Department of Economics Hacettepe University

ECO 448 Natural Resources and Environmental Economics

Spring 2008

Course Information

Instructor Dr. Shihomi Ara-Aksoy

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Time/Place Wednesdays 13:10 – 16:00 @ İİBF D1

Office Hours Wednesdays 16:15 – 17:15 or by appointment

Course Website http://www.shihomiaksoy.org

Course Description This course provides an introduction to environmental and natural

resource economics and policy. Lectures are designed to provide insights into economic aspects and a theoretical foundation of a wide range of environmental issues including air and water pollution, climate change, management of renewable and non-renewable natural resources, and issues in common pool resource management, as well as the general

knowledge of environmental and natural resource issues.

Course Objectives By the end of this course, students are expected to develop a capacity to

evaluate the environmental/natural resources problem at hand, analyze the possible instruments, and assess the impacts of the chosen instrument.

Class Participation Discussion is a very important component of this class, therefore your

class attendance is highly expected.

Course Requirements

1.	Midterm Exam	20%
2.	Term Paper*	20%
3.	Presentation*	10%
4.	Final Exam	50%

^{*} See Term Paper Guidelines for the details

Make-up Exam No makeup exam will be given unless a legally acceptable document (such as medical report) is submitted. Validity of such document will be examined.

Academic Misconduct

Please read the relevant material at http://www.plagiarism.org/. Detected plagiarism throughout the coursework will cause the student to be punished according to the University rules. The students are expected to know what plagiarism is and lack of knowledge is not an acceptable excuse.

Disabilities

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific need.

Textbooks

R. Perman, Y. Ma, J. McGilvray and M. Common, *Natural Resource and Environmental Economics*, 3rd Edition, Pearson Education, 2003.

Tom Tietenberg, *Environmental and Natural Resource Economics*, 5th Edition, Addison Wesley Longman, 2000

Other Readings:

- Nicholas Stern, *The Economics of Climate Change, The Stern Review*, (2006), http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm
 - UN World Water Assessment Program(WWAP), Water a shared responsibility, The United Nations World Water Development Report 2, UNESCO and Berghahn Books, 2006
 - P.A. Champ, K.J. Boyle, T.C. Brown, *A Primer on Nonmarket Valuation*, Kluwer Academic Publishers, 2003
- E.Ostrom, et.al., The Drama of the Commons, National Academy Press, 2001

Topics, Exams and Term Paper Due

	Date	Topics	
1 st week	Feb. 13	Introduction	
2 nd week	Feb. 20	Water, Air Pollution, Climate Change	
3 rd week	Feb.27	Pollution Control: Targets	
4 th week	Mar.5	Pollution Control: Instruments	
5 th week	Mar.12	International Environmental Problems	
6 th week	Mar.19	Environmental Evaluation	Term Paper Topic Submission Due
7 th week	Mar.26	Sustainability Natural Resource Exploitation Non-renewable Resources	
8 th week	Apr.2	MIDTERM EXAM	
9 th week	Apr.9	Natural Resource Exploitation, Renewable Resources Commons-Pool Resource	
10 th week	Apr.16	Environmental Problems and Policies in Turkey	
11 th week	Apr.23	Holiday, NO CLASS	
12 th week	Apr.30	EU Accession Process and Turkish Environmental Policies	
13 th week	May.7	Student Presentation	Term Paper Submission Due
14 th week	May.14	Student Presentation	
		Final Exam	

Reading Schedule

Week 1 (Feb.13): [Introduction]

Week 2 (Feb.20): [Water Pollution, Air Pollution, Climate Change]

- Water Pollution: Tietenberg, pp439-445 (available on the course webpage)
 : Water, pp121-123, 136-145 (available on the course webpage)
- Air Pollution (1): Six Common Air Pollutants (Basic Information, Health and Environmental Effects) http://www.epa.gov/air/urbanair/
- Air Pollution (2): Tietenberg, pp388-391, 398-399 (available on the course webpage)
- Climate Change: The Economics of Climate Change, The Stern Review (2006), Chapter 1. (available on the web/course webpage)

Week 3 (Feb.27): [Pollution Control: Target]

• Perman Chapter 6

Week 4 (Mar.5): [Pollution Control: Instruments]

- Perman et.al. Chapter 7
- Stern Review Chapter 14, 15, 16 [available on the web/course webpage]

Week 5 (Mar.12): [International Environmental Problems]

- Perman et.al. Chapter 10
- Stern Review Chapter 21, 22 [available on the web/course webpage]
- Kyoto Protocol to UNFCCC, United Nations, 1998
 [Available at http://unfccc.int/resource/docs/convkp/kpeng.pdf]

Week 6 (Mar.19): [Environmental Evaluation]

- Perman et.al. Chapter 12
- Champ et.al. Chapter 2, 4, and 8

Week 7 (Mar.26): [Sustainability, Natural Resource Exploitation: Non-renewable Resources]

- Perman et.al. Chapter 4
- Tietenberg, Chapter 7, 8 and 9

Week 8 (Apr.2) : **MIDTERM EXAM**

Week 9 (Apr.9):

[Natural Resource Exploitation: Renewable Resources, Common Pool Resource]

- Tietenberg, Chapter 10, 12 and 13
- Ostrom et.al. Chapter 1 and 2
- G. Hardin. (1968) *The Tragedy of the Commons*, Science 162, 1243-1248 (available on course webpage)

Week 10 (Apr.16): [Environmental Problems and Policies in Turkey]

- State Planning Agency, *Turkey: National Environmental Action Plan*, May 1998 [Available at http://ekutup.dpt.gov.tr/cevre/eylempla/neap.html]
- Ministry of Environment and Forestry, *First National Communication on Climate Change, Republic of Turkey*, January 2007.

 [Available at http://www.cevreorman.gov.tr/belgeler4/iklimbildirimi.pdf]

Week 11 (Apr.23): Holiday, NO CLASS

Week 12 (Apr.30): [EU Accession Process and Turkish Environmental Policies]

• EU-Twinning-Project Air-Quality http://www.havakalitesi.cevreorman.gov.tr/english/frameset_airquality.htm

Week 13 (May.7) and Week 14 (May.14)

• Student Presentation