Principles of Microeconomics

ECON 10011 / 20011
Fall 2007
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Web page: http://www.nd.edu/~adutt/
Tuesdays and Thursdays, 11.00 to 12.15, De Bartolo 207
Office Hours: Tuesdays and Thursdays, 12.45 PM -1.45 PM, Tuesdays, 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 issues** related to the behavior and interaction of individuals. It examines how individuals make decisions, how markets allocate resources through the price mechanism, and problems relating to imperfect competition, externalities (like pollution), public goods and 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. Prerequisites

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

3. 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);
  (iii) **in-classes quizzes** (20 points); and
  (iv) **Home work** (at Aplia) and one short **class project** - 10 points. Home work problems will be available through Aplia (see information below). They will be on that website after (almost) every class. There will be some practice problems on the site which will not count towards your graded. Others are required and will be graded. You need to check the due date and time for each problem set and do them on line.

You can also test your understanding of the material by doing the relevant problems in the practice quizzing center under student resources at the book's website at: http://bcs.worthpublishers.com/krugmanwellsmicro/
These will not be graded.

The **class project** involves choosing one topic of relevance to this course from a newspaper or magazine article and writing a 2-3 pg. report on it using tools developed in this class. The report should provide a brief description of the issue or problem and use concepts and tools developed in the class to analyze it. The topic must be cleared with the instructor by October 18 (the last class before Fall Break). Due by December 11 (last class day), but may be handed in any time before that – as an attachment to an email.

Each **exam** will cover the material taught in the weeks prior to that exam. The final exam will cover the entire course material. 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.

4. Homework

Homework needs to be done with Aplia.

Registration Instructions

1. Connect to http://www.aplia.com.
2. Click the **System Configuration Test** link below the **Sign In** and **Register** sections to make sure you can access all of the features on Aplia's website. This takes just a few seconds and tells you how to update your browser settings if necessary.
3. Return to http://www.aplia.com.
   - If you have never used Aplia before, click the **New Student** button and enter your Course Key: **T9NF-8SJ9-5EGQ**. Continue following the instructions to complete your registration.
   - If you have used Aplia before, sign in with your usual e-mail address and password and enter your Course Key when prompted: **T9NF-8SJ9-5EGQ**. If you are not prompted for a new Course Key, click the **Enter Course Key** button to enroll in a new Aplia course. Enter your Course Key when you are prompted.
4. You can pay for Aplia through the book store or directly through the Aplia site. If you choose to pay directly to Aplia and if you understand your payment options, pay now. Otherwise, postpone your purchase decision by choosing the option to pay later. Your payment grace period ends at the end of the day on 09/17/2007.

The Aplia site also contains other useful information which you are welcome to use.

5. Textbook

The textbook for the course is *Microeconomics*, by Paul Krugman and Robin Wells, New York: Worth Publishers. You also need the i-clicker and Aplia card. As noted earlier, the book's website is: http://bcs.worthpublishers.com/krugmanwellsmicro/

6. Attendance

Attendance in class will not be recorded. However, since a part of the course grade depends on the almost-daily quizzes, and on presentation of projects, absences will have a negative effect on your grade. You can miss up to 3 of the quizzes without affecting your grade adversely (since I will drop the 3 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 homework, quizzes, project 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 exams, but work on their own when doing the assignments, quizzes and exams.

8. Miscellaneous

My office hours will be on Tuesdays and Thursdays, 12.45 PM -1.45 PM, Tuesdays, 9.30 – 10.30 AM, 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 abut specific course material or about general issues. 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

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

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
g. Consumer "rationality" and behavioral economics
Reading: KW, Chapters 10, 11

III. Interactions

10. 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

11. 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

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. 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. 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.

21. 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.