

Game Theory, Fall 2016

Lecturer: Péter Vida, vidapet@gmail.com

Lectures: Wednesdays, 14.00-17.15, Room UCP 442

Description of the course

The course introduces the main concepts and tools of game theory with the aim to enable you to read original game-theoretic literature and to prepare you to do research in the field. You will learn how to represent an economic situation as a game (part 1) and how to analyze it using different equilibrium concepts proposed in the literature, the prominent one being the Nash equilibrium (parts 2 and 3). In part 4, we will concentrate on strategic interaction under incomplete information and include the uncertainty of the players about some of the parameters of the game. Often, an equilibrium concept fails to provide a unique solution to the game. In part 5, we will deal with the problem of indeterminacy in games in extensive form and introduce refinements of the Nash equilibrium. In part 6, we discuss adverse selection and moral hazard. In part 7, we touch upon mechanism design and implementation. In part 8, we analyze some repeated games.

Requirements

Problem sets will be distributed during the term and must be solved before discussed during the sections. A final exam will be held in December.

Recommended books

- Fudenberg, D., Tirole, J. (1991). Game Theory, MIT Press, Cambridge, Massachusetts.
- Osborne, M., Rubinstein, A. (1994). A Course in Game Theory, MIT Press, Cambridge, Massachusetts.
- Mas-Collel, A., Whinston, M. D., Green, J. R. (1995). Microeconomic Theory, Oxford University Press, New York, Oxford.

Course materials

Lecture slides, problem sets and other course-related material are available online at: <https://sites.google.com/site/aniguerdjikova/home/teaching/master>