

INTRODUCTORY MICROECONOMICS

1ST YEAR:

BACHELOR IN ECONOMICS (EC 1004)

BACHELOR IN BUSINESS ADMINISTRATION (AE1004)

BACHELOR IN FINANCE AND ACCOUNTANCY (FC1004)

**ACADEMIC YEAR 2013-14
(1ST SEMESTER)**

GENERAL OBJECTIVES AND CONTENTS

Economic theory is divided into two major fields of study: Microeconomics and Macroeconomics. While Microeconomics studies the behavior of individual economic agents such as consumers and firms, Macroeconomics deals with aggregate economic quantities such as national output, interest rates, unemployment or inflation.

The course Introduction to Microeconomics is the very first contact for undergraduate students with the concepts of Economic Theory. The main objective of the course is therefore to familiarize students with the basic concepts of Microeconomics, allowing them to follow more advanced courses. Therefore, it is a core subject in their training and it is fundamental to get the right combination of elements such as oral explanation of the concepts, graphical analysis and algebraic approach.

Given its analytical approach, an important objective of the course is to enable students to be able to give a quantitative answer to the proposed economic problems. In order to do so the course will provide students with both theoretical and practical training and develop a range of skills in handling tools for solving problems with the ultimate goal of creating a knowledge base that allow students to apply the general concepts learned to real situations faced when developing their professional activity.

The course has three main specific objectives:

- Provide a complete and affordable view of the market economy as a form of social organization and the role of prices in the markets.
- To familiarize the student with the microeconomic approach: rational agents and equilibrium assumptions.
- Set the ground for studying competitive model from the point of view of partial equilibrium analysis and general equilibrium as well as different market structures.

The content of the course is divided into three parts. The first part includes a brief introduction to the basic concepts of economic analysis such as the definition of economics, the concept of scarcity and choice and the introduction of the production possibility frontier and the opportunity cost. Additionally, it introduces the concept of supply and demand and market fundamentals, as well as the concept of equilibrium. Finally, it introduces the concept of elasticity that introduces students to the quantitative analysis of demand and supply.

The second part focuses on demand and analyzes consumer behavior. It introduces students to the concept of utility to represent consumer preferences and budget constraint as limit for the consumer choice. Finally, it introduces the optimization problem solved by the consumer when making his/her consumption choice.

The third part deals with the supply. More specifically introduces the concepts of production and costs, distinguishing between the short and long run.

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SPECIFIC EDUCATIONAL OBJECTIVES

The more specific objectives of the course are Introduction to Microeconomics:

- Detailed review of analytical tools in economic theory regarding the behavior of consumers and producers, that is, explain how and why consumers and firms make economic decisions within the context of different models, stressing the role of assumptions in the theoretical analysis of economic phenomena.
- Establish how economic agents interact through markets and industries. In order to do so the course will familiarize students with the principles governing the microeconomic approach, such as principle of rationality behind the behavior of economic agents and the optimization as a criterion for decision making.
- To introduce the concept of equilibrium as a property of the interaction within the economic market and the functioning of the market mechanisms and the fundamental role played by prices as a result of the interaction between supply and demand.

- Finally, this course should acquaint students with the scientific method based on the identification of variables and behavioral assumptions of behavior, as well as the formulation of hypotheses that can later be confronted with empirical evidence.

REQUIRED PREVIOUS KNOWLEDGE

To successfully complete the course is essential that students have acquired in high school knowledge related to mathematical analysis: operations with integers, real numbers, powers and fractions, solving equations and systems of equations, differential calculus and analysis of functions.

On the other hand, it is recommended, although not essential, in high school having completed the course Introductory Economics, since the students who have completed this course will be already familiar with some basic concepts.

SKILLS TO ACQUIRE

In this section the student will find a list of the procedures and methods that is expected to acquire through the study of the course Introduction to Microeconomics. Note that many of the skills listed below are not unique to this area but are common to other subjects of the bachelor:

- Familiarity with basic economic concepts. Understand the concept of economic problem: scarcity of resources and unlimited needs.
- Understand the behavior of economic agents: consumers, firms and institutions
- Ability to forecast the behavior of economic variables in the real world.
- Ability to discuss on different economic issues.

From a general perspective, the time devoted to study this subject should provide students with an overview on problem solving and decision-making. The course aims to foster a general problem and its division into parts to examine the relationships between them. It is, ultimately, a way to promote technical and analytical skills required for decision making, understanding this decision-making as a structured process that follows a basic structure information-decision-action

SOCIAL SKILLS AND ABILITIES

The set of procedures and attitudes listed below relate to the way in which the student interacts with their social environment and most of them are common to other courses in the bachelor degree:

- Promote the spirit of research, developing students' ability to analyze new problems with the tools learned and to reason rigorously and systematically.
- Ability to analyze and find information from different sources in order to address new problems.
- Capacity for analysis and synthesis.
- Ability to solve problems.
- Ability of being critical and self-critical.
- Ability to autonomous learning.

- Ability to adapt to new situations.
- Creativity in solving problems.
- Ability to work individually and in groups, in a coordinated way.
- Ability to discuss and express themselves in a coherent and intelligible form rational standards.
- Development of attitudes and values that promote ethical behavior in the development of professional activity.

REFERENCE BIBLIOGRAPHY

BASIC BIBLIOGRAPHY

The bibliography recommended for the preparation of the course consists of different textbooks:

- Pindyck, R. S. and Rubinfeld, D. L., *Microeconomics*, 8th Edition (Prentice Hall): This is one of the introductory texts most widely used and their structure allows students more autonomous learning during the course since it includes more advanced topics in special sections. It also makes clear and simple presentation of different topics. The material included in this textbook is complemented by a very interesting website (<http://www.prenhall.com/pindyck>) whose visit is recommended to students, since there you can find additional online resources.
- Frank, R. H., *Microeconomics and Behavior* (McGraw-Hill International Edition) 8th Edition, 2010: This textbook manual is presented as an alternative to the Pindyck and Rubinfeld, since the structuring of content is similar. It also provides a considerable amount of numerical problems, some of them with its corresponding solution.
- Mankiw, G., *Principles of Economics*, 3rd Edition (McGraw-Hill): This includes both issues of Microeconomics and Macroeconomics, so it is important to guide the student on the sequence of topics to follow the course. However, the chapters are short and the content is easy to follow.

ADDITIONAL BIBLIOGRAPHY

Other textbooks excellent in content, presentation of the concepts are:

- Varian, H. L., *Intermediate Microeconomics: A Modern Approach*, 8th Edition (Norton International Student Edition)
- Samuelson, P. A. and Nordhaus, W. D., *Microeconomía*, 18ª Edition (McGraw-Hill): Along with the Pindyck and Rubinfeld is one of the most widely used introductory texts.
- Walter Nicholson, W., *Intermediate Microeconomics and Applications*, (International Thomson Publishing), 9 th Edition, 2006: This book includes reviews of almost all the contents of the subject with a special emphasis on the mathematical side it can be difficult to follow for some students. It offers a variety of problems solved.

METHODOLOGY

- **Theoretical lectures:** In this lectures the key concepts included in the analytical program will be covered, using also practical exercises and examples when considered appropriate. Due to time constraints, it is recommended that students read the corresponding chapters from the basic bibliography before the lecture. The corresponding slides to be covered in the different lectures will be available to the students in advanced using the “Aula Virtual”.
- **Exercises lectures:** In this lectures the student will apply the concepts covered in the theoretical lectures. A booklet will be available to the students including the basic exercises to be solved. The aim of the exercises lectures will allow students to set the concepts explained in the theoretical lectures, and help them to develop capabilities to solve specific problems, as well as their analytical and reasoning skills.
- **Laboratory lectures:** In this lectures the students will participate in experimental sessions and will conduct the subsequent analysis and discussion of the results obtained, linking them to the theoretical models explained in the theoretical lectures. The aim of the laboratory lectures is to consolidate the concepts explained in the lectures, developing the analytical and reasoning skills of the student.

EVALUATION CRITERIA

As evaluation criteria, the final course grade will be the sum of the evaluation of the proposed activities during the course (continuous assessment) and final exam, weighted as follows:

- **Continuous Assessment:** It represents 30% of the final grade is divided between the evaluation of the exercises through two intermediate exams (20%) and participation and delivery of the exercises proposed in the laboratory lectures (10%).
- **Final exam:** It represents 70% of the final grade.

ANALYTICAL PROGRAM

PART I: INTRODUCTION

TOPIC 1. BASIC PRINCIPLES OF ECONOMIC ORGANIZATION AND THE MARKET MECHANISM

- 1.1. Economics as a science of choice: the scarcity and the need to choose.
- 1.2. The Production Possibilities Frontier and the opportunity cost.
- 1.3. Demand Analysis: Demand Function: definition, graphical representation and shifting.
- 1.4. Analysis of supply: supply function: definition, graphical representation and shifting.
- 1.5. Market Equilibrium: Equilibrium properties
- 1.6. Government intervention: Price control (price floor and price ceiling).
- 1.7. Concept of Elasticity

Bibliography: Mankiw, chapters 1, 2, 4, 5 and 6 (pp. 71-77).
Frank, chapter 1 and chapter 8 (pp. 242)
Pindyck and Rubinfeld, chapter 2.

PART II: CONSUMER THEORY

TOPIC 2. CONSUMER CHOICE

- 2.1. Introduction to consumer theory.
- 2.2. The meaning of rational choice.
- 2.3. The axioms of the theory of consumer behavior.
- 2.4. Indifference curves.
- 2.5. The utility function.
- 2.6. Marginal utility and the marginal rate of substitution.
- 2.7. The budget constraint.
- 2.8. Consumer choice (equilibrium).
- 2.9. Corner solutions.

Bibliography: Pindyck and Rubinfeld, chapter 3 and Appendix of chapter 4 (pp. 149-157)

TOPIC 3. THE EFFECT OF PRICE AND INCOME CHANGES ON INDIVIDUAL DEMAND

- 3.1 Income changes: normal versus inferior goods, Engel curve
- 3.2 Price changes: The price-consumption curve and demand curve
- 3.3 The effect price changes: income and substitution effects (Hicks and Slutsky)
- 3.4 The individual demand curve.
- 3.5 From individual to market demand.
- 3.6 The consumer surplus.

Bibliography: Pindyck and Rubinfeld, chapter 4.

TOPIC 4. APPLICATION OF THE CONSUMER RATIONAL CHOICE MODEL

4.1. Individual labor supply: Optimal choice of leisure and income

4.2. Individual savings supply: Inter-temporal consumer choice

Bibliography: Frank, chapter. 14 (pp. 464-469) and chapter 5 (pp.155-162).

PART III: THEORY OF THE FIRM: PRODUCTION AND COSTS.

TOPIC 5. PRODUCTION

5.1. The production decisions of a firm:

- The production function
- Temporal dimension of production: The short versus the long run.

5.2. The technology of production:

- Production with one input
- Production with two inputs

5.3. Two special cases of production functions

Bibliography: Pindyck and Rubinfeld, chapter 6 and Appendix chapter 7 (pp. 264-265).

TOPIC 6. THE COST OF PRODUCTION

6.1 The economic concept of cost and economic efficiency

6.2. Cost in the short run

6.3. Cost in the long run:

6.4. Relationship between short run and long run costs.

6.5. Duality in production and cost theory.

Bibliography: Pindyck and Rubinfeld, chapter 7 and Appendix chapter 7 (pp. 266-269).