

Microeconomics II

Allievi and Master in Economics Programmes Second Term 2009/10

Lecturer: Esteban Jaimovich

Term: Spring Semester

Office Hours: Fridays 11-12 noon or by appointment.

Part I: Game Theory (5 Lectures + 2 Tutorials)

1. Static Games with Complete Information
 - a. Strict and Weak Strategic Dominance.
 - b. Nash Equilibrium.
 - c. Applications to the Oligopoly Theory.

Bibliography: Osborne, chapters 2 and 3; O & R, chapters 1 and 2.

2. Mixed Strategies

Bibliography: Osborne, chapter 4; M-C, W & G, chapter 8.D

3. Extensive Games with Complete Information

- a. Backwards induction.
- b. Subgame Perfect Equilibrium.

Bibliography: Osborne, chapter 5; O & R, chapter 6.1, 6.2, 6.4, 6.5

4. Repeated Games

- a. Reputation.
- b. Bargaining Games.

Bibliography: Gibbons, chapter 2.3; Osborne, chapter 14; O & R, ch. 7.1, 7.2, 7.3

Part II: Economics of Information (7 Lectures + 2 Tutorials)

1. Introduction (1 lecture)
 - a. Types of Asymmetric Information
 - b. The Baseline Model

Bibliography: M.S. & P.C., chapters 1 and 2.

2. Moral Hazard (2 lectures)

- a. The Basic Principal-Agent Model – two-effort case and overview of continuous-effort case.
- b. Linear Contracts.
- c. Applications: *i*) incentives for managers, *ii*) credit rationing.

Bibliography: M.S. & P.C., chapter 3 (except sections 3.6, 3.7 and 3.C);

M-C, W & G, chapter 14.B.

3. Adverse Selection (3 lectures)

- a. The two-type case.
- b. The market for “lemons” (market unravelling in continuous-type case)
- c. Applications: *i*) insurance markets, *ii*) credit rationing.

Bibliography: (for 4.a and 4.c) M.S. & P.C., chapter 4 (except sections 4.4 and 4.C); (for 4.b) M-C, W & G, chapter 13.B.

4. Signalling (1 lecture)

- a. Quick Review of Bayesian Games (Bayesian Perfect Equilibrium).
- b. Signalling games.
- c. Education choice as a Signal.

Bibliography: (for 4.a and 4.b) Gibbons, chapter 3.1, and chapter 4.1 and 4.2.A; (for 4.c) M-C, W & G, chapter 13.C.

Evaluation Method

Evaluation consists in two exams: a *mid-term exam*, which corresponds to Part I of the programme; and a *final exam*, which covers the topics in Part II. The mid-term exam accounts for 40% of the final mark. The final exam accounts for the remaining 60% of the final mark.

Main Bibliography

- Osborne, "An Introduction to Game Theory". Oxford University Press. 2004.
- Osborne and Rubinstein, "A Course in Game Theory". MIT Press. 1994.
- Robert Gibbons, "A Primer in Game Theory". Princeton University Press. 1992.
- Macho Stadler and Perez Castillo, "An Introduction to the Economics of Information". Oxford University Press. 2001. 2nd edition.
- Mas-Collel, Whinston and Green, "Microeconomic Theory". Oxford University Press. 1995.

Secondary Bibliography

- Acemoglu D. and Zilibotti F., (1999): "Information Accumulation in Development", *Journal of Economic Growth*, 4, 5-38.
- Aghion P. and Bolton P., (1997): "A Theory of Trickle-Down Growth and Development", *Review of Economic Studies*, 64, 151-172.
- De Meza D. and Webb D., (2000): "Does Credit Rationing Imply Insufficient Lending?", *Journal of Public Economics*, 78, 215-234.
- Van Tassel E., (1999): "Group Lending under Asymmetric Information", *Journal of Development Economics*, 60, 3-25.
- Ghatak M., (1999): "Group Lending, Local Information and Peer Selection", *Journal of Development Economics*, 60, 27-50.
- Ghatak, Morelli and Sjostrom (2001): "Occupational Choice and Dynamic Incentives", *Review of Economic Studies*, 68, 781-810.