

WWS 511d. Microeconomic Analysis (Accelerated)
Fall 2002
TTh 2:40 PM-4:10 PM

Guido Lorenzoni
Room: 418, Robertson Hall
Email: guido@princeton.edu

This course covers the basics analysis of competitive markets and introduces some of the tools used to analyze non-competitive markets, markets with asymmetric information and contracts. The emphasis will be on a unified approach to the formal modeling of economic behavior. This approach starts from individual decision-making and builds on this foundation to derive predictions on aggregate economic outcomes.

The course is intended for students who have already developed familiarity with the concepts of microeconomics (at the level of 511c) and who are interested in developing the technical skills necessary to access the current economic literature. Lectures will move more quickly to cover the theoretical aspects of the subject and more time will be spent on how to apply the theory to specific contexts of policy relevance.

Mathematical prerequisites are: calculus, basic probability and some familiarity with linear algebra.

The textbook is:

H. Varian, *Microeconomic Analysis*, W. W. Norton & Company, 1992

Other suggested textbooks are

G. A. Jehle, P. J. Reny, *Advanced Microeconomic Theory*, Addison-Wesley, 2000

A. Mas-Colell, M. D. Whinston and J. R. Green, *Microeconomic Theory*, New York and Oxford, Oxford University Press, 1995

The latter is a more advanced textbook recommended for PhD students.

Course outline

(numbers in parenthesis refer to chapters in Varian)

A. Decision Making

1. Consumer Choice (7)

2. Classical Demand Theory (8.1-8.6)

Duality, Expenditure Minimization, Properties of the Slutsky Matrix, Price Indices, Aggregation and the Representative Consumer

3. Production (1,2,3,4,5)

4. Choice under Uncertainty (11.1-11.7)

Expected Utility, Orderings of Distributions, Risk Aversion

B. Competitive Equilibrium

5. General Equilibrium in a Quasi-linear economy (taxes and deadweight loss) (13)
6. I and II Welfare Theorems. The relations between competitive equilibria, Pareto optima and optima of a social planner problem (17.1-17.4,17.6-17.9)
7. General Equilibrium under Uncertainty, Complete and Incomplete Markets
Insurance and Asset Markets
8. Externalities and Public Goods (23.1-23.5,24)

C. Market Power, Information and Contracts

8. Elements of Non-cooperative Game Theory (15.1-15.11)
9. Monopoly Pricing, Oligopoly, Competitive limit (14.1-14.3,16.1-16.5)
10. Adverse Selection and Moral Hazard (class notes)
11. Asymmetric information and non-linear mechanisms (taxation) (class notes)