



ÇANKAYA UNIVERSITY

Faculty of Economics and Administrative Sciences

Course Definition Form

Part I. Basic Course Information

Department Name	ECONOMICS	Dept. Numeric Code	3 1	
Course Code	E C O N 4 3 7	Number of Weekly Lecture Hours	3	
		Number of Weekly Lab/Tutorial Hours	0	
Course Web Site	http:// econ437.cankaya.edu.tr		Number of Credit Hours	3
		ECTS Credit	0 5	

Course Name and Other Course Information

This information will appear in the printed catalogs and on the web online catalog.

English Name	Energy Economics
Turkish Name	Enerji İktisadi
Mode of Delivery	Face to face
Language of Instruction	English

Course Description

Provide a brief overview of what is covered during the semester. This information will appear in the printed catalogs and on the web online catalog. Maximum 60 words.

This course is designed to expose students to working of energy markets and interrelationship among these markets. Demand for energy, supply of energy, and public policies affecting energy markets are discussed. The aspects of coal, oil, natural gas, electricity and nuclear power as well as renewable energy are addressed. Policy issues on energy tax, price regulation, deregulation, energy efficiency and policies for controlling emission are elaborated.

Prerequisites (if any) <i>Give course codes and check all that are applicable.</i>	1 st	2 nd	3 rd	4 th
	<input type="checkbox"/> Consent of the Instructor	<input type="checkbox"/> Senior Standing	<input type="checkbox"/> Give others, if any.	
Co-requisites (if any)	1 st	2 nd	3 rd	4 th
Course Type <i>Check all that are applicable</i>	<input type="checkbox"/> Must course for dept. <input type="checkbox"/> Must course for other dept.(s) <input checked="" type="checkbox"/> Elective course for dept. <input type="checkbox"/> Elective course for other dept.(s)			

Part II. Detailed Course Information**Course Objectives***Maximum 100 words.*

The course aims to provide a comprehensive understanding of energy markets, as well as knowledge of how to analyze them and how they interact with the rest of the economy. A further aim of is to give students advanced tools to analyze how energy policies affect the demand and supply of different types of energy.

Learning Outcomes*Explain the learning outcomes of the course. Maximum 10 items.*

By the end of this course students should:

- understand the role of energy in economic activity,
- have a knowledge of methods to assess alternative energy projects, technologies, and policies,
- have an understanding of structure of energy markets and patterns of energy production and consumption,
- know what key factors and principles need to be considered in evaluating alternative energy policy options,
- have a good understanding of the need for government policies in various energy markets, and to analyze the possibilities and limitations of various policy measures,
- describe the oil, natural gas and coal production background history and markets,
- analyze energy-related policy issues using standard economic tools.

Textbook(s)*List the textbook(s), if any, and other related main course material.*

Author(s)	Title	Publisher	Publication Year	ISBN
Carol Dahl	International Energy Markets: Understanding Pricing, Policies, and Profits	PenWell Corporation	2015, 2 nd ed.	

Reference Books*List, if any, other reference books to be used as supplementary material.*

Author(s)	Title	Publisher	Publication Year	ISBN

Teaching Policy*Explain how you will organize the course (lectures, laboratories, tutorials, studio work, seminars, etc.)*

Instructor will give lectures on major concepts and issues. Students are expected to engage in discussion during lectures. Most in-depth learning takes place when students actively engage themselves in discussions thought presenting and sharing their ideas. Instructor holds weekly consultation hours to answer students' questions.

Laboratory/Studio Work*Give the number of laboratory/studio hours required per week, if any, to do supervised laboratory/studio work and list the names of the laboratories/studios in which these sessions will be conducted.*

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Computer Usage*Briefly describe the computer usage and the hardware/software requirements for the course.*

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Course Outline	
<i>List the weekly topics to be covered.</i>	
Week	Topic(s)
1	Chapter 1 - Introduction; Chapter 2 - Energy Lessons from the Past and Modeling the Future
2	Chapter 3 - Perfect Competition and the Coal Industry
3	Chapter 4 - Energy Price Controls, Taxes, Subsidies, and Social Welfare
4	Chapter 5 - Natural Monopoly and Electricity Markets; Chapter 6 - Restructuring in the Electricity Sector
5	Chapter 7 - Monopoly, Dominant Firm, and OPEC; Chapter 8 - Market Structure, Transaction Cost Economics, and US Natural Gas Markets
6	Chapter 9 - Monopsony: Japan and the Asia-Pacific LNG Market
7	Midterm Exam
8	Chapter 10 - Game Theory and the European Natural Gas Market
9	Chapter 11 - Externalities and Energy Pollution; Chapter 12 - Public Goods and Global Climate Change; Chapter 13 - Safety and Security
10	Chapter 14 - Allocating Fossil Fuel Production over Time and Oil Leasing
11	Chapter 15 - Supply and Costs Curves
12	Chapter 16 - Energy Balances and Energy Demand
13	Chapter 17 - Linear Programming, Refining, and Energy Transportation
14	Chapter 18 and 19 - Energy Option and Futures Markets for Managing Risk

Grading Policy								
<i>List the assessment tools and their percentages that may give an idea about their relative importance to the end-of-semester grade.</i>								
Assessment Tool	Quantity	Percentage	Assessment Tool	Quantity	Percentage	Assessment Tool	Quantity	Percentage
Midterm Exam	1	45%						
Final Exam	1	55%						

ECTS Workload			
<i>List all the activities considered under the ECTS.</i>			
Activity	Quantity	Duration (hours)	Total Workload (hours)
Attending Lectures (<i>weekly basis</i>)	14	3	42
Attending Labs/Recitations (<i>weekly basis</i>)	-	-	-
Compilation and finalization of course/lecture notes (<i>weekly basis</i>)	14	1	14
Collection and selection of relevant material (<i>once</i>)	1	2	2
Self study of relevant material (<i>weekly basis</i>)	14	3	42
Take-home assignments	-	-	-
Preparation for quizzes	-	-	-
Preparation for mid-term exams (<i>including the duration of the exams</i>)	1	10	10
Preparation of term paper/case-study report (<i>including oral presentation</i>)	-	-	-
Preparation of term project/field study report (<i>including oral presentation</i>)	-	-	-
Preparation for final exam (<i>including the duration of the exam</i>)	1	15	15
TOTAL WORKLOAD / 25			125/5

ECTS Credit	5
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Program Qualifications vs. Learning Outcomes Consider the program qualifications given below as determined in terms of learning outcomes and acquisition of capabilities for all the courses in the curriculum. Look at the learning outcomes of this course given above. Relate these two using the Likert Scale by marking with X in one of the five choices at the right.

No	Program Qualifications	Contribution				
		0	1	2	3	4
1	To know the fundamental concepts in economics and associated social sciences, and relate these concepts to each other.					X
2	To know the quantitative and qualitative methods and computer skills necessary for testing hypotheses derived from economic theories for the purpose of contributing towards the solution of economic problems.			X		
3	To acquire the necessary knowledge for gathering and processing data, and for building up the scientific research capacity to guide economic policy.			X		
4	To specialize in some of the sub-disciplines of economics, and to gain interdisciplinary analytical skills by making connections between those sub-disciplines and other social sciences.				X	
5	To have the ability to question, interpret, and analyze the findings of economic studies.					X
6	To develop the ability to present in writing as a report and verbally as a presentation the knowledge acquired through education.			X		
7	To be able to work in teams, and when necessary to rise up to the challenge individually.				X	
8	To gain life-long learning and critical-thinking skills.				X	
9	To be able to assess one's need for advanced study and to make plans accordingly by using the critical and analytical thinking skills gained during undergraduate studies.				X	
10	To gain the ability to use a language at least at the Level B1 of the European Language Portfolio to follow economic news and developments, and to communicate with colleagues.				X	
11	To maintain scientific, social, and ethical standards when collecting, interpreting, and disseminating economic information, and in application of economic ideas.			X		
12	To be conscious of social and environmental needs.		X			
13	To develop an open-minded attitude towards new ideas and developments.					X
14	To relate the knowledge gained through education to the cultural and historical characteristics of the society.		X			

Scale for contribution to a qualification: 0-none, 1-little, 2-moderate, 3-considerable, 4-highest