

ECON-502: Topics in Sustainability

Julio Videras

KJ 209

jvideras@hamilton.edu

Office hours: Monday 12:30-4:30, or by appointment

Objectives and Course Description

Sustainability is a broad multidisciplinary topic with economic, environmental, and social dimensions. This course explores the economics of sustainability. The topics include the relationship between standards of living and conservation of the natural environment, the role of formal and informal institutions, research on the environmental Kuznets curve, and the determinants of sustainable consumption choices. The course relies on empirical methods. This course is intended for those fulfilling the senior project requirement. (Prerequisites, 265,275.)

The course goals are:

- To present the main ideas and concepts informing the debate about sustainability;
- To read critically research on the economics of sustainability;
- To replicate and extend empirical analyses informed by the literature on sustainability; and
- To use economic theory and statistical methods to develop and test hypotheses.

Course Readings

Required for the course: Matthew E. Kahn, 2006, “*Green Cities: Urban Growth and the Environment.*” Brookings Institution Press, Washington, D.C.

Readings will also include academic papers detailed below.

Course Requirements and Grading

1. Final paper: 25%
2. Labs: 20%
3. Presentations: 15%
4. Participation: 15%
5. Examinations: 15%
6. Article responses: 10%

1. Final Paper

The assignment is discussed in more detail in a separate handout.

2. Labs

There are three laboratory assignments that require performing statistical analyses using STATA. The assignments are discussed in more detail in a separate handout.

3. Presentations

Every student will make a 15-20 minutes presentation based on one of the readings for the course. The presentation should last no more than 20 minutes and be accompanied of PowerPoint slides. You must follow these steps:

1. At least four days before your presentation you need to stop by my office to discuss the reading you are going to present. I expect you have read the article and have questions and an outline of the presentation.
2. Make an appointment in the Oral Communications Center to visit the Center at least 24 hours before the presentation.

In addition, you will make three presentations on your research for your final paper.

Helpful information from the Oral Communication Center:

<https://my.hamilton.edu/oralcommunication/guides.html>

4. Participation

To determine the participation grade I will consider attendance, preparation for each class and reading of assigned texts, your engagement in class discussions, the quality of your comments, and attendance to the Sustainability Program talks.

5. Examinations

Exam #1 covers topics 1-3 and Exam #2 covers topics 4-6. Material for the tests includes lectures and the readings (book and questions from reading responses).

6. Article responses

There are ten 1-page responses to the papers presented and discussed in class. The assignments are discussed in a separate handout.

Speakers Sustainability Program

You are required to attend the following talks:

- Sept 21: Matt Kahn
- Oct 4: Steven Hayward
- Nov 10: Sean Safford

Late Work Policy

All assignments are due in class on the specified date. Each student is allowed one two-day grace period that allows you to turn in one assignment 48 hours late. Once you have exercised this option, you will not get credits for late assignments. Students cannot exercise this option for quizzes and the final paper.

Accommodations

I request that any student with a documented disability needing academic adjustments or accommodations speak with me during the first two weeks of class. Students have the responsibility for requesting accommodations and services. All discussions will remain confidential. Students with disabilities should also contact Allen Harrison, Associate Dean of Students for Diversity and Accessibility in the Office of the Dean of Students (Elihu Root House; ext. 4021) who coordinates services for students with disabilities. For more information on disability services: https://my.hamilton.edu/college/dean_of_students/accessibility/index.html

Behavior in the classroom

Being late for class and leaving class during lectures are disruptive behaviors. Plan to be on time and refrain from leaving the classroom unless it is absolutely necessary. Please, switch off your cell phones and any other electronic devices. I will ask students that use the computers during lectures for reasons unrelated to the course to excuse themselves from the classroom. Class attendance is important.

Topics

The course is divided into seven topics. Sustainability is a broad and multidisciplinary issue. These topics are selective. Class sessions combine lectures, presentations of readings and original research, and discussions.

Topic 1: Concepts of Sustainability, dimensions, and measurement

Readings

- Anand, Sudhir, and Amartya Sen (2000): "Human development and economic sustainability," *World Development*, 28(12): 2029-2049.
- Howarth (2007): "Towards an operational sustainability criterion," *Ecological Economics*, 63:656-663.
- Green Cities: Chapter 2

Topic 2: Income and the Environment: The Environmental Kuznets Curve

Readings

- Dasgupta et al. (2004): "Air pollution during growth: Accounting for governance and vulnerability." World Bank Policy Research Working Paper 3383. <http://ideas.repec.org/p/wbk/wbrwps/3383.html>
- Caviglia-Harris, Chambers, and Kahn (2009): "Taking the "U" out of Kuznets: A comprehensive analysis of the EKC and environmental degradation," *Ecological Economics* 68: 1149-1159.
- Green Cities: Chapter 3

Topic 3: Population Growth and the Environment

- J.A. Brander (2007): "Sustainability: Malthus revisited?" *Canadian Journal of Economics*, 40(1): 1-38.
- A. Shi (2003): "The impact of population pressure on global carbon dioxide emissions, 1975-1996: Evidence from pooled cross-country data," *Ecological Economics* 44: 29-42.
- Green Cities: Chapter 6

Topic 4: Urban Growth and the Environment: Sprawl

- Kahn (2000): "The environmental impact of suburbanization," *Journal of Policy Analysis and Management*, 19(4): 569-586.
- Green Cities: Chapter 7

Topic 5: Sustainable Consumption Choices at the Household Level

- Kotchen and Moore (2007): "Private provision of environmental public goods: Household participation in green-electricity programs," *Journal of Environmental Economics and Management*, 53: 1-16
- Green Cities: Chapter 4

Topic 6: The Demand for Sustainable Policies

- Nelson, Uwasu, and Polasky (2007): "Voting on open space: What explains the appearance and support of municipal-level open space conservation referenda in the United States?" *Ecological Economics* 62: 580-593
- Green Cities: Chapter 5

Topic 7: Social Capital and the Environment, managing the commons

- Elizabeth G. Katz (2000): "Social capital and natural capital: A comparative analysis of land tenure and natural resource management in Guatemala," *Land Economics*, 76(1): 144-132

Course Outline/Tentative Schedule

08/26: Introduction	10/19: Research Presentations
08/31: Topic 1: Lecture	10/21: Research Presentations
09/02: Topic 1: Lecture	10/26: Topic 5: Lecture
09/07: Topic 1: Presentation #1	10/28: Topic 5: Presentation #8
09/09: Topic 1: Presentation #2	11/02: Topic 6: Lecture
09/14: Topic 2: Lecture	11/04: Topic 6: Presentation #9
09/16: Topic 2: Lecture	11/09: Exam #2
09/21: Topic 2: Presentation #3	11/11: Topic 7: Lecture
09/23: Topic 2: Presentation #4	11/16: Topic 7: Lecture
09/28: Topic 3: Presentation #5	11/18: Topic 7: Presentation #10
09/30: Topic 3: Presentation #6	11/30: Research Presentations
10/05: Exam #1	12/02: Research Presentations
10/07: Topic 4: Lecture	12/07: Research Presentations
10/12: Topic 4: Presentation #7	12/09: Lecture