Syllabus

Advanced Micro: Information Economics

Department of Economics and Business
CENTRAL EUROPEAN UNIVERSITY

- **Instructor:** Marc Kaufmann; Office: 402, Nador 13; Email: KaufmannM@ceu.edu
- **Credits:** 2 CEU (4 ECTS)
- **Term:** Winter 2017-2018
- **Course level:** PhD
- **Prerequisites:** Micro I and Micro II

Course description

To familiarize students with the basic concepts, models, and methods in information economics, the study of the effects of information asymmetries on economic outcomes. The topics covered are:

- Adverse Selection in Markets
  - Akerlof's lemons model
- Nonlinear Pricing
  - The basic two-type model of hidden information
  - Competitive screening
- Moral Hazard
  - The basic two-effort model of hidden action
  - Career concerns
- Mechanism Design
  - Pivotal mechanisms
  - The revelation principle
  - Auction theory

Learning outcomes

Understanding of the basic models used to capture the various effects of asymmetric information: adverse selection, nonlinear pricing, moral hazard, mechanism design. Learning techniques to solve these models. Ability to spot when asymmetric information is an important aspect of an economic situation, and to identify the type of asymmetry at play and the modeling tools to use.

Reading list

There is a very nice textbook on information economics and contract theory: "Contract Theory" by Patrick Bolton and Mathias Dewatripont, MIT Press, 2005. Although the book covers much more material than this course, it may be useful for understanding some of the topics in the class,for finding applications, and as a reference. But the only required readings are relatively detailed lecture notes from Botond Kőszegi. I will post relevant notes on the

class website around the time the material is covered in class. These lecture notes draw from a variety of sources, including the "Contract Theory" book, Mas-Colell/Whinston/Green, some other published work, and others' (mostly unpublished) lecture notes. Since these are not my notes and since they have not been edited to the standard of publishable texts, please ask for permission before circulating!

Assessment

There will be 3 problem sets in the course. Each problem set is due at the beginning of class on the given day. The problem sets will not be graded, but 10% of your grade (3.33% per problem set) depends on submitting the problem sets, which includes having attempted the questions. This is to drive home the point that it is essential for you to work on the problem sets essential to understand the material.

The schedule for the problem sets is as follows:

1. Problem set 1 is uploaded on on January 8th and due on January 17th.

2. Problem set 2 is uploaded on January 17th and due on January 31st.

3. Problem set 3 is uploaded on January 31st and due on February 12th.

The final will be held in the final week of class. The grade will be determined 90% by the final and 10% by the timely submission of (but not performance on) the problem sets.