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# Advanced Microeconomics (MA)

Fall 2021

#### Content

**Description** Microeconomics studies the decisions of individuals and firms and their interaction in markets. This course is devoted to the basic methods of microeconomic analysis. It covers decision theory, household theory, and game theory. While decision theory deals with individual's choices, game theory analyzes situations where decision makers influence each other.

This course provides the basis for further courses in economics as well as for own work, e.g. writing a Master's thesis in the field of microeconomics.

### Training Objectives In this course students will

- a) learn microeconomic methods
- b) learn game theoretic methods
- c) deepen their knowledge in microeconomics

#### (Tentative) Course Outline

Part I "Deep Micro"

1. Introduction

- 2. Individual Decisions
- 3. Consumer Decisions
- 4. Producer Decisions
- 5. General Equilibrium
- 6. Market Failure

### Part II "Game Theory"

- 1. Introduction
- 2. Static games with complete information
- 3. Dynamic games with complete information
- 4. Static Games with incomplete information
- 5. Dynamic games with incomplete information

## Organisation

Datum	Zeit	Kurs / Übung	Raum
Thursday 23.09.2021	8:15 - 11:00	Lecture	PER 21, room TBA
Thursday 30.09.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 07.10.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 14.10.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 21.10.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 28.10.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 04.11.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 11.11.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 18.11.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 25.11.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 02.12.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 09.12.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 16.12.2021	8:15 - 12:00	Lecture and Exercises	PER 21
Thursday 23.12.2021	8:15 - 12:00	Lecture, Exercises, and Q&A	PER 21

#### Examination

**Final Exam** This class is graded through an end of semester written exam. The exam is 120 minutes long. The exam will either be in person or online, depending on latest guideline from the University.

## **Supporting Materials**

**Lecture & Exercises** All materials required for the class are available on Moodle.

The best preparation material for the final exam is the material shared during the lecture and exercises. Students are particularly advised to independently prepare for the exercise tutorials.

**Reference Books** There are many textbooks on these topics. We can recommend the following ones.

- Jehle G., Reny. P. (3rd ed., 2011) Advanced Microeconomic Theory, Financial Times/Prentice Hall.
- MAS-COLELL, A., WHINSTON, M. D., & GREEN, J. R. (1995) *Microeconomic Theory*, New York: Oxford University Press.
- Rubinstein, A. (2006) Lecture Notes in Microeconomic Theory, Princeton University, Princeton.
- Tadelis, Steve (2013) Game Theory: An Introduction, Princeton University Press.
- M. O. Jackson, K. Leyton-Brown, Y. Shoham Online Game Theory course. https://www.coursera.org/course/gametheory (MOOC not book).