Economics 144  
Economics of Conservation

Course Hours: MWF 4:00 – 4:50 PM  
Classroom: Solis, Room 1-07

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Class Web Page:

Course Dates:   Monday, March 29 - Friday, June 4 
Final:                  Monday – Friday, June 7-11 
Holidays:        Cesar Chavez Holiday, Friday, March 26 
                 Memorial Day, May 31 
                 President’s Holliday Monday, February 16
Purpose: Biodiversity and ecosystems and their services face growing threats. Their loss affects human welfare. Humans depend on natural systems to produce a wide variety of ecosystem goods and services, ranging from direct use of certain species for food or medicines to ecosystem functions that provide water purification, nutrient retention, or climate regulation. Sustaining biodiversity in the face of increasing human populations and increased human economic activity promises to be a major challenge. Since most of the threats to biodiversity and ecosystems originate from human actions, understanding human behavior and the social, political and economic systems in which people operate is an essential component for those interested in conserving biodiversity. Biology alone is insufficient to address the growing threats to biodiversity and ecosystems. This course examines conservation policy from an economic perspective, applying economics principles to develop policy. A cost-benefit analysis framework will be employed, and the aim will be to develop an applied approach that can be implemented.

Students interested in related political science issues should consider Political Science 125: The Politics of Conservation in Developing Countries.

Textbooks

Required (Purchase):


Additional Key Overview Readings


Other readings will be available from the class website in pdf or Word files. Not all sections yet have assigned readings; additional readings will be assigned during the quarter.

General Source of Information
Evaluation: Exams, Grades, and Re-Grades

- One midterm and final exam, each of which is 50% of the final course grade.
- Bluebooks are required.
- Re-grade requests are to be made in writing and must explain the reason why a re-grade is requested, i.e. a logical discussion and thorough explanation of why your answer deserves more credit. Exam answers must be written in pen to be eligible for a re-grade.
- All re-grade requests will be routed through the TA responsible for correcting the question.
- The instructor will NOT over-rule a TA’s grading of the question. The instructor will only step in when there is a perceived procedural issue.

1. Introduction

- Powerpoint Lecture: Introduction

2. Review of Economic Concepts

2.1. Externalities

- Powerpoint Lecture: Environmental Externalities and Market Failure

2.2. Total Economic Value and Markets for Biodiversity

- Powerpoint Lecture: Biodiversity Markets
• Barbier, Economics of the wilds, Chapter 2 in Swanson and Barbier, eds.
• Polasky, Costello, and Solow Section 3.

2.3. Opportunity Costs of Conservation: Impacts on Local Inhabitants

• Powerpoint Lecture: Opportunity Costs of Conservation
• Borneo rain forests:
  http://www.timesonline.co.uk/tol/news/world/asia/article5908207.ece

2.4. Costs, Benefits, and Discounting

• Powerpoint Lecture: Costs, Benefits, and Discounting

2.5. Property Rights, Public Goods, Common Resources, Coase Theorm

• Powerpoint Lecture: Property Rights
• Powerpoint Lecture: Impure Public Goods
2.6. Collective Action, Social Norms, and Economic Incentives

- Powerpoint Lecture: Collective Action Social Norms

3. Biodiversity

- Polasky, Costello, and Solow, Sections 2 and 3

3.1. Biodiversity and Ecosystem Services

- Powerpoint Lecture: Ecosystem Services
- Polasky, Costello, and Solow, Section 3.3.
- Barbier, Economics for the wilds, Chapter 2 in Swanson and Barbier
- Aylward, Appropriating the value of wildlife and wildlands, Chapter 3 in Swanson and Barbier

4. Community Conservation

- Powerpoint Lecture: Community Conservation

5. Economic Approaches for Conservation: Markets, Incentive and Market-Based Policy

- Powerpoint: Direct and Indirect Conservation
• Polasky, Costello, and Solow, Section 5

5.1. Command-and-Control Conservation: Quota Schemes

• Bulte et al. Section 3.1.

5.2. Payments for Environmental Services

• Powerpoint: Conservation Payments
• Powerpoint: Selling Environmental Services to help Finance Reforestation

5.2.1. Case Study

• Guest Speaker

5.4. Eco-Tourism

• Powerpoint: Ecotourism

5.5. International Conventions, Markets, and Trade

• Swanson, The role of wildlife utilization and other policies in biodiversity conservation, Chapter 4 in Swanson and Barbier, editors. 1992. *Economics for the Wilds*.

6.1. Game Ranching

• Powerpoint Lecture: Game Ranching Illegal Trade


• Rodney Jackson. 2004. Pakistan’s Community-based Trophy Hunting Programs and Their Relationship to Snow Leopard Conservation.

### 6.2. The Tiger

- Powerpoint Lecture: Tigers

### 6.3. The Vaquita

- Guest Speaker

### 6.4. Migratory Species

- Guest speaker on migratory seabirds
6.5. Conservation in San Diego County

- Guest speaker