Advanced Microeconomics II

Lecture

lectured by Dr. Bodo Knoll (in English) Office hour: tba Lecture starts April 25, 2019 in HS 2006, 8:15 am

Advanced Microeconomics II

(Game Theory and Applications)

Game theory is a formalized theory of strategic interaction. What a player's best choice is depends on the choice of the other players, and how other future choices are influenced by the history of choices and also future choices. Thence, players' strategies, information and expectations are formed by the group. The course provides an introduction to classical and evolutionary game theory with a focus on applications of these concepts in different fields of economics.

Applications range from individuals within firms, private life, firms competing in markets and nations engaged in international negotiations.

Course outline

- 1. Basic Concepts
- 2. Elimination of Dominated Strategies
- 3. Pure Strategy Nash Equilibria
- 4. Mixed Strategy Nash Equilibria
- 5. Subgame Perfection
- 6. Repeated Games
- 7. Evolutionary Stability
- 8. Bayes' Rule and Private Information
- 9. Signaling and Screening
- 10. Principal Agent Models

<u>Reading list</u>

Gintis, Herbert, Game Theory Evolving, A Problem-Centered Introduction, 2nd edition, 2009.