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Syllabus for Advanced Microeconomics. Part Five and Six

Winter Term 2020/21

Time and Location

- 5th January 2021, 14:00-17:30 conference room, IWH
- 12th January 2021, 14:00-17:30 conference room, IWH

Description

This third part of the PhD course “Advanced Microeconomics” provides a comprehensive coverage of the microeconomic theory of Expected Utility Theory, General Equilibrium Theory under Uncertainty as well as Game Theory (Static and Dynamic Games of Complete Information).

- You learn about Expected Utility Theory and apply it to General Equilibrium Theory.
- You understand the solution concepts of static and dynamic games of complete information.
- You learn how to derive key insights of these contents using appropriate mathematical tools.

Prerequisites

A solid background of microeconomic theory. Joy of learning and discovery.

Literature

The course will be based on the book:

Mas-Colell, A., Whinston, M. D., & Green, J. R. (1995). *Microeconomic theory* (Vol. 1). New York: Oxford university press.

You are expected to read the relevant chapters of the book covered in class. Additionally, the course draws from several other sources that you are expected to read, too. Please note: The slides and notes will not substitute attending the class nor reading the material. They intend to help you to follow and understand the contents of the course.

Contents and required reading

1. Expected Utility Theory

- Mas-Colell, Whinston., & Green (1995), chapter 6, A-D.
- Supplementary: Kreps, D. M. (1988). *Notes on the Theory of Choice*. Boulder: Westview Press, chapter 5 and 6.

2. General Equilibrium Theory under Uncertainty

- Mas-Colell, Whinston., & Green (1995), chapter 19, A-E.

3. Static Games of Complete Information

- Mas-Colell, Whinston., & Green (1995), chapter 7 and 8, A-B and D.
- Supplementary: Gibbons, R., (1992). *Game Theory for Applied Economists*. Princeton University Press, chapter 1.

4. Dynamic Games of Complete Information

- Mas-Colell, Whinston., & Green (1995), chapter 9, A-B.
- Supplementary: Gibbons, R., (1992). *Game Theory for Applied Economists*. Princeton University Press, chapter 2.

Examination/Assessment

After every block of lectures, you will receive a problem set which you need to solve within a week. In total there will thus be two problem sets that you need to solve. Over the entire four parts of the advanced microeconomics course (from which this one here will be the first), you will receive eight problems sets in total form which you have to pass six to pass the entire course.