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 4 8	**Number of Weekly Lecture Hours**	3	**Number of Weekly Lab/Tutorial Hours**	0	**Number of Credit Hours**	3
Course Web Site	http:// econ448.cankaya.edu.tr					**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	Environmental and Resource Economics
Turkish Name	Çevre ve Doğal Kaynak Ekonomisi
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 focuses on the application of economic principles in the analysis of environmental and natural resource issues. The topics to be covered in this field include property rights, externalities, environmental valuation, static and dynamic efficiency, models of natural resource use over time, energy, recyclable resources, water, fisheries, forestries, air pollution, water pollution, and sustainable development.

Prerequisites (if any) *Give course codes and check all that are applicable.*	1st	2nd	3rd	4th
	☐ Consent of the Instructor	☐ Senior Standing	☐ Give others, if an	
Co-requisites (if any)	1st	2nd	3rd	4th
Course Type *Check all that are applicable*	☐ Must course for dept ☐ Must course for other dept.(s) ☒ Elective course for dept. ☐ Elective course for other dept.(s)			

Part II. Detailed Course Information

Course Objectives
Maximum 100 words.

This course is designed to introduce students to the fundamental theories and issues of environmental and natural resource economics. The course develops a rationale for, and explains the methodologies used in, the application of economic theory in analyzing environmental and resource problems.

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

Upon successful completion of this course, students will be able to:
1. Understand the role of economic theory in the analysis of environmental and resource issues.
2. Develop an understanding of the role of markets, and the limits of markets as mechanisms to manage environmental and resource problems.
3. Identify different kinds of market failure related to the environment and the natural resources.
4. Demonstrate how particular analytical techniques may be applied to problems involving natural resources and the environment.
5. Identify the economic costs and benefits of a particular environmental policy and the tools that can be used to estimate these costs and benefits.
6. Assess the advantages and limitations of using cost-benefit analysis to inform public policy.
7. Get a good knowledge of the economic principles of optimal exploitation of depletable and renewable resources.
8. Understand the key issues involved in dealing with the environmental pollution.

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

Author(s)	Title	Publisher	Publication Year	ISBN
Tietenberg, T. and L. Lewis	Environmental & Natural Resource Economics, 10th edition	Pearson Education	2015	978-1292060798

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

Author(s)	Title	Publisher	Publication Year	ISBN
Harris, J. M. and B. Roach	Environmental and Natural Resource Economics: A Contemporary Approach, 4th edition	Routledge	2017	978-1138659476
Hartwick, J. and N. Olewiler	Economics of Natural Resource Use, 2nd edition	Pearson Education	1997	978-0321014283
Perman, R., Y. Ma, M. Common, D. Maddison, and J. McGilvray	Natural Resource and Environmental Economics, 4th edition	Pearson Education	2012	978-0321417534

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

The teaching strategy will be mostly based on lectures and problem solving. Students are expected to participate in class discussions and are encouraged to ask questions and share their opinions. Instructor will hold regular office hours specifically to answer students' questions about the course material and assist them.

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.

NA

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

NA

Course Outline
List the weekly topics to be covered.

Week	Topic(s)
1	Property rights, externalities, and environmental problems.
2	Valuing the environment: concepts and methods.
3	Dynamic efficiency and sustainable development.
4	Population growth.
5	Models of natural resource use over time: depletable resources.
6	Models of natural resource use over time: renewable resources.
7	Midterm exam.
8	Energy: the transition from depletable to renewable resources.
9	Recyclable resources and water.
10	Fisheries and forestries.
11	Environmental economics: an overview.
12	Air pollution: local and regional; Climate change.
13	Water pollution and toxic wastes.
14	The quest for sustainable development.

Grading Policy
List the assessment tools and their percentages that may give an idea about their relative importance to the end-of-semester grade.

Assessment Tool	Quantity	Percentage	Assessment Tool	Quantity	Percentage	Assessment Tool	Quantity	Percentage
Term Paper	1	25						
Midterm Exam	1	25						
Final Exam	1	40						
Class Participation	1	10						

ECTS Workload
List all the activities considered under the ECTS.

Activity	Quantity	Duration (hours)	Total Workload (hours)
Attending Lectures (*weekly basis*)	14	3	42
Attending Labs/Recitations (*weekly basis*)	-	-	-
Compilation and finalization of course/lecture notes (*weekly basis*)	14	1	14
Collection and selection of relevant material (*once*)	1	1	1
Self-study of relevant material (*weekly basis*)	14	2	28
Take-home assignments	-	-	-
Preparation for quizzes	-	-	-
Preparation for mid-term exams (*including the duration of the exams*)	1	10	10
Preparation of term paper/case-study report (*including oral presentation*)	1	10	10
Preparation of term project/field study report (*including oral presentation*)	-	-	-
Preparation for final exam (*including the duration of the exam*)	1	20	20
		TOTAL WORKLOAD **/** 25	125/25
		ECTS Credit	**5**

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