PhD Course: Microeconomics

Markus Walzl*

Winter 2019-20

Objectives

The course provides an in-depth discussion of key-concepts of microeconomic theory ranging from individual decision making and (general) equilibrium theory to theories of strategic interaction. Central theoretical concepts and proof techniques of modern microeconomic theory will be discussed and applied. Students will acquire a working-knowledge of these concepts and techniques such that main branches of the contemporary literature on microeconomics will become accessible.

Teaching mode

Classes will be given by

• Markus Walzl, Professor of Economics, markus.walzl@uibk.ac.at, Office hours: Feel free to contact him right after class or make an appointment via email.

Students are advised to read the literature indicated in the syllabus in italics as a preparation for a session. In particular, it will prove useful to become aware of instances where it is difficult to follow the presentation in the reader – this is not an uncommon experience when exposed to the theoretical literature. To make a joint effort to overcome these difficulties is the main objective of the class meetings where key concepts from the literature complemented by additional material are presented and discussed. Special emphasis is given to a step-by-step discussion of proofs and a thorough assessment of conceptual aspects. A group discussion of problem sets will be mainly delegated to the tutorials.

Tutorials will be given by

• Karolina Vocke, karolina.vocke@uibk.ac.at, Office hours: Feel free to contact him right after class or make an appointment via email.

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Grading will be based on a midterm (20-1-2020), a take-home (questions published after the first week, due 20-1-2020), and an oral exam (after the course at the beginning of February, schedule published towards the end of the course).

Literature

Main references

- Rubinstein, A. (2016), Lecture Notes in Microeconomic Theory, Princeton University Press, available online.
- Mas-Colell, A., Whinston, M. und J. Green (MCWG), Microeconomic Theory, Oxford: Oxford University Press, 1995.

More references will be provided on the lecture slides and will be available on the OLaT page of the course.

Schedule

Lectures and tutorials will be in "Besprechungsraum FiWi" (4th floor North Wing) or "Besprechungsraum Statistik" (2nd floor East Wing).

Session 1: Preferences (7-1-20, 1 p.m., FiWi)

- Eliciting preferences
- Rationality
- Literature: Rubinstein Introduction and Lect. 1; MCWG ch. 1 A-B

Session 2: Utility (8-1-20, 9 a.m., FiWi)

- Utility representation
- Continuous preferences
- Literature: Rubinstein Lect. 2

Session 3: Choice (9-1-20, 2 p.m., FiWi)

- Rational choice and rationalizability
- Weak axiom of revealed preference
- Psychological motives
- Literature: Rubinstein Lect. 3; MCWG ch. 1 C-D

Session 4: Consumption and demand (10-1-20, 9 a.m., FiWi)

- Consumer preferences
- Consumer choice
- Demand and rationalizability
- Literature: Rubinstein Lect. 4-5; MCWG ch. 3 A-D and 4

Session 5: Midterm exam (20-1-20, 1 p.m., FiWi)

Session 6: Choices over Lotteries (20-1-20, 3.30 p.m., FiWi)

- von Neumann-Morgenstern axiomatization
- Expected utility and its limits
- Literature: Rubinstein Lect. 7-8; MCWG ch. 6

Session 7: Production and perfect competition (21-1-20, 9 a.m., Stat)

- Review of production theory
- Competitive equilibrium
- Partial equilibrium analysis
- Literature: Rubinstein Lect. 6, p.84-89, MCWG ch. 10 A-C

Session 8: General equilibrium (22-1-20, 9 a.m., Stat)

- Exchange economies
- Closed economies with production
- Equilibrium and welfare
- Literature: MCWG ch. 15 A-C; MCWG 16

Session 9: Equilibrium properties (23-1-20, 9 a.m., Stat)

- Compactness, convexity, and continuity
- Brouwer's fixed point theorem
- Fixed points and equilibrium existence
- Equilibrium uniqueness and stability
- Literature: Jehle and Reny (2011), Ch.A.1, Elements of MCWG ch. 17-18

Session 10: Core equivalence (24-1-20, 9 a.m., FiWi)

- The concept of the core
- the core and general equilibrium