

**1. Name of Course:** Environmental Economics

**2. Lecturer:** Professor Gerhard Clemenz

**3. No. of Credits (no. of ECTS credits):** 1 CEU credit (2 ECTS)

**4. Semester or Time Period of the course:** Winter term

**5. Pre-requisites:** Basic knowledge of Microeconomics (welfare theorems, market failures).

**6. Course Level:** MA Economics, 2nd year

**7. Course Outline:** The course gives an up to date coverage of the most important issues in Environmental Economics. After identifying the main reasons for market failures when it comes to environmental issues the targets and instruments of environmental policies are discussed. Special attention will be paid to aspects of imperfect information and problems of international co-operation.

**8. The goals of the course:** The course provides an overview of standard models of the economic analysis of environmental problems and available instruments for tackling them. Students successfully completing this course should be able to apply modern economic analysis to identifying causes and consequences of polluting activities, devising remedies and assessing their effect.

**9. The learning outcomes of the course:** development of analytical skills to a level where students can evaluate critically both, research outputs in environmental economics and actual policy measures, and design and carry out research projects both, at a theoretical level and as basis for policy advise.

**10. Assessment:** There will be a final examination with 100% weight.

### **11. Detailed Plan of Lectures with Associated Reading**

#### 1. Introduction Week 1

Scope and method of environmental economics; economy-environment interdependence; sustainability; market failures.

Perman, R. et al. (2003), Natural Resource and Environmental Economics, Pearson Education Limited, ch. 1-5.

Hanley, N. J.F. Shogren and B. White (1997) *Environmental Economic*, Macmillan: London, ch.1,2.

## 2. Pollution control: targets *Week 1*

Pollution stocks, pollution flows and damage; the efficient level of pollution; Ambient pollution standards; intertemporal analysis of stock pollution.

Perman, *Op Cit.* Ch.6

## 3. Pollution control: instruments *Weeks 1-2*

Criteria for the choice of instruments; command and control; economic incentive instruments.

Perman, *Op Cit.* Ch.7

Hanley, N. et al, *Op Cit.* Ch. 3-5.

## 4. Pollution policy with imperfect information *Week 2*

The relative merits of instruments under different types of uncertainty; moral hazard and adverse selection; tournaments.

Perman, *Op Cit.* Ch.8

Hanley, N. et al, *Op Cit.* Ch. 3-5.

## 5. International environmental problems *Week 2*

International environmental co-operation; game theory analysis; selected examples.

Perman, *Op Cit.* Ch.10

Hanley, N. et al, *Op Cit.* Ch. 6.

Powerpoint Files and course outline:

- [www.econ.ceu.hu/download/docs/Env/Targets.ppt](http://www.econ.ceu.hu/download/docs/Env/Targets.ppt)
- [www.econ.ceu.hu/download/docs/Env/Intro.ppt](http://www.econ.ceu.hu/download/docs/Env/Intro.ppt)
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