

SYLLABUS

Course Title: Introduction to Environmental Economics (IKT3620)

Academic Year / Semester: 2018 Fall

Instructor: Dr. Tunç Durmaz

Office: G2-101 **Office hours:** Thursday 14:00 – 15:00 or by appointment

Lecture Time / Room: Thursday @ 10am / Z08

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URL: https://www.tuncdurmaz.com/int_env_econ_fall_2018.html

Objective

Economics is essential to help us understand and solve the many environmental problems that we face throughout the world. It is true that people often associate economics with financial and commercial issues, but economics goes much more beyond that. We can use economic to protect the environment, rather than harm it. Thus, in this class, we set out the principal insights that economics has to offer. We then take a range of environmental problems and show how these insights can help address those problems. We believe that an environmental policy that disregards (the economic behavior of) consumers and firms will not be successful in achieving its environmental goal. Economic actors can be influenced to consider their impacts on the environment when they are exposed to the right prices on environmental goods and services. Note that economic and environmental systems are interlinked. If we do not consider economic insights, we are doomed to fail in producing cost-effective outcomes for either system.

Topics

Part One

- Introduction: Economics for the Environment
- Markets and the Environment
- Valuing the Environment: Concepts
- Valuing the Environment: Methods
- Behaviour and Environmental Risk
- Economic Growth, the Environment and Sustainable Development
- Strategic Interaction and the Environment
- Trade and the Environment

Part Two

- The Economics of Climate Change
- Forests
- The Economics of Water Pollution
- Biodiversity
- Energy and Resources
- The Economics of Carbon Capture and Sequestration (CCS)

Course Material

- Hanley, Nick, Jason Shogren, and Ben White. Introduction to environmental economics. Oxford University Press, 2013.

Course overview:

The course is divided into two parts. In the first part, we will explore some important concepts in economics and illustrate why they matter for environmental issues. In the second lecture (L2), we will explore the role of market in determining the level of environmental quality, what 'market failure' means, and how markets can be used to work for the environment. The practice of placing monetary values on the environment has become controversial but is an important component of the economist's toolbox. In L3 and L4 we will deal with this issue as well as with the methodology of cost-benefit analysis. High levels of risk and uncertainty characterize many environmental decision-making problems. Therefore, in L5 I will introduce economic approaches to these issues. Sustainable development and green growth are fashionable buzzwords in environmental and development debates at present. In L6, we will investigate what economics has to contribute to this debate and to understanding the relationship between growth and indicators of environmental quality. In L7, I will introduce game theory techniques as a useful tool to help understand situations in which people behave strategically, be they countries arguing over climate change conventions or fishermen competing over harvests. In L8, I will lay out some basic economics of the debate over free trade and ask whether trade can always increase people's well-being. A follow-up question is whether trade restrictions can be justified on environmental grounds.

In the second part of the course, we will attempt to see how economics can help us understand the causes of a series of major environmental problems and provide environmental protection at lower cost. The issues that we will study include climate change, forests and forest loss, water pollution, biodiversity loss, energy policy, and carbon capture and sequestration.

Grading

Attendance is not obligatory. The grading consists of one mid-term (30%), 'unannounced' quizzes (30%), and a final exam (40%). There will be no make-ups for quizzes under any circumstances.

Important

Please, refrain from bringing up your personal misfortunes and problems regarding your planned graduation under any circumstances. For example, that you started working or that you need to pass this course in order to graduate or any family problem or misfortune must not be addressed at me. Therefore, do not expect any response to your emails in this regard. Moreover, in case you need to use your phone, use it outside the class, not inside!.. You are welcome to come back to the class when you are done.