

European University Institute

Economic Theory, syllabus for Winter 2010

MASSIMO MORELLI

- **Classes:** MWF 11-13, one of which by the TA, Niall Hughes;
- **Office Hours:** Thursday from 9 to 11.
- **Required Texts:**
 1. Mas-Colell A., Whinston M.D., and Green J.R., 1995, *Microeconomic Theory*, Oxford;
 2. Reny P. and Jehle, *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. Even though the grade is decided exclusively on the basis of the final exam, it is a requirement to always turn in the problem sets, since it is going to be crucial preparation. There will be four problem sets.
Final Exam: week of February 22.

Subjects and readings

- Material for first week, starting on Wednesday January 13 and continuing on Friday January 15:
 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, [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, with lectures on M and W and TA recitation on F on problem set of first 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, same allocation as in second 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, same allocation:
 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 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., “Diagrammatic 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.