

Economic Theory, syllabus for Winter 2012

Andrea Mattozzi

- **Classes:** Tue/Thu 17.15-19.15.
- **TA:** TBA
- **Office Hours:** Thursday from 15 to 17.
- **Required Texts:**
 1. Mas-Colell A., Whinston M.D., and Green J.R., 1995, *Microeconomic Theory*, Oxford;
 2. Reny P. and Jehle G., *Advanced Microeconomic Theory*, 2nd edition, Addison Wesley.
- Recommended extra text: Salanie B., *The Economics of Contracts*, MIT.
- **Course Objectives:** This course introduces you to market failures such as asymmetric information, externalities, public goods, and agency problems. Topics include: models of asymmetric information in markets, including screening, signaling, and lemons; markets with externalities or public goods; optimal contracts, principal-agent models with hidden actions, and principal-agent models with hidden information; mechanism design and the revelation principle; voting.
- **Course Requirements:** There will be the usual final exam. Problem sets need to be turned in, but won't be graded.

Subjects and readings

- Material for first week:
 1. Inefficient market equilibria when there are unobservable private characteristics that are relevant for the competitive prices. MWG 13, A and B.
 2. Adverse selection and markets with signaling; MWG-13C, JR-8.1, [7].
 3. Competitive screening; in labor markets: MWG-13D and [4]; in insurance markets: JR-8.1.
- Material for second week:
 1. Moral hazard and the principal agent problem in insurance and labor markets; MWG-14, JR-8.2.
 2. Monopolistic screening; MWG-14C.
 3. Principal-agent model with hidden information and hidden action.

- Material for third week:

1. Left-overs from the theory of complete contracts;
2. Contingent contracts vs. incomplete contracts.
3. Incomplete contracts and the theory of the firm. Chapters on Salanie's book.

- Fourth week:

1. Externalities and bargaining with asymmetric information. From Coase theorem to Myerson and Satterthwhite;
2. Social choice, implementation and mechanism design, taking public good provision and collective decision making as main topics. Items from Chapters 22 and 23 of MWG.

- Last week:

1. Continuing implementation and mechanism design;
2. Cooperative and non-cooperative theories of group behavior.

Additional readings (tentative list)

[1] Akerlof G., "The Market for Lemons: Qualitative Uncertainty and the Market Mechanism," QJE, 1970.

[2] Groves T., and J. Ledyard, "Optimal Allocation of Public Goods: A Solution to the Free Rider Problem," ECTA, 1977.

[3] Riley, J.G., and W. Samuelson, "Optimal Auctions," AER, 1981.

[4] Rothschild, M., and J. Stiglitz, "Equilibrium in competitive insurance markets: An essay on the Economics of Imperfect Information," QJE, 1976.

[5] Samuelson P., "The Pure Theory of Public Expenditure," REStat, 1954.

[6] Samuelson P., "Diagrammatic Exposition of a Theory of Public Expenditure," REStat, 1955.

[7] Spence, M., "Job Market Signaling," QJE, 1973.

[8] Wilson, R., "A Model of Perfect Competition," REStud, 1977.