CONTRACT THEORY
Ph.D. course, Stockholm University 2012
Jens Josephson

ABSTRACT
This course will provide an overview of important areas of the economics of information. It will cover classic papers of contract design under asymmetric information (moral hazard and adverse selection models), mechanism design and auctions, and, if time permits, also reputation.

EXAMINATION
The examination will consist of weekly problem sets, presentations of articles, and an exam.

TOPICS
1. MORAL HAZARD I: STATIC BILATERAL
2. MORAL HAZARD II: MULTIAGENT AND DYNAMIC
3. ADVERSE SELECTION I: STATIC BILATERAL
4. ADVERSE SELECTION II: DYNAMIC, SIGNALING, AND CHEAP TALK
5. AUCTIONS AND MECHANISM DESIGN
6. REPUTATION

LITERATURE

General Treatments
Osborne and Rubinstein (1994), A Course in Game Theory, MIT Press.

0. Introduction

1. Moral Hazard I: Static bilateral


2. Moral hazard II:

   a) Multiagent


   b) Dynamic


3. Adverse Selection I: Screening


4. Adverse Selection II:

a) Signaling, and Cheap Talk


b) Dynamic


5. Auctions and Mechanism Design

(http://www.stanford.edu/~jacksonm/mechtheo.pdf)

6. Reputation


7. Presentations

Pick an article on information economics of your choice – either among the ones listed below or a different one – but check your choice with me before you start preparing your presentation.


**Prerequisites**

I will assume a basic knowledge of the following:

- First-order stochastic dominance
- Expected utility and risk-aversion
- Optimization with inequality constraints: Kuhn-Tucker
- Basic game theory:
  - Dominated strategies
  - Nash Equilibrium
  - Games of incomplete information
  - Bayesian (Nash) Equilibrium
  - Subgame-perfect Equilibrium
  - (Weak) Perfect Bayesian Equilibrium
  - Notions of repeated games (such as MWG 12.D)