

**Course Profile - Department of Economics**

Course Number : <b>ECO 354</b>		Course Title : <b>Energy Economics</b>																															
Required / Elective : Elective		Pre / Co-requisites : None																															
<p>Catalog Description:                  Definition and kinds of natural resources. Natural resources and other production factors. Economic growth development approaches and their relationships with natural resources. Energy economics and its place in general economics. Energy supply and demand analysis. Classification of energy resources and their potentialities. Problems in the production and consumption of non-renewable energy sources. Nuclear and renewable energy use as alternatives. International energy policies.</p>		Textbooks / Required Material :																															
Course Structure / Schedule : 3+0+0 / <b>6 ECTS</b>																																	
<p>Extended Description : This course is designed to introduce undergraduate students to the global political economy of energy resources. It will cover the topics from a global economic and geopolitical perspective. The role of Turkey as a hub of energy transshipment will also be considered with an evaluation of its policies in this field so far.</p> <p>Course Plan</p> <table border="1"> <thead> <tr> <th>Week</th> <th>Topics</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>An introduction to energyeconomics.</td> </tr> <tr> <td>2</td> <td>Definition and kinds of natural resources. Natural resources and other production factors.</td> </tr> <tr> <td>3</td> <td>Economic growth development approaches and their relationships with natural resources.</td> </tr> <tr> <td>4</td> <td>Energy economics and its place in general economics.</td> </tr> <tr> <td>5</td> <td>Problem Session 1, Quiz 1</td> </tr> <tr> <td>6</td> <td>Energy supply and demand analysis.</td> </tr> <tr> <td>7</td> <td>Classification of energy resources and their potentialities.</td> </tr> <tr> <td>8</td> <td>Problems in the production and consumption of non-renewable energy sources.</td> </tr> <tr> <td>9</td> <td>Problem Session 2, Midterm 1</td> </tr> <tr> <td>10</td> <td>Nuclear energy</td> </tr> <tr> <td>11</td> <td>Midterm 2, Energy Economics and the Environment</td> </tr> <tr> <td>12</td> <td>Renewable energy use</td> </tr> <tr> <td>13</td> <td>Quiz 2, International energy policies.</td> </tr> <tr> <td>14</td> <td>Project pesentations</td> </tr> </tbody> </table>				Week	Topics	1	An introduction to energyeconomics.	2	Definition and kinds of natural resources. Natural resources and other production factors.	3	Economic growth development approaches and their relationships with natural resources.	4	Energy economics and its place in general economics.	5	Problem Session 1, Quiz 1	6	Energy supply and demand analysis.	7	Classification of energy resources and their potentialities.	8	Problems in the production and consumption of non-renewable energy sources.	9	Problem Session 2, Midterm 1	10	Nuclear energy	11	Midterm 2, Energy Economics and the Environment	12	Renewable energy use	13	Quiz 2, International energy policies.	14	Project pesentations
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Design content : None		Computer usage: No particular computer usage																															

Course Outcomes: [relevant program outcomes in brackets]:

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

Understand the history and facts about energy resources, define kinds of natural sources and identify economic growth development approaches and their relationships with natural resources.[3, 13]

Describe energy economics' place in general economics and analyze energy supply and demand.[8]

Identify international energy policies.[4]

Analyze economic and security implications of energy resources for the world as a whole, and especially for Turkey [10,12]

Derive some foreign and security policy implications for Turkey [10,12]

Recommended reading:

Daniel Yergin, The Prize: The Epic Quest for Oil, Money and Power  
 Micheal T. Klare, Resources Wars: The Landscape of Global Conflict  
 Terry Lynn Karl, The paradox of Plenty : Oil Booms and Petro States  
 Fueling the 21st

Teaching methods

Lecture, in class discussion, group work and presentation

Assessment methods:

Midterms: 30 %

Final Examination: 50%

Group work and presentation : 20 %

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					
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 appreciating, 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					

6	Apply statistical methods, calculus and similar methods in data analysis, Comprehend problems on humanities and social sciences and make inferences on solutions					
7	Recognize the diversity in cultures, belief systems and life styles, question information using logical induction and deduction					
8	Ability to model the equilibrium dynamics in markets, analyze, abstract, synthesize and interpret information				x	
9	The ability to work, take initiative and lead in multidisciplinary teams					
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:	Total Workload (hour):				
Pre- reading	14	15				
Lectures	14	45				
Team work	1	40				
Exam	2	5				
Readings	14	45				
<b>TOTAL 150/25 = 6 ECTS</b>						
Prepared by : Çağla Özsoy				Revision Date : <u>27/06/2013</u>		