

Advanced Microeconomics
Microeconomía Avanzada(14700001)
Teoría del Equilibrio General (14700001)
Universidad del Rosario - Facultad de Economía
Semestre 2017 - II

Syllabus

Instructors: Mariana Blanco and Çağatay Kayı.

Class Hours: Mondays and Wednesdays: 9:30 – 11:00.

Lecture Hall: CASUR 302.

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Office Hours: Thursdays: 9:00 – 11:00. Otherwise, please e-mail me to arrange a mutually convenient time.

Teaching Assistant: Nathalie Basto Email: nathalie.basto@urosario.edu.co.

Problem Sessions: Fridays 7:00 – 9:00, TBA.

Objectives: This course is aimed for students in the Master of Economics. The course introduces and explores theory of consumption, theory of production, theory of general equilibrium and the welfare properties of competitive equilibria, externalities, public goods, social choice theory, cooperative bargaining, and an application of competitive equilibrium. The purpose of the course is to introduce advanced theories and analytical tools as well as the types of questions that are used and answered in each area. The topics covered in this course are important since they are either basic analytical tools that are used in many fields of economics or basic economic theories that will be needed in your future study and bring you to the frontier of theoretical research.

Requirements:

There are lectures (twice a week) and a problem session (roughly every two weeks, starting from second week). Evaluation is based on two partial exams (29% each), unannounced surprise quizzes (10% in total) and a cumulative final exam (32%). There are problem sets that you do not have to hand them in but these problems are good preparation for the exams.

If a student misses an exam, we follow the regular procedure determined by the academic regulations. There are NO make-up exams without documented medical evidence that should be presented within one week of the exam. Failure to do so results in a score of zero on the missed exam. After the final, there is no rounding for grades and the grades are not subject to change unless there exists a well-founded claim.

The schedule is as follows:

- *First day of classes:* 9 August 2017, Wednesday.
- *First exam:* 6 September 2017, Wednesday.
- No classes on August 21, October 9 and 11 (Semana Rosarista), October 16, November 6 and 13.
- *Second exam:* 18 October 2017, Wednesday.
- *Last day of classes:* 29 November 2017, Wednesday.
- *Final:* 5 December 2017, Wednesday.

Course Outline:

1. Preference, Choice, and Utility.
 - (a) Preference Relations and Choice Rules.
 - (b) The Relationship Between Preference Relations and Choice Rules.
 - (c) Commodities, Consumption Sets, and Competitive Budgets.
 - (d) Demand Functions and Comparative Statistics.
 - (e) The Weak Axiom of Revealed Preferences and the Law of Demand.
2. Classical Demand Theory.
 - (a) The Utility Maximization Problem.
 - (b) The Expenditure Minimization Problem.
 - (c) Relationships between Demand, Indirect Utility, and Expenditure Functions.
 - (d) Welfare Evaluation of economic Changes.
 - (e) The Strong Axiom of Revealed Preference.
3. Aggregate Demand.
 - (a) Aggregate Demand and Aggregate Wealth.
 - (b) Aggregate Demand and the Weak Axiom.
 - (c) Aggregate Demand and the Existence of a Representative Consumer.
4. Production.
 - (a) Production Sets.
 - (b) Profit Maximization and Cost Minimization Problem.
 - (c) Aggregation.
5. Choice under Uncertainty.
 - (a) Expected Utility Theory.
 - (b) Money Lotteries and Risk Aversion.
 - (c) Comparison of Payoff Distributions in Terms of Return and Risk.
 - (d) Subjective Probability Theory.
6. General Equilibrium.
 - (a) Definitions.
 - (b) Basic Properties of Walrasian Equilibrium.
 - (c) The Edgeworth Box.
 - (d) Existence of Walrasian Equilibria.
 - (e) The Set of Equilibria for a Fixed Economy.
 - (f) The Equilibrium Correspondence.
7. General Equilibrium, Efficiency, and the Core.
 - (a) The First Theorem of Welfare Economics.
 - (b) The Second Theorem of Welfare Economics.
 - (c) Walrasian Equilibria are in the Core.
 - (d) In a Large Enough Economy, Every Core Allocation is a Walrasian-Equilibrium Allocation.

- (e) Externalities and Lindahl Equilibrium.
8. General Equilibrium, Time, and Uncertainty.
 - (a) A Framework for Time and Uncertainty.
 - (b) General Equilibrium with Time and Uncertainty.
 - (c) Equilibria of Plans, Prices, and Price Expectations: I. Pure Exchange with Contingent Claims.
 - (d) Incomplete Markets.
 9. Social Choice Theory.
 - (a) Social Choice and Paradox of Voting (Condorcet Paradox).
 - (b) Arrow's (Im)possibility Theorem.
 - (c) Arrow's Theorem without Transitivity.
 - (d) Single-peaked Preferences and Median Voter Theorem.
 - (e) Sen's Impossibility Theorem (Impossibility of Paretian Libertarianism).
 10. Cooperative Bargaining.
 - (a) Bargaining Problems and Properties of Bargaining Solutions.
 - (b) Egalitarian, Utilitarian, Nash, and Kalai–Smorodinsky Solutions.
 - (c) The Characterization of Nash Solution.
 - (d) Cooperative Bargaining and Pareto Frontier.
 11. An Application of Competitive Equilibrium: Housing Markets.
 - (a) Two-sided One-to-one Matching Problems: Marriage Problem.
 - (b) One-sided One-to-one Matching Problems: Roommate Problem.
 - (c) One-sided Matching Problems with Endowments: Housing Markets.
 - (d) Housing Markets and Competitive Equilibrium.
 - (e) One-sided Matching Problems without Endowments: House Allocation Problems.

Textbooks:

- Kreps, D.M. (1990). A Course in Microeconomic Theory. Princeton University Press.
- Kreps, D.M. (2013). Microeconomic Foundations I: Choice and Competitive Markets. Princeton University Press.
- Mas-Colell, A., Whinston, M.D., and Green, J.R. (1995). Microeconomic Theory. Oxford University Press.
- Rubinstein, A. (2006). Lecture Notes in Microeconomic Theory: The Economic Agent. Princeton University Press