

PhD Course: Microeconomics

Markus Walzl*

Revised Version – Winter 2011-12

Objectives

The course provides an in-depth discussion of key-concepts of microeconomic theory. Focusing on individual decision making (week 1) and equilibrium theory (week 2), central theoretical concepts and proof techniques of modern microeconomics 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 microeconomic theory 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.
- *Preparatory reader*: Students are asked to read certain parts of chapters of MCWG or Rubinstein 2010 (see schedule) as a preparation for a session.
- *Lecture*: Key concepts from the corresponding chapters complemented by additional material are presented in the session.
- *Problem sets*: Special emphasis is given to the joint reproduction of the proofs of landmark results and group discussions of problem sets. Grading will be based on a midterm and a final exam with questions similar to the problem sets.

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Schedule

Session 1: Preferences and utility

- Choice sets and revealed preference relations
- Preference axioms and utility representation
- Literature: Rubinstein Lect. 1; MCWG ch. 1

Session 2: Continuity

- Continuous preferences
- Debreu's Theorem
- Literature: Rubinstein Lect. 2

Session 3: Choice

- Weak axiom of revealed preference
- Psychological motives
- Rational choice and rationalizability
- Literature: Rubinstein Lect. 3

Session 4: Consumer Choice

- Preference properties and utility representation
- Weak and strong axiom of revealed preferences
- Walras' law and law of demand
- Literature: Rubinstein Lect. 4-5
- Further Reading: MCWG ch. 2 and 3A-D

Session 5: Production

- Review of production theory
- Literature: Rubinstein Lect. 7
- Further Reading: MCWG ch. 5

Session 6: Review session

- Concluding discussion of decision theory (week 1 of the course)
- Discussion of problem sets

Session 7: Expected utility and attitudes towards risk

- vonNeumann-Morgenstern Axiomatization
- Subjective expected utility
- Risky decisions
- Literature: Rubinstein Lect. 8-9, MCWG ch. 6

Session 8: Non-expected utility and recent developments

- Empirical assessment of expected utility
- Alternative approaches to decision making under risk
- Literature: Starmer, Ch. (2000) Developments in non-expected utility theory: the hunt for a descriptive theory of choice under risk, *Journal of Economic Literature* 38, 332-382 and Friedman, D. and S. Sunder (2011), *Risky Curves: From Unobservable Utility to Observable Opportunity Sets*, Yale University.

Session 9: Perfect competition

- Partial equilibrium analysis
- Marshallian demand and supply
- Literature: MCWG ch. 10A-C

Session 10: General equilibrium

- Exchange economies
- Robinson Crusoe economies
- general definition
- Literature: MCWG ch. 15A-C,16 A-B

Session 11: General equilibrium and welfare

- First and second fundamental theorem of welfare economics
- Welfare measures
- Literature: MCWG ch. 16 C-D

Session 12: Existence and uniqueness of general equilibrium

- Equilibrium existence and uniqueness
- Comparative statics
- Equilibrium stability
- Literature: MCWG ch 17A-H

Literature

Main references

- Rubinstein, A. (2010), *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 Ecampus page of the course.