Course Content
In this course we study the use of natural resources and the management of environmental quality from the perspective of economics. The course covers conceptual and methodological topics, including sustainability, as well as applications to contemporary environmental issues such as depletion of fish stocks and climate change. The first part of the course is an introduction to the principles of environmental and resource economics. The second part deals with the current issues we have about the use of various environmental resources. In the final part we discuss policies to the way we use environmental resources.

Learning Objectives
• Gain familiarity with the economic approach to issues of allocation and management of natural resources and environmental goods;
• In particular, learn about (1) the concepts and methods of cost-benefit analysis and (2) policies/institutions for various environmental-conservation and pollution-control objectives.
• Develop an awareness of current economic issues concerning environmental and resource policy in the US and around the world.

Prerequisites:
Econ 120, 130, 131 or the instructor’s consent.

Course Requirements:
Problem sets 20%
Midterm 30%
Presentations/Participation 20%
Final (May 15 Thursday, 9:45-11:45) 30%

There are NO MAKEUP EXAMS except under extraordinary circumstances. Problem sets are intended to prepare you for the examinations. Although they constitute only 20% of your final grade collectively, it is highly recommended you take them seriously! Everyone will participate in a group project (details to be given later). If we have time, the groups will present their work during the last 2 weeks of the semester.
Required Textbook:
Additional readings, as well as lecture slides, will be made available (details to be announced).

Course Outline:

We will closely follow Tietenberg textbook. However, the book contains more material than can be covered adequately in a semester. Hence, we will need to skip some of the topics listed below.

I. Introduction and foundation of environmental economics

Chapter 1 Visions of the Future
Chapter 2 Valuing the Environment: Concepts
Chapter 3 Valuing the Environment: Methods
Chapter 4 Property Rights, Externalities and Environmental Problems
Chapter 5 Sustainable Development: Defining the Concept

II. Natural resource economics

Chapter 6 The Population Problem
Chapter 7 The Allocation of Depletable and Renewable Resources: An Overview
Chapter 8 Depletable, Nonrecyclable Energy Resources: Oil, Gas, Coal and Uranium
Chapter 9 Recyclable Resources: Minerals, Paper, Glass, etc.
Chapter 10 Replenishable but Depletable Resources: Water
Chapter 11 Reproducible Private-Property Resources: Agriculture
Chapter 12 Renewable Resources: Forests
Chapter 13 Renewable Common-Pool Resources: Fisheries and Other Species
Chapter 14 Generalized Resource Scarcity

III. Economics of pollution control

Chapter 15 Economics of Pollution Control: An Overview
Chapter 16 Stationary-Source Local Air Pollution
Chapter 17 Regional and Global Air Pollutants: Acid Rain and Atmospheric Modification
Chapter 18 Mobile-Source Air Pollution
Chapter 19 Water Pollution
Chapter 20 Toxic Substances and Hazardous Wastes

IV. Sustainable development revisited

Chapter 22 Development, Poverty and the Environment
Chapter 23 The Quest for Sustainable Development