



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 0	Number of Weekly Lecture Hours	3	
		Number of Weekly Lab/Tutorial Hours	0	
Course Web Site	http:// econ430.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	GAME THEORY WITH ECONOMIC APPLICATIONS
Turkish Name	EKONOMİK UYGULAMALI OYUN TEORİSİ
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.

An advanced game theory course starting with a review of basic definitions and equilibrium concepts, and developing selected applications ranging from auctions to political economy and industrial organization.

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 empower the student with the ability to analyze real-life economic and business problems regarding the Game Theory by making use of scientific economic tools, and offer policy proposals.

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

Upon successful completion of this course, students will be able to:

1. Know how to approach problems from a game theoretical perspective
2. Develop the ability to think critically and analytically
3. Apply game theoretic approaches to real world cases and evaluate mechanisms and policies.

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

Author(s)	Title	Publisher	Publication Year	ISBN
Thomas J. Webster	Analyzing Strategic Behavior in Business and Economics: A Game Theory Primer	Lexington Books	2015	9781498525626

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

Author(s)	Title	Publisher	Publication Year	ISBN
Drew Fudenberg and Jean Tirole	Game Theory	ANE Books	2005	9788180520822
H. Scott Bierman and Luis Fernandez	Game Theory with Economic Applications	Pearson	1997	9780201847581

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

Course will be taught through lectures on weekly basis

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 <i>List the weekly topics to be covered.</i>	
Week	Topic(s)
1	Introduction to Game Theory
2	Static Games with Complete Information Coalition Games Strategic Moves and Deterring Defection
3	Static Games with Complete Information Competition Games Coordination Games
4	Static Games with Complete Information Repeated Games Continuous Strategies
5	Static Games with Complete Information Static Oligopoly Games Strategic Trade Policy
6	Review
7	Midterm Exam
8	Dynamic Games with Complete and Perfect Information Game Trees
9	Dynamic Games with Complete and Perfect Information Dynamic Oligopoly Game
10	Dynamic Games with Complete and Perfect Information Bargaining
11	Games with Incomplete Information Decision Making Under Uncertainty
12	Games with Incomplete Information Adverse Selection Incentive Contracts
13	Games with Imperfect Information Information Sets Auctions
14	Games with Imperfect Information Signalling Screening

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
Class participation	1	10%						
Midterm	1	40%						
Final	1	50%						

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	1	1
Self study of relevant material (<i>weekly basis</i>)	14	2	28

Take-home assignments			
Preparation for quizzes			
Preparation for mid-term exams (including the duration of the exams)	1	20	20
Preparation of term paper/case-study report (including oral presentation)			
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=5
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