

Department of Economics
Hacettepe University
ECO241 (02) Mathematical Economics I
Winter 2011

Course Information

Instructor: Dr. Shihomi Ara-Aksoy
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Class Time/Place: **Wednesdays 9:00 – 11:45 @ D11**

Office Hours: Tuesdays 12:00 - 13:30, Wednesdays 12:00 - 13:30, by appointment

Course Website: <http://yunus.hacettepe.edu.tr/~sara>, <http://www.shihomiaksoy.org>

Course Objectives

This course is designed to introduce a wide range of mathematical techniques used in senior undergraduate level economics courses. The mathematical tools used in equilibrium models, comparative-static models and optimization problems are discussed with economics applications. The course will extensively employ algebra and basic calculus, although there will be a review of basic techniques such as differentiation, integration and matrix operations as these skills are required.

Course Requirements

1	Two Midterm Exam (25% each)
2	Final Exam (50%)

Textbooks: Chiang, A.C. and K, Wainwright (2005), "Fundamental Methods of Mathematical Economics", 4th Ed., McGraw-Hill.

Make-up Exam

No makeup exam will be given unless a legally acceptable document (such as medical report) is submitted. Validity of such document will be examined.

Academic Misconduct

Please read the relevant material at <http://www.plagiarism.org/>. Detected plagiarism throughout the coursework will cause the student to be punished according to the University rules. The students are expected to know what plagiarism is and lack of knowledge is not an acceptable excuse.

Disabilities

Any student who feels s/he may need an accommodation based on the impact of a disability should contact the instructor privately to discuss your specific need.

Course Schedule

Week	Date	Topic	Readings
Week 1	Oct. 5	<i>Economics Models</i>	Ch. 2
Week 2	Oct. 12	<i>Equilibrium Analysis in Economics</i>	Ch. 3
Week 3	Oct. 19	<i>Linear Models and Matrix Algebra (1)</i>	Ch. 4
Week 4	Oct. 26	<i>Linear Models and Matrix Algebra (2)</i>	Ch. 5
Week 5	Nov. 2	<i>Comparative Statics and the Concept of Derivative</i>	Ch. 6
Week 6	Nov. 9	No Class	
Week 7	Nov.16	<i>Rules of Differentiation and Their Use in Comparative Statics</i>	Ch.7
Week 8	TBA	Midterm Exam I	
Week 9	Nov.30	<i>Comparative-Static Analysis of General-Function Models</i>	Ch. 8
Week 10	Dec. 7	<i>Optimization: A Special Variety of Equilibrium Analysis</i>	Ch. 9
Week 11	Dec. 14	<i>Exponential and Logarithmic Functions</i>	Ch.10
Week 12	Dec. 21	<i>The Case of More than One Choice Variable</i>	Ch.11
During 12th week		Midterm Exam II	
Week 13	Dec. 28	<i>Optimization with Equality Constraints</i>	Ch.12
Week 14	Jan. 4		
	TBA	Final Exam	