

INTRODUCTION TO MICRO ECONOMICS

AULA Moodle

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OBJECTIVES

On this course you will learn the economic principles first participating in experiments and then studying the related economic theory and its applications. While participating in economic experiments you will see the economic principles in action. After each experiment, after having gathered and worked on its data, we will present the economic theories designed to explain the principles you've discovered in the laboratory and its applications. This process enables you to assess the capacity of the simplifications of economic theory to explain the economic world in which we live.

BIBLIOGRAPHY

The main textbook is *Experiments with Economic Principles* (2nd Edition) by Theodore C. Bergstrom and John H. Miller [WB]. This textbook is designed to teach economic principles through experiments. It is recommendable to also consult other microeconomic textbooks to deepen your knowledge. In particular the program outline makes reference also to chapters of a second book, *Principles of Economics* (3rd Edition) by Gregory Mankiw [M]. This course requires the extensive reading of the text books, and work on the exercises presented in the books. At the same time some complementary readings will be recommended during the course and will be available through Aula Global.

SCHEDULE

Part I: Competitive Markets

Topic 1. Introduction to Microeconomics

Bibliography: Harford, Tim (2007) *The Undercover Economist. Exposing Why the Rich Are Rich, the Poor Are Poor--and Why You Can Never Buy a Decent Used Car!* Chapter 3.
[M] Chap. 1:3-10 and Cap. 2.

Topic 2. Supply and Demand

- 2.1 A model of competitive markets
- 2.2 The supply curve
- 2.3 The demand curve
- 2.4 The price-quantity equilibrium
- 2.5 Who trades in equilibrium?
- 2.6 Reserve price, profit of seller and consumer surplus
- 2.7 The efficiency of competitive equilibrium
- 2.8 Model of competitive markets with supply and demand curves

Bibliography: [BM] Chap. 1 and Appendix A.1. [M] Chap. 4, Ch. 7.

Topic 3. Shifts in Supply and Demand

- 3.1 Review of the model of competitive markets: input and output.
- 3.2 The supply curve with variable costs and fixed costs
- 3.3 Comparative statics: supply shift
 - 3.3.1 What happens to the quantity in equilibrium?
 - 3.3.2 What happens to the equilibrium price?
 - 3.3.3 What about the equilibrium profits?
- 3.4 Comparative Statics with smooth demand and supply curves.
 - 3.4.1 What happens to the quantity in equilibrium?
 - 3.4.2 What happens to the equilibrium price?

- 3.4.3 What about the equilibrium profits?
- 3.5 Slope and Elasticity of Demand and Supply Curves
 - 3.5.1. Sensitivity of quantity demanded / supplied to a change in the price.
 - 3.5.2. Slope: definition and calculation.
 - 3.5.3. Elasticity: definition and calculation.
 - 3.5.4. The relationship between the slope and elasticity.
 - 3.5.5. Comparative statics: Elasticity and total revenue

Bibliography: [BM] Chap. 2, Appendix A.2., A.3, A.4 and A.5
[M] Chap. 4 and Chap.5

Part Two: Intervention in the market and economic policy

Topic 4. A Sales Tax

- 4.1 Tax on sale for sellers.
 - 4.1.1 How does the supply curve change?
 - 4.1.2 The price and equilibrium quantity.
- 4.2 Sales Tax for buyers.
 - 4.2.1 How does the demand curve change?
 - 4.2.2 The price and equilibrium quantity.
- 4.3 Comparison of results: tax for the seller and buyer.
- 4.4 Who bears the tax? It depends on the elasticity.
- 4.5 Taxes and Welfare
 - 4.5.1. First Welfare Theorem: efficiency of competitive markets
 - 4.5.2. Government intervention through taxation:
 - 4.5.3. Analysis of welfare with and without taxes
 - 4.5.4. Efficiency loss (excess burden) and cost of taxes
 - 4.5.5. Why do taxes exist? Efficiency and justice

Bibliography: [BM] Chap. 3. [M] Chap. 6:124-131.

Topic 5. The labor market and minimum wage

- 5.1. Introduction.
- 5.2. The demand for labor.
 - 5.2.1. Rule of the value of marginal product.
 - 5.2.2. Marginal product and average product.
 - 5.2.3. Labor demand curve of a company.
 - 5.2.4. Labor demand curve of the market.
- 5.3. Labor supply.
- 5.4. Competitive equilibrium in the labor market.
- 5.5. Effects of a minimum wage.
- 5.6. Minimum prices and maximum prices.

Bibliography: [BM] Chap. 5. [M] Chap. 6:114-123; Cap. 18:401-408.

Part three: Consumer behavior

Topic 6. The decision of the consumer.

- 6.1. The budget constraint.
- 6.2. The preferences of the consumer.
- 6.3. The optimal consumer bundle.
- 6.4. Changes in income and in prices.

Bibliography: [BM] Cap.3, [M] Chap.6:???

Part Four: Imperfect Markets and technology

Topic 7. Externalities

- 7.1. Introduction.
- 7.2. Competitive markets and externalities.
- 7.3. Taxes on pollution.
- 7.4. Transferable permits.
- 7.5. Positive externalities and subsidies.

Bibliography: [BM] Chap. 6 [M] Chap. 10

Topic 8. Monopolies and cartels

8.1 Monopoly and Competitive Markets.

8.2 Behavior of a Monopoly.

8.2.1 Total Revenue and Total Cost.

8.2.2 Marginal Revenue and Marginal Cost.

8.2.3 Quantity and Price of Monopoly.

8.3 Comparison of Monopoly and Competitive Markets.

8.4 Monopoly with Smooth Curves.

8.5 Cartels.

Bibliography: [BM] Chap. 7 (except pages 203-208).

[M] Chap. 15: 314-328

Topic 9. Network externalities

9.1. What are the network externalities?

9.2. Network externalities and the demand curve.

9.3. The equilibrium with network externalities.

9.4. Stable equilibria, unstable equilibria and critical mass.

Bibliography: [BM] Chap. 9

EVALUATION CRITERIA

- 50%: **Final exam.** 19/12/2011 15:00 - 17:00, 40.S02. It is necessary to pass the final exam.
- 20%: **Midterm Exam** (2-3 November, during the lab).
- 20%: **Weekly assignment.** The completeness of each assignment will be evaluated and it will be corrected based on one or two points chosen at random.
- 10%: **Experiments.** 5% depends on attendance. Not participating in an experiment adjudicates 0 profits in said experiment. The remaining 5% will be proportional to your average profits obtained (after excluding the maximum and minimum) with respect to profits earned by the rest of the class.

Important:

- The grade of your profits depends on all of your experiments and results for all students in the class, not only for students in your group.
- During a seminar there will be several sessions and rounds of the same experiment. Not all rounds / sessions will be counted for the profits, the profits will be chosen randomly from among rounds and sessions in each experiment. The session and / or round which is chosen for profits will be announced once the profits of this experiment are published.
- The more profits you get, the higher your score. To obtain high profits you have to get the best possible price. The formula we use will be:

$$[0,5\{presence\}] + \left[0,5 \frac{Mean\ Profit\{without\ Profit_{max}\ and\ Profit_{min}\}}{Benef_{max}\ class - Benef_{min}\ class} \right]$$

CALENDAR (SEE ALSO POWER POINT SLIDE 21 IN TOPIC 0)

- 27-Sept: Topic 0: Introduction: Contents and Organization
- 4-Oct.: Topic 1: Introduction to Economics
- 6 Oct.: **Seminar 1:** Supply and Demand
- 11-Oct: Topic 2: Supply and Demand
- 13 Oct. : **Seminar 2:** shifts of Supply and Demand
Submission of Task 1 (Topic 1-2)
- 18-Oct: Topic 3: Shifts in Supply and Demand and Elasticity
- 20 - Oct: **Seminar 3:** Sales Tax
Submission of Task 2 (Topic 3)
- 25-Oct: Topic 4: Tax and Welfare
- 27 - Oct: **Seminar 4:** A Minimum Wage
Submission of Task 3 (Topics 4)
- 1-Nov.: no hay class
- 3 Nov: **Seminar 5: Midterm Exam** (Topics 1-4)
- 8-Nov: Topic 5: A Minimum Wage
- 11-Nov.: **Seminar 6:** Externalities
Submission of Task 4 (Topics 5)
- 15-Nov: Topic 6: Externalities
- 17 – Nov.: **Seminar 7:** The Monopolies and Cartels
Submission of Task 5 (Topic6)
- 22-Nov.: Topic 7: The Monopolies and Cartels
- 24 – Nov.: **Seminar 8:** Network Externalities
Submission of Task 6 (Topic 7)
- 28. Nov.: Topic 9: Behavior of consumers
- 29-Nov.: Topic 8: Network Externalities
- 1-Dec: *SUBMISSION OF Task 7 (Topic 8 AND 9)*

EXAMEN “INTRODUCTION TO MICROECONOMICS”
19/12/2011 15:00 - 17:00, 40.S02

INSTRUCTIONS FOR EXPERIMENTS / SEMINARS

- The grade of the experiments depends on attendance and some profits accumulated during the experiment
- To participate in an experiment you must be punctual and have an identification number (the **NIA**).
We do not admit entrance to anyone not belonging to the subgroup of the meeting or once the experiment has begun.
- **Before** the seminar in which the experiment is performed you must have read the **introduction** to the topic in the textbook and have done the **warm up exercises**.
These tasks not only ensure the smooth running of the seminars, but also enhance the potential for greater profits.
- At the beginning of the experiment you will receive a sheet with information about your role in the experiment. At the end of each experiment you must return this sheet with the data of your participation.
- The **Lab Notes** derived from the experiments and necessary in order to do the tasks will be published in the “aula Moodle” of the subject.
- As in any society, unethical behavior or a breach of the rules can be penalized with loss of profits.

Competencias:

G1,G2,G3,G6,G9,G10,
G11,G12, G15, G17 G19