



strong points to demonstrate that the economic growth is one of the major causes of the environmental damages that have irrevocably changed - and that are still modifying - our ecosystems. As the main goal of economics is to increase the wealth of individuals, and the environment where we live is part of it, it's important to use the economic reasoning to analyze the environment problems and solve them through designing adequate environmental policies.

**COURSE OBJECTIVES**

The main objective of this course is to provide students with the basic economic methods and tools to analyze environmental issues.

In particular microeconomic and macroeconomic analysis will be used to study:

- the appropriate level of environmental quality
- the sources of environmental problems
- the economic impact of environmental regulation
- the problem of social cost
- policy instrument choice
- estimating benefits of environmental improvements.

**GENERAL INFORMATION:**

1. For deeper understanding of the material, teaching will be complemented by the discussion of cases and problems.
2. The aims of the course can only be achieved through a joint effort. Therefore a prepared and constructive participation in class is expected. All reading assignments should be completed before class to enhance understanding of topics.
3. All written assignments are due in class on the scheduled dates. No make-up assignments will be given except for true emergency situations. In these cases please contact me IN ADVANCE.
5. Class attendance is essential for understanding the most important concepts of this course and solving techniques.

**GRADING:**

The value of each component of your grade is as follows

Participation in class	10 points
Homework assignments	30 points
Mid Term	80 points
Final Exam	80 points
	200 points

Unexcused absence, latently submission of homework assignments, poor Class participation.

- 3 points

Extra credit projects

20 points

#### GRADES

92	A
90 - 92	A-
87 - 89	B+
83 - 86	B
80 - 82	B-
77 - 79	C+
72 - 76	C
70 - 72	C-
60 - 69	D
Below 60	F

#### **PARTICIPATION:**

Classes are conducted on the premise that regular attendance is expected and it is very important to keep current on the assignments and to be prepared to discuss the material. Your participation in class will contribute to your final evaluation. *Each unexcused absence is penalized with the deduction of 3 points.*

#### **TESTS AND EXAMS:**

Tests will be based on materials presented in the classroom (i.e. text book, discussions, etc.). The test format will be multiple choice question, short essay questions and problem type question. The midterm exam will be given early in the term to allow students to become familiar with the instructor's testing procedures. The final exam will consist of some questions on a few topics from the earlier test given during the term, plus questions on any untested chapters, lectures, etc. **No make-up exams will be given except for true emergency situations. In these cases please contact me IN ADVANCE.**

#### **PENALTY FOR LATE WORK:**

Late work on projects and other assignments will be penalized with a reduction of three points.

#### **ACADEMIC HONESTY (Ethical Student Behavior):**

Copying, cheating, plagiarizing, theft of class materials, etc. is punishable by: (1) a failing grade on the item in question, (2) a failing grade in the course, and/or (3) dismissal from the University in accordance with the established policies on academic dishonesty.

## **SYLLABUS:**

A tentative schedule is presented below. Depending on circumstances and class needs, it may be modified during the semester.

## **TENTATIVE SCHEDULE**

### **Introduction:**

- What is Environmental Economics and what is the scope of this field of Economics?
- A first simple model: the Material balance model.
- How the economic goals can be balanced with the environmental objectives; relationships of economic system to environmental and social sustainability.

### **The principal causes of Environmental degradation**

- Market failures and externality problems
- Pollution externalities.
- Environmental quality as a public good
- Government policy failures

### **The principal policies and strategies for environmental protection**

- Property rights, markets and macroeconomic relationships;
  - Coase theorem.
  - Pigouvian Fees.
  - Regulating Pollution
  - Emission fees and Marketable Permits
  - ...

### **Individual preferences and social choice mechanisms regarding Environmental protection**

- Individual Preference
- Social Choice mechanisms: Pareto Criterion and Compensation Principle (Kaldor Hicks)
- Social Welfare Functions
- Arrows Impossibility Theorem

### **Economic Efficiency and Markets**

- Cost-Benefit Analysis

## **Overview on the Environment policy in the United States and the International Environmental Issues.**

- Federal Water Pollution-Control Policy, Federal Air Pollution-Control Policy, Federal Policy on Toxic and Hazardous Substances
- State and Local Environmental Issues
- Economic Development and the environment
- International Environment agreements

## **Economy – wide Effects of Environmental regulations**

Case Studies