Course Outline 2018/19
Microeconomic Theory — EC5110

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AIMS

This course is a graduate level introduction to microeconomic theory, aiming to acquaint students with the basics of modern microeconomic analysis. During the course, the students will learn the core tools that economists use to analyze problems of resource allocation in consumer, producer, and market settings.

We will begin with a review of the prerequisite mathematical tools. We will then apply these tools to the formal analysis of the optimizing behaviour of consumers and producers. Finally, we will introduce markets and the notion of competitive equilibrium.

LEARNING OUTCOMES

Upon completion the course students should be able to:

- Apply the basic tools of economics to analyze problems of scarce resource allocation.
- Formulate and solve both the Marshallian (utility maximizing) and the Hicksian (cost minimizing) demand problems; understand the key properties of the solutions.
- Formulate and solve both the profit maximization and the cost minimization problems of a price-taking producer; understand the key properties of the solutions.
- Understand the notion of partial equilibrium; solve for partial equilibrium with perfect competition and under monopoly.
- Understand the notion of general equilibrium; solve for the Walrasian equilibrium in a pure exchange economy. Understand the First and Second Welfare Theorems.

COURSE DELIVERY

The course consists of a two-hour lecture and a one-hour seminar each week. Given the subject's mathematical content, the only way to understand the material is to work through problems and exercises. Students are encouraged to work together in groups on these problems. Problem sets will be assigned during lectures and students will be required to present their solutions during seminars. Students are strongly encouraged to talk to the course leader about the course by coming to see him either during regular office hours or by appointment.

ASSESSMENT

Summative assessment:

- **2-hour final examination** (65% of the final mark) is taken during the Summer term.
- **1-hour in-class test** (25% of the final mark) is taken during the seminar slot in week 8 of the Autumn term (the week after Reading week)

Formative assessment:

- **Weekly problem sets** (10% of the final mark). Students are expected to present their answers during the seminar. Detailed solutions to problem sets will be posted on Moodle after the seminar. Students will be able to assess their own performance through discussion during seminar and by comparing their answers to the posted suggestions. In addition, discussions during seminars and the instructor's office hours will provide more personalized feedback.
- **In-class test** (as listed under "summative assessment" above)

Solutions will be posted on Moodle (collective feedback). Scripts will be marked and numerical grades assigned (individual feedback).

READING

The main text for the course will be

- W. Nicholson and C. Snyder. Microeconomic theory: Basic principles and extensions. Nelson Education, 2011. ISBN 9781111525514

The following texts can also be useful as additional reading:

- Hal R. Varian. (1992). *Microeconomic Analysis*, 3rd edition. W. W. Norton and Company.

- Mas-Colell, M. Whinston, and J. Green, *Microeconomic Theory*, Oxford University Press.

WEEKLY TIMETABLE

Lectures 1 Overview of the course. Optimization problems / Math Review.
Reading: Lecture notes; Nicholson and C. Snyder, Chapter 1-2

Lectures 2–4: Consumer theory: Preferences, Choice, and Utility maximization; Demand; Income and Substitution effects, Uncertainty and Information.
Reading: Lecture notes; Nicholson and C. Snyder, Chapters 3–7

Lectures 5–8: Producer theory: Technologies; Profit maximization; Cost minimization
Reading: Lecture notes; Nicholson and C. Snyder, Chapters 9–11

Lecture 9: Partial equilibrium: Perfect competition and monopoly
Reading: Lecture notes; Nicholson and C. Snyder, Chapters 12,14

Lecture 10: General equilibrium in a pure exchange economy; First and Second Welfare Theorems
Reading: Lecture notes; Nicholson and C. Snyder, Chapters 13