European University Institute

Economic Theory, syllabus for Winter 2011

Massimo Morelli

• Classes: Tue/Thu 11-13.

• TA: David Strauss.

• Office Hours: Thursday from 9 to 11.

• Required Texts:

- Mas-Colell A., Whinston M.D., and Green J.R., 1995, Microeconomic Theory, Oxford;
- 2. Reny P. and Jehle, *Advanced Microeconomic Theory*, 2nd edition, Addisen 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:

- 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, [8].
- 3. Competitive screening; in labor markets: MWG-13D and [5]; in insurance markets: JR-8.1; in credit markets: [2].

• Material for second week,

- 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;
- 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 noncooperative theories of group behavior.

References

- [1] Akerlof G., "The Market for Lemons: Qualitative Uncertainty and the Market Mechanism," QJE, 1970.
- [2] Ghatak M, M. Morelli and T. Sjöström (2007), Journal of Economic Theory.
- [3] Groves T., and J. Ledyard, "Optimal Allocation of Public Goods: A Solution to the Free Rider Problem," *Econometrica*, 1977.
- [4] Riley, J.G., and W. Samuelson, "Optimal Auctions," AER, 1981.
- [5] Rothschild, M., and J. Stiglitz, "Equilibrium in competitive insurance markets: An essay on the Economics of Imperfect Information," *QJE*, 1976.
- [6] Samuelson P., "The Pure Theory of Public Expenditure," Review of Economics and Statistics, 1954.
- [7] Samuelson P., "Diagramatic Exposition of a Theory of Public Expenditure," Review of Economics and Statistics, Vol. 37, 1955.
- [8] Spence, M., "Job Market Signaling," QJE, 1973.
- [9] Wilson, R., "A Model of Perfect Competition," Review of Economic Studies, 1977.