



4th LJUBLJANA DOCTORAL SUMMER SCHOOL
3 - 21 July 2017

10-14 July 2017, from 9.00 to 16.00

Course title:

BEHAVIORAL GAME THEORY

ECTS credits: 6

Lecturer: Professor Philipp Otto, European University Viadrina, Germany

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AIMS OF THE COURSE:

The intensive course provides an overview of the basic concepts of game theory and how these can or cannot be applied in different decision making contexts. Game theory is a way of formalizing strategic situations. Part of the course is teaching you strategic considerations that can be taken into account when making your choices. Furthermore, game theory can help to predict other peoples' choices or the behavior of organizations once they are in strategic settings with consequences for your own behavior. Diverse empirical methods will be introduced, concentrating on explanatory experiments and their various outcomes.

Basic introduction into game theory and its application in behavioral and experimental settings. First knowledge but mainly interest in formal theory and abstract thinking is needed. A basic mathematical understanding for modeling decision making is useful, but not required. The reading list has to be acquired before the start of the course. It includes general primers as well as state of the art publications for each of the topic.

COURSE SYLLABUS:

The course focuses on the behavioral observations for different aspects of game theory. The five days will be structured according to the basic components of game theory with its corresponding experimental investigations and various outcomes.

I: Normal Form Games & Nash Equilibrium

II: Extensive Form Games & Backward Induction

III: Mixed Strategies, Asymmetric Information & Signaling

IV: Repeated Games, Evolutionary Stable Strategies & Learning

V: Presentations, Wrapping-Up & Exam

LIST OF READINGS:

- . Erik Agner (2012): A Course in Behavioral Economics, Palgrave Macmillan.

- Colin F. Camerer (2003): Behavioral Game Theory: Experiments in Strategic Interaction, Princeton University Press.
- Prajit K. Dutta (1999): Strategies and Games: Theory and Practice, MIT.

TEACHING METHODS:

Besides the general introduction into the necessary material, experimentation, active participation, and group work are the main teaching methods of the course. Each session includes theoretical components and practical illustrations. The material is enriched by diverse concrete examples, actively playing the games, and the discussion of its various cases for application.

Acquired skills are strengthened in continuous knowledge tests (20%) and a final exam (40%). Part of the individual evaluation is also the participation in the discussion (20%) and the group assignments which includes a presentation (20%).

Lecturer's Biographical Note:

Dr. Philipp E. Otto is specialized in Experimental Economics and Behavioral Game Theory. In 2007 he received his PhD from the University College London (UCL). He supported the LESSAC research team at ESC Dijon on experiments in consumer behavior as well as giving classes in statistics and organization management. Currently he is working for the DFG (German Science Foundation) on a project on threshold public goods at the Microeconomics Department of the Viadrina University in Frankfurt (Oder), Germany. Research interests include, among others, matching markets and price bargaining, social motives and learning, cognitive heuristics and strategy selection. Publications of his appeared in international journals such as the Journal of Socio-Economics, the Journal of Experimental Economics, the Journal of Applied Cognitive Psychology, Economica, and Kyklos.