Economics 206: Agency and Mechanism Design

Description

This is focused on the foundations of contract theory (also known as incentive theory) and its basic methods from mechanism design. Part I of the course carefully analyzes the hidden information (adverse selection) principal-agent model and its application to contracts. It covers the simple one agent model, and the multi-agent model using the set-up of mechanism design. Part II is devoted to the theory of Moral Hazard and its applications. Time permitting, part III concentrates on the Theory of the Firm and Incomplete Contracts.

Prerequisites

First year Microeconomics at the PhD level.

Requirements & Grades

Problem Sets: During the semester students will be required to hand in 3 problem sets. The problem sets are due a week after they are distributed. You are strongly encouraged to work in teams, but the product you turn in must be individual work.

Final exam: A final take-home exam will be distributed at the end of the semester that will be due in 24 hours. These should not be done in teams but rather individual work is required.

Final grade: The final grade will consist of 75% problem sets and 25% final exam.

Readings

A set of detailed notes will be made available on the web. There is also a list of articles, those marked with an asterisk are highly recommended, and other articles are supplemental to the material. Most articles are available through JSTOR on the web, or can be found in the library.
Syllabus

I. Hidden Information (Adverse Selection)

I.1 Static Models.


(*) Baron, D. and R. Myerson (1982), "Regulating a Monopolist with Unknown Cost," *Econometrica* **50**:911-930


I.2 Mechanism Design and Multiple Agents

The General Mechanism Design Problem: The Revelation Principle


(*) MWG Ch.23 section C


Bayesian Implementation: The Expected Externality (AGV) mechanism

(*) MWG Ch.23 section D


Bayesian Implementation: The Linear Utility Case with Participation Constraints

(*) MWG Ch.23 sections D & E


**I.3 Dynamic Models and Renegotiation**


**III. Moral Hazard (Hidden Action)**

**III.1 Static One-Agent Models**


MWG Ch. 14 section B


III.2 Static Multi-Agent Models


III.3 Dynamic Models and Renegotiation


### III.4 Multi-Task Analysis


### IV. Theory of the Firm

IV.1 Established Views of the Firm


**IV.2 Incomplete Contracts and Renegotiation**


