This course is research oriented. It gives a rigorous review, based on the current literature, of the economics of strategic behavior, informational economics, principal-agent theory, and economic design. These areas are central to modern research in microeconomic theory and its applications. Applications include the theory of contracts; incentive compatible mechanisms for provision of public goods; bargaining; auction theory and others. Coverage may vary depending on students’ research interests. Active student participation, including class presentations, is essential.

**Reading** The textbook for the course is:

Additional texts:

Selected journal articles to be distributed in class

**Assessment** Assessment in this class will consist of problem sets and exam; class presentations and participation; and research proposal on a topic related to the class. The proposal should include the statement of the problem, literature review, and the proposed model (or experimental design). It should not exceed 20 pages. While reading papers for the class, think of the ways of extending or improving them, or applying their results to problems in applied economics. This could lead you to a good research idea.
TENTATIVE SYLLABUS

1. **Introduction.** Economics of information and incentives.

2. **Preliminaries.** Decision-making under uncertainty. Review of game theory.

3. **Market failure with asymmetric information.** Akelrof’s market for lemons. Signaling and screening.

4. **Principal-agent problems.**
   (a) The hidden action model. The first order approach and its validity. Application: managerial incentives and employee compensations.
   (d) Generalized Principal-Agent models. Linear incentive scheme. Auctioning incentive contracts. Dynamics and the problem of commitment.

5. **Incomplete contracts and the theory of the firm.**

6. **Mechanism design.**
   (a) The mechanism design approach.
   (b) Bargaining. Optimal 2-person bargaining. Dividing a partnership efficiently.
   (c) Public goods. Dominant strategy mechanisms. Nash equilibrium mechanisms. Experimental evidence.

RECOMMENDED TEXTS


**READING BY TOPICS**

1: Introduction.

Myerson, 1989


Milgrom and Roberts, Chapters 1-5

2: Preliminaries.

MWG, Chapters 6, 7-9.

Varian, Chapters 11, 15.


3: Market failure with asymmetric information.

MWG, 13; Kreps, 17; Varian, 25.9-25.11
Salanie, 4.


**4a: Hidden action.**


Salanie, 5.1-5.3.4.


Milgrom and Roberts, chapters 6-8, 12-13.


**4b: Hidden action with multiple agents**

Laffont, 1989, 11.3-11.5.

Salanie, 15.3.5-15.4, 6.5.


4c: Hidden information


Salanie, chapters 2-3.


4d: Generalized Principal-Agent models


Laffont, Tirole. "Auctioning Incentive Contracts."


5: Incomplete contracts and the theory of the firm.


Salanie, 7.

Milgrom and Roberts, chapter 9.


6a: The mechanism design approach.

MWG 23.A-23.B.


Myerson, 1989.


6b: Bargaining


6c: Public Goods


6d: Auctions


Harris and Raviv

Myerson

Maskin and Riley

Milgrom and Weber

Ausubel and Cramton

Spectrum Auction