

Advanced Microeconomics (MA)

Fall 2026

Content

Description Microeconomics studies the decisions of individuals and firms and their interaction in markets. This course is devoted to study foundational models of microeconomic analysis. It covers decision theory, choice 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 decision-theoretic methods
- b) learn game-theoretic methods
- c) deepen their knowledge in foundational models of microeconomics

Syllabus

Part I *“Deep Micro”*

1. Introduction
2. Preferences
3. Demand
4. Supply
5. General Equilibrium
6. Social Choice

Part II *Game Theory*

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

Organisation

The lectures of the first part of the course are held by Giovanni Valvassori Bolgè and the exercise tutorials are given by Qingchao Zeng.

The lectures of the second part of the course are held by Holger Herz and Louis-Gabriel Nobs.

The room is PER 21, C140.

For questions please use the Q&A forum on moodle or write an email to
qingchao.zeng@unifr.ch or louis-gabriel.nobs@unifr.ch.

Date	Time	Content
Thu 17.09.2026	8:15 - 9:15	Lecture I-1: Introduction
	9:30 - 12:00	Lecture I-2: Preferences
Thu 24.09.2026	8:15 - 9:15	Exercises
	9:30 - 12:00	Lecture I-3: Demand
Thu 01.10.2026	8:15 - 9:15	Exercises
	9:30 - 12:00	Lecture I-3: Demand
Thu 08.10.2026	8:15 - 9:15	Exercises
	9:30 - 12:00	Lecture I-4: Supply
Thu 15.10.2026	8:15 - 9:15	Exercises
	9:30 - 12:00	Lecture I-4: Supply
Thu 22.10.2026	8:15 - 9:15	Exercises
	9:30 - 12:00	Lecture I-5: General Equilibrium
Thu 29.10.2026	8:15 - 09:15	Exercises
	10:15 - 12:00	Lecture I-6: Social Choice
Thu 05.11.2026	8:15 - 10:00	Lecture II-1: Static Games with Complete Information
	10:15 - 12:00	Lecture II-1: Static Games with Complete Information
Thu 12.11.2026	8:15 - 10:00	Lecture II-2: Dynamic Games with Complete Information
	10:15 - 12:00	Lecture II-2: Dynamic Games with Complete Information
Thu 19.11.2026	8:15 - 09:15	Exercise: Nash Equilibrium
	09:30 - 10:30	Exercise: Mixed Strategies
	10:45 - 11:45	Exercise: Subgame Perfection
Thu 26.11.2026	8:15 - 10:30	Lecture II-3: Static Games with Incomplete Information
	10:45 - 12:00	Exercise: Repeated Games
Thu 03.12.2026	8:15 - 10:30	Lecture II-4: Dynamic Games with Incomplete Information
	10:45 - 12:00	Exercise: Static Games with Incomplete Information
Thu 10.12.2026	8:15 - 10:30	Lecture II-4: Dynamic Games with Incomplete Information
	10:45 - 12:00	Exercise: Dynamic Games with Incomplete Information
Thu 17.12.2026	8:15 - 09:15	Lecture II-5: Questions and Exam Preparation
	09:30 - 12:00	Correction of one Past Exam (Part II only)

Examination

Final Exam This class is graded through an end-of-semester written exam. The exam lasts 120 minutes and it covers both parts equally.

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 The main textbooks for this course are:

RUBINSTEIN, A. (2026) *Lecture Notes in Microeconomic Theory*, Princeton University Press.

TADELIS, S. (2013) *Game Theory: An Introduction*, Princeton University Press.

There are many more textbooks on these topics. We can also recommend the following ones.

JEHLE G., RENY. P. (3rd ed., 2011) *Advanced Microeconomic Theory*, Financial Times/Prentice Hall.

GIBBONS, R. (1992) *A Primer in Game Theory*, Pearson Education.

MAS-COLELL, A., WHINSTON, M. D., & GREEN, J. R. (1995) *Microeconomic Theory*, Oxford University Press.

OSBORNE, M. (1994) *An Introduction to Game Theory*, MIT Press.

OSBORNE, M., & RUBINSTEIN, A. (1994) *A Course in Game Theory*, MIT Press.

Prerequisites From the Bachelor studies basic knowledge in the following topics is expected.

- Sets and mappings, e.g. functions
- Calculus, e.g. derivatives
- Optimization, e.g. Lagrange

- Choice under uncertainty, e.g. expected values
- Probability theory, e.g. Bayes' rule

Most textbooks cited above provide helpful summaries of these topics, usually in their mathematical appendices.