Microeconomic Theory I

Syllabus
First Year Graduate Program
Universidad Carlos III de Madrid
Fall 2015

Overview

This quadrimester course provides an introduction to microeconomic theory designed to meet the needs of students in the economics Ph.D. program. Some parts of the course are designed to teach material that all graduate students should know. Others are used to introduce methodologies. The topics include some of the most fundamental topics of classical microeconomics: consumer and producer theory, markets and competition, general equilibrium, and tools of comparative statics.

Textbooks

A standard textbook is A. Mas-Colell, M. Whinston and J.Green, *Microeconomic Theory*, Oxford UP 1995, and for short it will be referred to as MWG below. This is the recommended, primary text for the course and is a detailed, dense text that covers most of what will be covered and much more.

Other textbooks that can be helpful are:

C. Hara, I. Segal and J. R. Green, *Solutions Manual for Microeconomic Theory*, Oxford University Press, 1997

D. Kreps, *A course in Microeconomic Theory*, Princeton U Press, 1990

G. Jehle, and P. Reny, Advanced Microeconomic Theory, Prentice-Hall 2000

N. Miller, *Notes on Microeconomic Theory*, available at http://www.ksg.harvard.edu/nhm/notes.htm

A. Rubinstein, *The Economic Agent*, available at http://arielrubinstein.tau.ac.il/

W. Hildenbrand y A. Kirman, Introduction to Equilibrium Analysis, North Holland

Course structure

The following list provides main structure of the course and related material in MWG.

1. Consumer Theory: preference, utility functions, utility maximization, demand functions, indirect utility functions, expenditure minimization, duality, comparative statics, revealed preference (Chapters 1 to 4)

2. Social Choice Theory: preferences aggregation, social choice functions, Arrow's Theorem (Chapter 21)

3. Production Choice: technology, production sets, profit maximization and cost minimization, input demands, supply function (Chapter 5)

4. Choice under Uncertainty: expected utility theory (Chapter 6)

5. Partial Equilibrium: supply and demand, equilibrium in competitive markets, efficiency, taxes, subsidies, price controls (Chapter 10)

6. General Equilibrium in Competitive Economies: partial and general equilibrium, existence of competitive equilibrium, cooperative and non-cooperative foundations of the competitive equilibrium, welfare theorems (Chapter 15 to 18)

Faculty
Lecturer: Martin Dumav
Teaching Assistant: To be announced

Course Meeting Times
Lectures: 2 sessions per week, 1.5 hours per session
Recitations: 1 session per week, 1 hour per session
(Weekly schedule will be announced)

Grading
The course will be graded on the basis of six problem sets, a midterm and a final exam. Problem sets will be due in class on assigned lecture dates. They will be graded on a check-, check, check+ basis.

The grades on the problem sets are intended primarily to give you an idea of how you are doing in the course and will affect course grades only for students with borderline scores on the exam. You may work in groups, but please do the write-ups individually. We do not expect to see identical answers from different students.