management*. 102(2014): 47-54.

Heal, Geoffrey and Wolfram Schlenker. 2008. "Sustainable Fisheries" *Nature*, 455, 1044-1045.

Macinko, Seth and William Whitmore, 2009, "A New England Dilemma: Thinking Sectors Through" Final Report to Massachusetts Division of Marine Fisheries, pages 11-19.

Grafton, R. Q., Dale Squires, and Kevin J. Fox. 2000. "Private Property and Economic Efficiency: A Study of a Common-Pool Resource" *The Journal of Law and Economics*, 43(2): 679-714.

Knapp, Gunnar. 1997. "Initial Effects of the Alaska Halibut IFQ Program: Survey Comments of Alaska Fishermen" *Marine Resource Economics*, 12(3): 239-248.

Wilén, James E., Jose P. Cancino, and Hirotugu Uchida. 2006. "TURFs and ITQs: Coordinated Vs Decentralized Decision Making."

Week 4: Problem Solving MONDAY 10/19

Week 5: International Regulations 10/28

****Schneider, Viktoria and David Pearce.** 2004. "What Saved the Whales? an Economic Analysis of 20th Century Whaling" *Biodiversity and Conservation*, 13(3): 543-562.

****Bailey, Megan, Gakushi Ishimura, Richard Paisley, and U. Rashid Sumaila.** 2013. "Moving beyond catch in allocation approaches for internationally shared fish stocks" *Marine Policy*, 40: 124-136.

****Aswani, Shankar, Georgina G. Gurney, Sara Mulville, Jaime Matera, and Michael Gurven.** 2013. "Insights from experimental economics on local cooperation in a small-scale fishery management system." *Global Environmental Change* 23(6): 1402-1409.

Barrett, Scott. 1994. "Self-Enforcing International Environmental Agreements" *Oxford Economic Papers*, 46(0): 878-94.

Hardin, Garrett. "The Tragedy of the Commons" 1968. *Science*, 162(3859): 1243-1248.

Kruger, Joseph, Wallace Oates, and William Pizer. 2007. "Decentralization in the EU Emissions Trading Scheme and Lessons for Global Policy" *Review of Environmental Economics and Policy*, 1(1): 112-133.

Week 6: Climate Change, Renewable Energy 11/4

****Hill, Jason, Erik Nelson, David Tilman, Stephen Polasky, and Douglas Tiffany.** 2006. "Environmental, Economic, and Energetic Costs and Benefits of Biodiesel and Ethanol Biofuels" *Proceedings of the National Academy of Sciences*, 103(30): 11206-11210. <http://www.pnas.org/content/103/30/11206/suppl/DC1>

****Heal, Geoffrey.** 2010. "Reflections-The Economics of Renewable Energy in the United States" *Review of Environmental Economics and Policy*, 4(1): 139-154.

****Costa, Dora L., and Matthew E. Kahn.** 2013. "Energy conservation "nudges" and environmentalist ideology: Evidence from a randomized residential electricity field experiment." *Journal of the European Economic Association* 11.3: 680-702.

Bento, Antonio M., Lawrence H. Goulder, Mark R. Jacobsen, and Roger H. Von Haefen. 2009. "Distributional and efficiency impacts of increased US gasoline taxes." *The American Economic Review*. 667-699.

Cooley, S. R. and S. C. Doney . 2009. "Anticipating Ocean Acidification's Economic Consequences for Commercial Fisheries" *Environmental Research Letters*, 4: 4007.

Herter, Karen. 2007. "Residential Implementation of Critical-Peak Pricing of Electricity" *Energy Policy*, 35(4): 2121-2130.

Herter, Karen, Patrick McAuliffe, and Arthur Rosenfeld. 2007. "An Exploratory Analysis of California Residential Customer Response to Critical Peak Pricing of Electricity" *Energy*, 32(1): 25-34.

Stern, Nicholas. 2008. "The Economics of Climate Change" *American Economic Review*, 98(2): 1-37.

Tol, Richard S. J. Spring 2009. "The Economic Effects of Climate Change" *The Journal of Economic Perspectives*, 23: 29-51(23).

Week 7: Problem Solving 11/11

Week 8: Valuing Ecosystem Services, Marine Ecosystems 11/18

****Carson, Richard T.** 2012. "Contingent valuation: a practical alternative when prices aren't available." *The Journal of Economic Perspectives*, 26(4): 27-42.

****Cesar, H. S. J. and P. J. H. van Beukering.** 2004. "Economic Valuation of the Coral Reefs of Hawai'i" *Pacific Science*, 58(2): 231-242.

****Sanchirico, James N., Kathryn A. Cochran, and Peter M. Emerson.** 2002. "Marine Protected Areas: Economic and Social Implications" , 02-26.

Carson, R. T. 2000. "Contingent Valuation: A User's Guide" *Environmental Science & Technology*, 34(8): 1413-1418.

Aburto-Oropeza, Octavio, Exequiel Ezcurra, Gustavo Danemann, Víctor Valdez, Jason Murray, and Enric Sala. 2008. "Mangroves in the Gulf of California Increase Fishery Yields" *Proceedings of the National Academy of Sciences*, 105(30): 10456-10459.

Cesar, H. S. J. 2000. "Coral Reefs: Their Functions, Threats and Economic Value." In *Collected Essays on the Economics of Coral Reefs*, ed. H. S. J. Cesar, 14-39. Sweden: Kalmar University.

Pearce, David W. and R. K. Turner. 1990. "Measuring Environmental Damage I: Total Economic Value." In *Economics of Natural Resources and the Environment Anonymous*, 120-140: JHU Press.

Week 9: Marine Ecosystems cont. MONDAY 11/23

****Christie, Mike, Nick Hanley, John Warren, Kevin Murphy, Robert Wright, and Tony Hyde.** 2006. "Valuing the Diversity of Biodiversity" *Ecological Economics*, 58(2): 304-317.

****Teisl, Mario F., Brian Roe, and Robert L. Hicks.** 2002. "Can Eco-Labels Tune a Market? Evidence from Dolphin-Safe Labeling" *Journal of Environmental Economics and Management*, 43(3): 339-359.

****Jacquet, Jennifer L. and Daniel Pauly.** 2007. "The Rise of Seafood Awareness Campaigns in an Era of Collapsing Fisheries" *Marine Policy*, 31(3): 308-313.

Dutton, Peter H. and Dale Squires. 2008. "Reconciling Biodiversity with Fishing: A Holistic Strategy for Pacific Sea Turtle Recovery" *Ocean Development & International Law*, 39(2).

Hedley, C. 2001. "The 1998 Agreement on the International Dolphin Conservation Program: Recent Developments in the Tuna-Dolphin Controversy in the Eastern Pacific Ocean" *Ocean Development and International Law*, 32: 71-92.

Holland, Dan and Kurt E. Schnier. 2006. "Individual Habitat Quotas for Fisheries" *Journal of Environmental Economics and Management*, 51(1): 72-92.

Palumbi, Stephen R. 2003. *Marine Reserves: A Tool for Ecosystem Management and Conservation*: Pew Ocean Commission.

Sanchirico, James N. and M. D. Smith. "Trophic Portfolios in Marine Fisheries: A Step Towards Ecosystem Management." Paper presented at *American Agricultural Economics Association Annual Meetings*, Montreal, Canada.

Week 10: Problem Solving 12/2