

## COURSE SYLLABUS

# Advanced Micro: Information Economics Central European University Winter 2017

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Corvinus University of Budapest, Department of Finance

Course level: MA, PhD

# Credits (# ECTS Credits): 2

Course e-learning site: <http://ceulearning.ceu.edu/course/view.php?id=6401>

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### Course Description

The aim of the course is to familiarize students with the basic concepts, models, and methods in information economics, the study of the effects of information asymmetries on economic outcomes.

### 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.

### Course Requirements

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 count toward the grade, but it is essential for understanding the material that you do them.

The grade will be determined entirely by the final.

### Readings

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. We will post the notes of Botond Kőszegi on the class website around the time the material is covered in class. His 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including the "Contract Theory" book, Mas-Colell/Whinston/Green, some other published work, and others' (mostly unpublished)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. The relevant sources are indicated at the beginning of each set of notes. Botond Kőszegi writes:

“To make it easier for you to go back to these sources, I tried to make the notation in the notes as consistent as possible with the most relevant source. The notes have not been subjected to the kind of scrutiny that is expected of published papers. Please ask for my permission before circulating!”

### **Topics**

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