

**COURSE DATA****Data Subject**

Code	44336
Name	Microeconomics
Cycle	Master's degree
Créditos ECTS	5.0
Academic year	2016 - 2017

Study (s)

Degree	Center	Acad. Period year
2202 - M.U. en Economía	FACULTY OF ECONOMY	1 First term

Subject-matter

Degree	Subject-matter	Character
2202 - M.U. en Economía	2 - Analytical and conceptual subject areas	Obligatory

Coordination

Name	Department
RUBIO JORGE, SANTIAGO JOSÉ	10 - ANÁLISIS ECONÓMICO
URBANO SALVADOR, M DESAMPARADOS	10 - ANÁLISIS ECONÓMICO

SUMMARY

Microeconomic theory is a set of consistent assumptions that aim to provide a systematic and realistic model of decision making for economic agents, and to use this framework to analyze socio-economic situations such as markets, bargaining, or social choice problems. The course introduces the fundamental tools that are needed for the analysis of these situations. We first introduce the concepts of choices and ordinal preferences, which is at the root of social choice theory. We then focus on the more specific case of competitive markets, and analyze the decision problem of the consumer (consumer theory). These tools lay the foundations for the analysis of the most fundamental market model, the perfectly competitive market model. Finally, we turn to stochastic environments and introduce the most fundamental results of the theory of decision under risk and uncertainty. These theories play a key role in the analysis of strategic situations.

A key methodological point in this course is to teach the students how to derive the properties of an economic model based a consistent set of assumptions and primitives. An important goal is to make them understand how assumptions translate into observable properties, and how theories can be tested and falsified.



The course covers Consumer Choice Theory, General Equilibrium Theory and Social Welfare. To study Market Failures, the student has learnt basic concepts of Game Theory that are required to analyze Public Goods and Externalities.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

RESULTADOS DE APRENDIZAJE

Competences and skills that will be acquired

General competencies:

- This course familiarizes the student with a set of tools appropriate for economic analysis.
- Set up and solve the most common decision problems economic agents' face.
- Autonomous and group learning.
- Analyze economic problems with precision and rigor.

Specific skills:

- Understanding of the basics of markets: Consumers Theories as well as General equilibrium in exchange economies. Efficiency and welfare. Market failures.
- Learning of how to develop models on the behavior of economic agents.
- Articulate hypothesis based on models.
- Evaluate the consequences al alternative policies.



DESCRIPTION OF CONTENTS

1. Consumer Theory

- 1.1. Preferences and choice.
 - 1.1.1. Preferences
 - 1.1.2. Rules of choice.
 - 1.1.3. Preferences and rules of choice.
- 1.2. Consumer choice
 - 1.2.1. Goods and consumption sets.
 - 1.2.2. The budgetary restriction.
 - 1.2.3. Demand functions and comparative statics.
 - 1.2.4. The weak axiom of revealed preference and the law of demand.
- 1.3. Classical demand theory.
 - 1.3.1. Preferences: basic properties.
 - 1.3.2. Preferences and utility functions.
 - 1.3.3. The utility maximization problem.
 - 1.3.4. Duality: the expenditure minimization problem.
 - 1.3.5. The demand function, the indirect utility function and the expenditure function
 - 1.3.6. Integrability.
 - 1.3.7. Aggregate demand.
- 1.4. Choice under uncertainty.
 - 1.4.1. The expected utility theory.
 - 1.4.2. Monetary lotteries and risk aversion.
 - 1.4.3. Monetary distributions in terms of rewards and risk. First order and second order stochastic dominance.
 - 1.4.4. Alternative theories.

2. General Equilibrium Theory

- 2.1 General equilibrium theory.
 - 2.1.1 Some examples.
 - 2.1.2 Exchange economies.
 - 2.1.3 The Walrasian equilibrium.
- 2.2. The first and the second welfare theorems.
- 2.3.1 The first welfare theorem.
- 2.3.2 The second welfare theorem.

3. Welfare Economics

- 3.1. Social welfare and the theory of social choice.
 - 3.1.1 Social welfare utility functions.
 - 3.1.2 The set of utility possibilities.
 - 3.1.3 Social optima.
 - 3.1.4 Social choice and Arrow's impossibility theorem.

4. Introduction to Game Theory: Strategic games with complete information.



4.1 Introduction: What is a game? What does game theory study? Strategic thinking: some examples. Game theory and economics.

4.2 Strategic games with complete information.

4.2.1 The strategic form of a game. Bipersonal games. Matrix representation of a game.

4.2.2 Dominant strategies: the prisoners' dilemma. Efficiency.

4.2.3 The best response functions of the players.

4.2.4 Nash equilibrium. Properties. Multiplicity.

4.2.5 Equilibria in mixed strategies.

5. Market Failures and the Second Best

5.1 Public goods.

5.2 Externalities.

5.3 The second best theory.

WORKLOAD

	Hours
CLASSROOM ACTIVITIES	
Theory classes	40.0
Classroom practices	10.0
Total Classroom activities	50.0
NON-ATTENDING ACTIVITIES	
Attendance at events and external activities	6.0
Study and independent work	36.0
Readings supplementary material	6.0
Preparing lectures	12.0
Preparation of practical classes and problem	12.0
Total Non-attending activities	72.0
TOTAL	122.0

TEACHING METHODOLOGY

1. Theory classes in class- room.

2. Resolution of problem sets. Elaboration of work topics. Discussion and oral presentation. Experimental work in the Lab., etc.

3. Attendance at external activities: invited seminars, congresses, visits to corporations and institutions, debates, etc.



EVALUATION

SE.1 End of term examination: 70%. This exam will consist of theoretical questions and problem resolution.

SE.2 Problems sets: 30%.

There will be three problem set assignments. Assignments will be available in the virtual classroom, indicating the date the problem set should be due. Students are encouraged to work together in solving the problem sets, although individual work is also accepted. The students can present solutions to problem sets either in paper-sheets or by e-mail in pdf or doc documents. Images are not accepted. If there exists a clear evidence that the solutions has been copied, the students will receive a zero for the problem set and the grade of the rest of problem sets will be divided by two.

Assistance to class is mandatory.

REFERENCES

Basic

Gravelle, Hugh and Ray Rees (2004). *Microeconomics*, 3rd ed., Prentice Hall/Financial Times.

Mas-Colell, Andreu, Michael D. Whinston and Jerry R. Green (1995). *Microeconomic Theory*, Oxford University Press.

Additional

Jehle, Geoffrey A., and Philip J. Reny (2011). *Advanced Microeconomic Theory*, 3rd ed., Pearson Education.

Kreps, David (2013). *Microeconomic Foundations*, Princeton University Press.

Osborne, M. (2004). *An Introduction to Game Theory*, Oxford University Press.

Rubinstein, Ariel (2012). *Lecture Notes in Microeconomic Theory: The Economic Agent*, 2nd ed., Princeton University Press.

Varian, H.R. (1992). *Microeconomic Analysis*. 3rd ed., W.W.W. Norton & Co. Existe traducción al castellano: *Análisis Microeconómico*, 3^a ed., Antoni Bosch.