



# B.E. International Program

## Faculty of Economics, Thammasat University



### Course Outline

#### EE 311 Microeconomics Theory ( Section 046401 ) Semester 1/2013 (August 13 – November 30, 2013)

<b>Number of credits</b>	4 credits
<b>Lecture Time</b>	Wednesdays & Fridays ; 11 AM – 1.00 PM
<b>Lecture Venue</b>	303, 3 <sup>rd</sup> floor, Faculty of Economics, Thammasat University, Tha Prachan campus
<b>Instructor</b>	Assoc. Prof. Dr. Chanin Mephokee Email : chanin@econ.tu.ac.th Office hours : by appointment

**Course Description:** Demand and supply analysis, consumer behavior and demand theory, production and cost of production, different types of product market structures, price determination in factor markets, decision-making over time, general equilibrium analysis, and introductory welfare economics and public policy.

*Prerequisites:* EE 211 and MA 216

**Method of Instruction:** There are a total of 60 class-hours for this course or 4 hours per week. Class activities in each week will consist of three hours of lectures, and one hour of discussions, exercises and quizzes. Students are expected to work on about four 15-minute quizzes during class hours, and participate in class discussions.

#### **Student Evaluation:**

Class participation and quizzes	5%
Mid-term examination	35% (Wed Oct 2, 2013 at 11.00 AM – 13.00 PM)
Final examination	60% (Wed Dec 18, 2013 at 09.00 AM – noon)

## Main Textbooks

There are several textbooks that cover similar material. The first three books will be used extensively, but, for many topics, they can be used interchangeably with the other listed books. It is important to realize, however, that no single textbook contains **all** the material covered in this course. It is therefore essential that you read several sources, and that you review the concepts listed under “REVIEW” on your own, so that our time can be more valuably spent on new topics.

- 1) Pindyck, Robert S. and Daniel E. Rubinfeld. *Microeconomics*, (7<sup>th</sup> ed.), New Jersey: Prentice -Hall, 2008.
- 2) Besanko, David, and Ronald R. Braeutigam, *Microeconomics: An Integrated Approach*, New York:John Wiley& Sons, 2002.
- 3) Salvatore, Dominick, *Microeconomics*, (4<sup>th</sup> ed.), New York: Oxford University Press. 2003.
- 4) Frank, Robert H. (6<sup>th</sup> ed.). *Microeconomics and Behavior*, New York: McGraw-Hill, 2005.
- 5) Perloff, *Microeconomics*, ( 3<sup>rd</sup> ed.) Boston: Addison-Wesley, 2004.
- 6) Miller, R.L., and R.P.H. Fishe. *Microeconomics: Price Theory in Practice*,New York: Harper Collins, 1995.
- 7) Hirshleifer, Jack *Price Theory and Applications* (6<sup>th</sup> ed.), New Jersey: Prentice - Hall, 1998.
- 8) Griffiths, Alan and Stuart Wall, *Microeconomics: Theory & Applications*, London: Longman, 1996.
- 9) Nicholson, Walter, *Intermediate Microeconomics and Its Application*, (8<sup>th</sup> ed.), Dryden Press, 2002.
- 10) Varian, Hal *Intermediate Microeconomics*, (5<sup>th</sup> ed.) New York: Norton, 1999.

Note: additional readings will be assigned during the semester, and readings on specific topics are given in the “boxes” under “Teaching Plan”.

## Supplementary Reading (for fun):

Levitt, Steven D. and Stephen J. Dubner, *Freakonomics*, New York: Harper Torch, 2006.

Harford, Tim, *The Undercover Economist: Exposing Why the Rich Are Rich, the Poor Are Poor-- and Why You Can Never Buy a Decent Used Car!*, Oxford University Press, 2006.

Marshall Jevons, *Murder at the Margin*, New Jersey: Princeton University Press, 1978, 1993.

*The Fatal Equilibrium*, New York: Balantine Books, 1985.

*A Deadly Indifference*, New Jersey: Princeton University Press, 1995.

## **Movies:**

## **Interactive Excel Exercises:**

There are 11 Interactive Excel Exercises located in  
<ftp://econ.tu.ac.th/class/archan/CHAYUNT/EC311/>

Each exercise contains a mathematical model in which the user can change some parameters that determine the behavior of model to change the equilibrium results and answer accompanies questions. Each exercise also includes a short explanation worksheet to help the user to understand the underlying theory related to the exercise. Where available, the name of the relevant interactive excel exercise will be given in “boxes” under “Teaching Plan”.

## **Teaching Plan:**

“A Beautiful Mind” Universal Studios, 2001.

“An Inconvenient Truth”, 2006.

“Inside Job”, 2010.

## **1. Introduction**

1.1 Why Study Microeconomics? (6 hours)

Application of Demand and Supply concepts: government intervention

**Review:** Concepts of consumer and producer surplus.

**Read:** Pindyck & Rubinfeld Chs. 2 and 9, Frank Ch. 2, Salvatore Ch.2, Perloff Chs.2,3,9,  
Miller & Fische Ch. 3, Besanko & Braeutigam Chs. 2 & 9, and newspaper articles!

## **2. Consumer Behavior and Demand Theory**

2.1 Indifference Curve Analysis (1.5 hours)

- assumptions
- analysis of goods, bads, neuters

**Review:** Properties of indifference curves.

**Read:** Pindyck & Rubinfeld Ch. 3, Salvatore Ch.3 (3.1-3.2), Perloff Ch.4 & App. 4A, Frank Ch.3,  
Hirshleifer Ch. 3(pp.70-73), Miller & Fische Ch.5, Besanko & Braeutigam Ch. 3 & 4.

2.2 Consumption equilibrium and changes in equilibrium (7.5 hours)

- consumption equilibrium and duality
- changes in income
- changes in price: income effect and substitution effect
- compensated and uncompensated demand curves
- market demand
- network externalities
- application: vouchers vs. income transfers
- revealed preferences, index numbers, and welfare changes

**Review:** Construction of demand curves, elasticities.

**Read:** Pindyck & Rubinfeld Ch. 4, Appendix; Salvatore Ch 3 (3.4-3.5) Chs.4 -5, Perloff Ch. 5, Frank Ch.4-5, Appendix; Hirshleifer Ch.4,Ch.5 (pp.117-152), Besanko & Braeutigam Ch. 5 Miller & Fische Ch.4 (pp.119-120); Appendix 5A and Ch.6, Griffiths and Wall Ch.1 (pp.33-50), Ch.2, (pp.55-68) , Varian Ch. 7.8 & Ch. 8.

**Do:** The Interactive Excel Exercise in “02IncomeSubstitutionEffect.xls” and “03IndexNumber.xls” files.

### 2.3 Intertemporal consumption (consumption overtime)

(4 hours)

- time preference and time value of money
- cases: regular income, productive opportunities, inheritance
- supply of saving
- consumption and pricing of durable goods and non-renewable resources

**Read:** Salvatore Ch.16, Frank Ch.15 Appendix, Perloff Ch. 16, Hirshleifer Ch.14,

Miller & Fische Ch.5 (pp.617-632), Pindyck & Rubinfeld Ch.15, Varian Ch. 10.

### 2.4 Consumption under uncertainty

(3 hours)

- expected utility
- preference toward risk
- gambling and insurance

**Read:** Pindyck & Rubinfeld Ch.5, Salvatore Ch.6, Perloff Ch.17 (17.1-17.2), Frank Ch.6 (pp.198-210)

Miller & Fische Ch.5 (pp.644-649), Griffiths & Wall Ch.3 (pp.102-113)

## 3. Transactions Costs and Institutional Economics

(3 hours)

- costs of market exchange
- components of transactions costs
- optimal search
- meaning of “institutions”
- origin of firms, an example of an institution
- rules, behavior and objectives of the firm
  - profit maximization
  - utility maximization and satisficing

**Read:** Miller & Fische Ch.7, Frank Ch.6 Appendix, Griffiths and Wall Ch.5, Baumol W.J.Economic Theory and Operations Analysis, 4<sup>th</sup> ed.(Prentice – Hall) 1977, Ch.15, Kreps, A Course in Microeconomic Theory, (Harvester Wheatsheaf) 1990, Ch. 20, Coase “The Nature of the Firm”, *Economica*, 4:386-405, 1937, Stigler, “The Economics of Information”, *Journal of Political Economy*, 69:3, 1961.

## 4. Production and Costs

(3 hours)

### 4.1 Production equilibrium

- least cost combination
- duality in production
- relationship between product curves and cost curves

### 4.2 Production functions and costs

- homogeneous production functions and their properties
- returns to scale
- elasticity of substitution

**Review:** All product and cost curves; e.g. AP, MP, TP, TC, AC, MC.

**Read:** Pindyck & Rubinfeld Chs.6-7, Salvatore Chs. 7-8, Perloff Ch.6-7, Frank Chs.9-10

## 5. Product Markets

### 5.1 Perfectly competitive markets

(1 hour)

- long-run equilibrium and efficiency

**Review:** Characteristics of perfectly competitive markets, price and output under perfect competition.

**Read:** Pindyck & Rubinfeld Ch.8, Hirshleifer & Glazer Ch.7 (pp.175-186), Salvatore Ch.9, (pp.240-248), Frank Ch.11, Miller and Fische Ch.10, Griffiths and Wall Ch.6, Perloff Ch. 8, Besanko & Braeutigam

### 5.2 Monopoly

(6.5 hours)

- meaning of market power
- price and output determination
- monopoly and resource allocation
- regulation of monopolies and contestable markets
- other pricing strategies
  - price discrimination: degrees and hurdles
  - two-part tariffs and other strategies
- multi-plant monopoly

**Review:** Simple monopoly

**Read:** Pindyck & Rubinfeld Ch.10 (10.1-10.4 and 10.7) & Ch.11, Perloff Ch.11,12; Salvatore Ch.10 & Ch.13, Frank Ch.12, Miller & Fische Ch.11-12,

### 5.3 Monopolistic competition

(1.5 hours)

- characteristics of monopolistic competition
- equilibrium price and output in the short run and long run
- implications on resource allocation

**Read:** Frank Ch.13, Pindyck & Rubinfeld Ch.12.1, Perloff 13.7, Besanko & Braeutigam Ch. 13.5  
Miller & Fische Ch.13 (pp.515-523), Salvatore Ch. 11 (11.1-11.2)

### 5.4 Oligopoly

(9 hours)

- meaning of oligopoly
- various models of oligopoly:
  - kinked demand
  - price leadership or dominant firm
  - Cournot, Bertrand and Stackelberg
  - collusion and cartel
- game theory and its application to oligopolistic markets
  - introduction
  - equilibrium: Dominant strategy, Nash equilibrium, Maximin
  - Prisoners' dilemma
  - sequential games
  - Strategic moves: entry deterrence

**Read:** Pindyck and Rubinfeld Ch.12.2-12.6 & Ch.13, Hirshleifer Ch.10,  
Salvatore Ch.11 (11.3-11.8) Ch. 12 , Frank Ch.13, Miller & Fische Ch.13 (pp.526-557),  
Perloff Ch. 13,14; Besanko & Braeutigam Ch. 13.1-13.4 & 14  
Chiang, Fundamental Methods of Mathematical Economics, Ch. 21.

## 6. Factor Markets

### 6.1 Competitive factor markets

(3 hours)

- demand for a factor ( cases of one variable input and several variable inputs )
- supply of inputs to a firm and market supply of inputs
- price and quantity of factor employed

**Read:** Pindyck & Rubinfeld Ch.14.1-14.2,Hirshleifer Ch.11, Salvatore Ch. 14,  
Frank Ch.14, Miller & Fische Ch.14 (pp.565-592),Griffiths & Wall Ch.9

### 6.2 Factor Markets with Monopoly and Monopsony Power

(2 hours)

- marginal revenue product
- marginal and average factor cost
- price and quantity of factor employed

**Read:** Pindyck and Rubinfeld Ch. 10.5-10.6 & Ch.14.3, Hirshleifer Ch.11 (pp.333-341), Frank Ch.14, Miller & Fische Ch.14 (pp.595-599), Griffiths & Wall Ch.9 (pp.383-385), Salvatore Ch.15, Perloff Ch. 15 (15.2, 15.3); Besanko & Braeutigam Ch. 11.7.

### 6.3 Factor Markets with Monopoly Power of Seller of Input (2 hours)

- monopoly power over the wage rate
- price and quantity of factor employed
- bilateral monopoly

**Read:** Pindyck & Rubinfeld Ch.14.4, Hirshleifer Ch.12 (12.4) (pp.356-363), Salvatore Ch.15, Miller & Fische Ch.14 (pp.599-606)

### 6.4 Economic Rent (1 hour)

- meaning of economic rent
- rent-seeking behavior and resource allocation

**Read:** Pindyck and Rubinfeld Ch.14 (pp.529-532), Frank Ch.15 (pp.569-70), Hirshleifer Ch.12 (12.7), Miller & Fische Ch.14 (pp.588-589), Griffiths &

## 7. General Equilibrium Analysis and Welfare Economics

### 7.1 General Equilibrium: consumption, production, and exchange (3 hours)

- welfare criteria
- Pareto optimum and efficiency
- perfect competition and Pareto optimum
- welfare maximization and Pareto optimum conditions

**Read:** Pindyck & Rubinfeld Ch.16 (16.1-16.4, 16.6), Hirshleifer Ch.15 (15.2), Miller & Fische Ch.16, Salvatore Ch.17, Frank Ch.16,

### 7.2 Market Failure and Imperfections (5 hours)

- imperfect competition, externalities, public goods, and asymmetric information
- correction of failure and imperfections: government or private sector

**Read:** Pindyck & Rubinfeld Ch.16 (16.7) & Chs.17-18, Hirshleifer Ch.15 (15.3), Miller & Fische Ch.17, Salvatore Chs.18-19, Frank Chs.17-18, Griffiths & Wall Ch.9 (pp.433-437) & Ch.11, Perloff Ch. 18,19 Besanko & Braeutigam Ch. 17

**Important Dates**

Class begins	August 13, 2013
Adding and Dropping Course	August 13 – 27, 2013
<b>Midterm Exam</b>	<b>October 2, 2013 ; 11.00 AM – 1.00 PM</b>
Course Withdrawal with “W”	October 16 – 21, 2013
Last day of classes	November 30, 2013
<b>Final Exam</b>	<b>December 18, 2013; 9.00 AM – noon</b>

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