Course Profile - Department of Economics

Course Number **: ECO 352**	Course Title : **Environmental Economics**
Required / Elective : **Elective**	Pre / Co-requisites : None
Catalog Description: The economic basis of environmental issues and policies. Ethics, economics and the environment. Welfare economics and the environment: efficiency and optimality, market failure and the environment. Externalities and the common-property basis of environmental problems. Estimating the costs of pollution. Emissions tax, emission abatement subsidy, alternative policies and instruments. Discussing thematic issues such as air and water pollution, solid-waste disposal, wilderness preservation and the protection of endangered species by investigating relevant cases.	Textbooks / Required Material : Environmental Economics: An Introduction, by Barry C. Field and Martha K. Field 2009, McGraw Hill Perman et al, Natural Resource and Environmental Economics, Pearson Publishing, 2003.
Course Structure / Schedule : 3+0+0 **/ 6 ECTS**	

Extended Description :

This course aims at equipping students with economic methods and tools to analyze environmental issues. The course combines theoretical analysis with discussions on specific environmental policies as applied to water, air pollution, energy, climate change and human health issues.

Course PlanWeek	Topics
1	An introduction to environmental economics, critics to neoclassical economics
2	The origins of the sustainability problem
3	Welfare economics and the environment: efficiency and optimality, social welfare function and optimality, partial equilibrium analysis of market efficiency, market failure, public policy and the environment, public goods, externalities, the second-best problem, imperfect information, government failure
4	Environmental pollution-targets and instruments: modeling pollution mechanisms, estimating the costs of pollution, criteria for choice of pollution control instruments, a comparison of the relative advantages of command and control, emissions tax, emission abatement subsidy and marketable permit instruments
5	Quiz 1, International environmental problems: international environmental cooperation, game theory analysis, international treaties
6	International trade and environment
7	Markets for tradable CO2 emissions
8	Water, Economics of fisheries
9	Midterm 1, Land use, Genetically modified organisms
10	Deforestation
11	Midterm 2, Energy Economics and the Environment
12	Consumption and environment, Overpopulation – Underpopulation,

	Economics of Garbage
13	Quiz 2, Waste management
14	Project pesentations

Design content : None

Computer usage: -

Course Outcomes:
By the end of this course, students will be able to:

I. Apply microeconomic theory to the study of environmental issues. **[1, 6, 12]**
II. Identify and critically evaluate alternative environmental policy instruments. **[3, 4, 7]**
III. Develop written and verbal skills in communicating an environmental economic perspective **[9, 10]**
IV. Recognize that the basic economic conditions are inevitably present when determining environmental goals and implementing environmental policies as well. **[1, 6, 8]**
V. Understand why resource and environmental problems have occurred from the economic point of view and what kind of policy tools, which are provided by economics should be implemented to solve these problems. **[1, 3, 4, 5, 6, 7, 12]**
VII. Gain an environmental conscious by investigating applications to environmental problems in air, water, land use and climate change **[4, 5, 6]**
VIII. Gain a consideration of the well being of humanity, not only in terms of theories but through a normative perspective which may help to develop simple but sustainable solutions towards environmental destruction and become a part of them. **[3, 4, 5, 7, 13]**

Recommended reading:

Supplementary to the text books, there are going to be several readings, which are updated according to the changes in the global environmental agenda as the semester proceeds.

Teaching methods:

Lectures, problem sessions, in class discussions, environmental group project, presentation.

Assessment methods:

Midterms: 45% (15% each)

Group project : 25 %

Final Examination: 30%

Contribution of Course Learning Outcomes to Program Outcomes

	Program Outcomes	Level of Contribution*				
		1	2	3	4	5
1	To comprehend fundamental economic concepts, to be able to utilize those in main economic problems, avoid mistakes as employee, employer, consumer and citizen due to common misconceptions regarding fundamental economic concepts					x
2	To comprehend growth,inflation, interest rates, foreign exchange rates, foreign investments and foreign trade in Turkish economy					
3	Acknowledging that there exist different schools of thought in the discipline of economics and apreciating, for example, that there may be differences of opinion about the role of the state in economic life					x

4	Understanding the set/matrix of relations in the global world economy and the role of international organizations within these relation;and also analyzing the costs and benefits of mutual dependence among countries.				x	
5	Apprehending the professional and ethical responsibilities, recognizing the importance and implications of occupational security					x
6	Apply statistical methods, calculus and similar methods in data analysis, Comprehend problems on humanities and social sciences and make inferences on solutions			x		
7	Recognize the diversity in cultures, belief systems and life styles, question information using logical induction and deduction				x	
8	Ability to model the equilibrim dynamics in markets, analyze, abstract, sythnesize and interpret information			x		
9	The ability to work, take initiative and lead in multidisciplinary teams					x
10	Effective communication skills by using written, verbal and visual tools					x
11	The ability to recognize life long education and participate in it as a student as well as an educator					
12	Preparing reports which evaluate the economy on sectoral and macro bases; assessing critically the publications related to the economy; being capable of identifying the dynamics of and following the developments in the market, stock exchange markets, exchange rate markets, supply and demand; collecting and analyzing data on different fields of economics and interpreting them using statistical and econometric techniques and required software programs; equipping with good skills of presenting the findings; efficient note taking; asking the necessary questions to achieve, utilize and transfer information.					x
13	Apprehending the role and importance of environment and environmental sustainability					x
	Level of Contribution* 1= Least 5 = Highest					

Student Workload/ECTS (European Credit Transfer System) Tableau:

Activity:	Number:	Duration(hour)**:**	Total Workload (hour):
Pre-class reading	15	2	30
Lectures	15	3	45
Team work and presentation			30
Exams	4	2.5	10
Problem Sessions	15	1	15
In class case Studies	10	2	20

TOTAL : 150/25 = 6 ECTS

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