

Course outline

Preparatory course in Microeconomics, 2023-2024

Master of Science in European Economy and Business Law

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Schedule: 04/09/2023 to 15/09/2023, Monday to Friday, 11.30am-1.00 pm (15 hours).

Outline and objectives: The first week will be devoted to the axiomatic foundations of microeconomics and the theory of consumption.

In the second week, we will review the theory of production, the partial equilibrium with competitive markets and the theory of monopoly.

Some extra topics that we will try to cover are: choice under uncertainty, hints to social welfare comparisons and to general equilibrium effects.

Topics (detail):

1. **Introduction.** Definition of microeconomics; axiomatic foundations of decision theory; understanding the utility function.
2. **Theory of consumption, I.** The budget set, the indifference curves and the marginal rate of substitution.
3. **Theory of consumption, II.** Constrained optimization with example utility functions; *hints to: substitute and complementary goods, income and substitution effects.*
4. **Theory of consumption, III.** Understanding the demand function; computing demand elasticity and the consumer surplus.
5. **Theory of consumption, extra I.** Hints to choice under uncertainty, risk-aversion and insurance.
6. **Theory of consumption, extra II.** Hints to social welfare: Pareto-optimality and equity-efficiency tradeoffs.
7. **Theory of production, 1.** The firm as a production technology; isoquants, isocosts; profit-maximization problem and optimal factor demand.
8. **Theory of production, 2.** Cost-minimization problem and the geometry of costs; the supply function; fixed and variable costs.

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9. **Market equilibrium, 1.** Competitive equilibrium; efficiency of partial equilibrium; if there is time, the effect of a price cap and the deadweight loss.
10. **Market equilibrium, 2.** Monopolistic equilibrium; surplus comparison with competition; if there is time, effect of a price cap revisited.
11. **Market equilibrium, extra.** Examples of general equilibrium effects.

References: Varian, H.R. (2010), *Intermediate Microeconomics: a modern approach*, 8th edition, WW Norton & Company.

The CORE team, The Economy. Available at: <https://www.core-econ.org>.