

Principles of Microeconomics

ECON 10011 / 20011

Fall 2006

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Tuesdays and Thursdays, 11 to 12.15, De Bartolo 126

Office Hours: Tuesdays and Thursdays, 9.30-10.30 AM and by appointment

1. Course Objective

This course provides an introduction to microeconomics with an emphasis on supply and demand, the consumer, the producer, economic equilibrium, efficiency and equity, market failures, and government intervention in markets.

In this context, the course has **three broad objectives**.

(1) It is designed to help students to understand basic **economic concepts and problems** related to the behavior and interaction of individuals. It examines how individuals make decisions, markets allocate resources through the price mechanism, and problems relating to imperfect competition, externalities (like pollution), common resources, imperfect information, and poverty and inequality.

(2) It is designed to give students a feel for the **methods** which economists use to understand individual behavior and interactions. It introduces students to a variety of **models**, including optimizing models of consumer and firm behavior, partial and simple general equilibrium models, and models of imperfect competition.

(3) Finally, it attempts to help students to develop an ability to apply the methods and models in **seeking solutions** to the economic problems confronting society.

2. Course Structure

The classes will consist of lectures with discussions and quizzes, and student project presentations (group projects).

3. Prerequisites

No background in economics is required. Students are expected to be conversant with (simple) high school algebra and geometry.

4. Course Requirements and Grading

The final grade for each student will be based on:

(i) best two grades in the three examinations during the semester, the dates of which are given in the schedule below (20 points each – total 40 points);

(ii) a comprehensive final examination (30 points); and

(iii) in-classes quizzes (20 points); and

(iv) a class project (10 points)

Each exam will cover the material taught in the weeks prior to that exam. The final exam will cover the entire course material and will contribute towards 30 % of the final grade. In-classes quizzes will be held on an almost daily basis, using i-clickers, based on the assigned readings and class lectures. Students must read the assigned readings for each class and be prepared to be tested on the material. All exams and quizzes will be closed-book in-class exams.

Class projects will be announced in advance. Groups for group projects will be decided by the instructor, in a random manner. Each student will have to contribute at least two pages of the group project report, although the project grade will partly be based on the effort of the entire group.

5. Textbook

The textbook for the course is *Microeconomics*, by Paul Krugman and Robin Wells, New York: Worth Publishers.

6. Attendance

Attendance will not be recorded. However, since a part of the course grade depends on almost daily quizzes, and on presentation of projects, absences will have a negative effect on your grade. You can miss up to 4 of the quizzes without affecting your grade adversely (since I will drop the 4 lowest scores for each student) Moreover, students should recognize that performance in exams is usually positively correlated with attendance.

7. Academic Code of Honor

The class is conducted in accordance with the Notre Dame Academic Code of Honor. All work on the quizzes and examinations is to be the work of the individual student. Students may (and indeed are encouraged to) work together in preparation for classes and in studying for the exam.

8. Miscellaneous

My office hours will be on Tuesdays and Thursdays, 9.30 to 10.30 AM. in my office at Decio 420, or by appointment. My office extension is 1-7594 and my e-mail address is adutt@nd.edu. Students are encouraged to come and see me for any questions they may have. Finally, let me take this opportunity to wish you all the best for this class and hope that you will both enjoy it and benefit from it.

Course schedule

Month	Date	Topic	Chapter
August	22	Introduction	Intro, 1
	25	Economic models	2
	29	Models, relations and graphs	2 appendix
	31	Supply and Demand	3
September	5	Supply and Demand and Market interventions	4
	7	Elasticity	5
	12	Consumer and producer surplus	6
	14	Quiz 1	
	19	Making decisions	7
	21	Inputs and costs	8
	26	Perfect competition and supply curves 1	9
	28	Perfect competition and supply curves 2	9
October	3	Consumer 1	10
	5	Consumer 2	11
	10	Partial and general equilibrium	
	12	Factor markets and distribution	12 with app
	17	Fall Break	
	19	Fall Break	
	24	Quiz 2	
	26	Efficiency and equity	13
	31	International Trade	17
November	2	Monopoly	14
	7	Oligopoly	15
	9	Monopolistic Competition	16
	14	Imperfect information	18
	16	Quiz 3	
	21	Externalities	19
	23	Public goods and common property	20
	28	Thanksgiving	
	30	Taxes, government spending and income distribution	21
December	5	Technology, information and network externalities	22
	11 to 15	Final	

Course outline

I. The Basics

1. Introduction and first principles

- a. Economics and the economy
 - b. Market and command economies
 - c. Microeconomics and Macroeconomics
 - d. Individual choice:
 - i. Scarce resources
 - ii. Opportunity cost
 - iii. Marginal decisions
 - iv. Exploiting opportunities
 - e. Interactions:
 - i. Gains from trade
 - ii. Equilibrium
 - iii. Efficiency and equity
 - iv. Markets and efficiency
 - v. Market failure and government intervention
 - f. Application: Economic “miracles”
- Reading: KW, Introduction, Chapter 1

2. Economic Models

- a. Models
 - b. Production possibility frontier
 - c. Comparative advantage and the gains from trade
 - d. Circular flow
 - e. Using models
 - f. Graphs and models
 - i. Graphs, variables and models
 - ii. Graphs and curves
 - iii. Slopes
 - iv. Maximum and minimum
 - v. Numerical graphs
 - vi. Problems in interpreting numerical graphs
- Reading: KW, Chapter 2, Chapter 2 appendix

3. Supply and Demand

- a. Model of a competitive market
- b. Demand
- c. Supply
- d. Equilibrium
- e. Changes in supply and demand
- f. Application
- g. Price controls
 - i. Price ceilings

- ii. Price floors
 - h. Quantity controls and taxes
 - i. Quotas
 - ii. Taxes
 - i. Applications
- Reading: KW, Chapters 3 and 4

4. Elasticity

- a. Definition
 - b. Measurement
 - c. Interpretation
 - d. Other demand elasticities
 - e. Price elasticity of supply
 - f. Implications and applications
- Reading: KW, Chapter 5

5. Consumer and producer surplus

- a. Introduction
 - b. Consumer surplus
 - c. Producer surplus
 - d. Efficiency and the gains from trade
 - e. Applications
- Reading: KW, Chapter 6

II. The individual

6. Making decisions

- a. Opportunity costs
 - b. Marginal analysis
 - i. Marginal cost
 - ii. Marginal benefit
 - iii. Marginal analysis
 - iv. Applications
 - c. Sunk costs
 - d. Present value
- Reading: KW, Chapter 7

7. Inputs and costs

- a. Production function
 - b. Cost function
 - c. Marginal and average cost
 - d. Short-run and long-run costs
- Reading: KW, Chapter 8

8. Perfect competition and the supply curve

- a. Perfect competition

- b. Profit maximization
- c. Individual supply curve
- d. Industry supply curve
 - i. Short run
 - ii. Long run

Reading: KW, Chapter 9

9. The consumer

- a. Utility and marginal utility
- b. Budgets and optimal consumption
- c. Marginal utility and the demand curve
- d. Indifference curves
- e. Indifference curves and consumer choice
- f. Effects of changes in prices and income
 - i. Change in income
 - ii. Change in prices
 - iii. Income and substitution effects
- h. Consumer “rationality” and behavioral economics

Reading: KW, Chapters 10, 11

III. Interactions

10. Partial and general equilibrium

- a. Partial equilibrium: demand, supply and equilibrium
- b. Production possibility frontier and profit maximization
- c. Indifference curves and utility maximization
- d. General equilibrium

11. Factor markets and income distribution

- a. Factors of production
- b. Income distribution
- c. Marginal productivity and factor demand
- d. Marginal productivity theory of income distribution
- e. Deviations from marginal productivity theory
- f. Labor supply

Reading: KW, Chapter 12 with appendix

12. Efficiency and equity

- a. Supply, demand and efficiency
- b. General equilibrium and efficiency
- c. Inefficiency in the economy
- d. Equity and fairness
- e. Equity and efficiency

Reading: KW, Chapter 13

13. International trade

- a. Comparative advantage and the gains from trade
 - b. Sources of comparative advantage
 - i. Climate
 - ii. Technology
 - iii. Factor endowments
 - iv. Increasing returns
 - c. Supply, demand and international trade
 - d. International trade and factor markets
 - e. Trade protection
 - i. Effects of protection
 - ii. Long-run effects of protection
 - iii. Political economy of protection
- Reading: KW, Chapter 17

IV. Market Failures and Government intervention

14. Monopoly

- a. Market structures
 - b. Meaning of monopoly
 - c. Monopoly equilibrium
 - i. Demand curve and marginal revenue
 - ii. Profit maximization
 - iii. Monopoly versus perfect competition
 - d. Monopoly and public policy
 - i. Preventing monopoly
 - ii. Dealing with natural monopoly
 - e. Price discrimination
- Reading: KW, Chapter 14

15. Oligopoly

- a. Oligopoly and its prevalence
 - b. Understanding oligopoly
 - c. Games
 - d. Kinked demand and price rigidity
 - e. Oligopoly in practice
- Reading: KW, Chapter 15

16. Monopolistic competition and product differentiation

- a. Meaning of monopolistic competition
- b. Understanding monopolistic competition
 - i. Short run
 - ii. Long run
 - iii. Compared to perfect competition
- c. Debates regarding monopolistic competition
 - i. Advertising
 - ii. Brand names

d. Applications
Reading: KW, Chapter 16.

17. Risk and imperfect information

- a. Risk and expectations
- b. Expected utility and risk aversion
- c. Buying, selling and reducing risk
- d. Imperfect information
 - i. Private information and asymmetric information
 - ii. Adverse selection
 - iii. Moral hazard
 - iv. Applications

Reading: KW, Chapter 18.

18. Externalities

- a. Externalities
- b. Costs and benefits of pollution
- c. Private solutions to externalities
- d. Policies towards pollution
- e. Production, consumption and externalities
- f. Applications

Reading: KW, Chapter 19.

19. Public goods and common resources

- a. Private goods
- b. Public goods
- c. Provision of public goods
- d. Common resources and the tragedy of the commons
- e. Artificially scarce goods

Reading: KW, Chapter 20.

20. Taxes, social insurance and income distribution

- a. Taxes and tax policy
- b. Government spending
- c. Poverty
- d. Income distribution
- e. Government policy on poverty and income distribution

Reading: KW, Chapter 21.

21. Technology, information goods, and network externalities

- a. Economics of information goods
- b. Intellectual property rights
- c. Network externalities and lock in
- d. Government policies regarding information goods and network externalities

Reading: KW, Chapter 22.