



B.E. International Program

Faculty of Economics, Thammasat University



Course Outline

EE 311 Microeconomics Theory (Section 046402)

Semester: 2/2015 (January 18 – May 14, 2016)

Instructor: **Dr. Pawin Siriprapanukul**
Office: BE Director Office, 5th floor
e-mail address: pawin@econ.tu.ac.th

Class Schedule: Wednesdays and Fridays at 11.00 – 13.00 hrs.

Class Room: Room , Faculty of Economics

Prerequisites: *EE 211 and MA 216*

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.

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 | 40% (Wednesday, March 9, 11.00 – 13.00 hrs.) |
| Final examination | 55% (Monday, May 23, 9.00 – 12.00 hrs.) |

Exam periods: (no class)

Minterm: March 7 – 12
Final: May 16 – June 1

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*, (7th 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*, (4th ed.), New York: Oxford University Press. 2003.
- 4) Frank, Robert H. (6th ed.). *Microeconomics and Behavior*, New York: McGraw-Hill, 2005.
- 5) Perloff, *Microeconomics*, (3rd 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* (6th 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*, (8th ed.), Dryden Press, 2002.
- 10) Varian, Hal *Intermediate Microeconomics*, (5th 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.

Oyer, Paul, *Everything I Ever Needed to Know about Economics I Learned from Online Dating*, Harvard Business Review Press, 2014.

Dan Ariely, *The Upside of Irrationality: The Unexpected Benefits of Defying Logic at Work and at Home*, Harper; 1 edition (June 1, 2010)

Dan Ariely, *Predictably Irrational, Revised and Expanded Edition: The Hidden Forces That Shape Our Decisions*, Harper Perennial; 1 Exp Rev edition (April 27, 2010)

Dan Ariely, *The Honest Truth About Dishonesty: How We Lie to Everyone--Especially Ourselves*, Harper Perennial; Reprint edition (June 18, 2013)

Movies:

“A Beautiful Mind” Universal Studios, 2001.
“An Inconvenient Truth”, 2006.
“Inside Job”, 2010.

Some Useful Links:

Student Resources for Frank’s text:

http://highered.mcgraw-hill.com/sites/0073375942/student_view0/index.html

Nobel Prize in Economic Sciences: http://nobelprize.org/nobel_prizes/economics/shortfacts.html

Robert H. Frank: <http://www.robert-h-frank.com/>

Econ Ph.D. Net: <http://www.econphd.net/>

Hal R. Varian: <http://people.ischool.berkeley.edu/~hal/>

The Official Paul Krugman Web Page: <http://web.mit.edu/krugman/www/>

The Undercover Economist: <http://timharford.com>

The Airport Economist: <http://www.theairporeconomist.com>

The Economist Magazine: <http://www.economist.com>

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:

1. Introduction

1.1 Why Study Microeconomics?

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!
Do: The Interactive Excel Exercise in “01Tax&Subsidy.xls” file.

2. Consumer Behavior and Demand Theory

2.1 Indifference Curve Analysis

- 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. Griffiths & Wall Ch.1 (pp.-33)

2.2 Consumption equilibrium and changes in equilibrium

- 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)

- 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.

Do: The Interactive Excel Exercise in “04Intertemp.xls” file.

2.4 Consumption under uncertainty

- expected utility
- preference toward risk
- gambling and insurance
- The Demand for Risky Assets

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) Besanko & Braeutigam Ch. 15 (15.1-15.4), Varian Ch. 12

3. Transactions Costs and Institutional Economics

- 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, 4th 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

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

| |
|---|
| <p>Review: All product and cost curves; e.g. AP, MP, TP, TC, AC, MC.</p> <p>Read: Pindyck & Rubinfeld Chs.6-7, Salvatore Chs. 7-8, Perloff Ch.6-7, Frank Chs.9-10 Miller & Fishe Chs.8-9, Griffiths & Wall Ch.4, Besanko & Braeutigam Ch. 6-8</p> <p>Do: The Interactive Excel Exercise in “05Prod&Cost.xls” file.</p> |
|---|

5. Product Markets

5.1 Perfectly competitive markets

- long-run equilibrium and efficiency

| |
|--|
| <p>Review: Characteristics of perfectly competitive markets, price and output under perfect competition.</p> <p>Read: Pindyck & Rubinfeld Ch.8, Hirshleifer & Glazer Ch.7 (pp.175-186), Salvatore Ch.9, (pp.240-248), Frank Ch.11, Miller and Fishe Ch.10, Griffiths and Wall Ch.6, Perloff Ch. 8, Besanko & Braeutigam Ch. 9.</p> <p>Do: The Interactive Excel Exercise in “06Competitive.xls” file.</p> |
|--|

5.2 Monopoly

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

| |
|--|
| <p>Review: Simple monopoly</p> <p>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 & Fishe Ch.11-12, Hirshleifer Ch.8, Griffiths and Wall Ch.7, Besanko & Braeutigam Ch. 11.1-11.6 & 12.</p> <p>Do: The Interactive Excel Exercise in “07Price Discrim.xls” file.</p> |
|--|

5.3 Monopolistic competition

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

| |
|---|
| <p>Read: Frank Ch.13, Pindyck & Rubinfeld Ch.12.1, Perloff 13.7, Besanko & Braeutigam Ch. 13.5 Miller & Fishe Ch.13 (pp.515-523), Salvatore Ch. 11 (11.1-11.2)</p> |
|---|

5.4 Oligopoly

- meaning of oligopoly
- various models of oligopoly:
 - kinked demand
 - collusion and cartel

- Cournot, Bertrand and Stackelberg
- price leadership or dominant firm
- 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.

Do: The Interactive Excel Exercise in "08Duopoly.xls" file.

Watch: "A Beautiful Mind"

6. Factor Markets

6.1 Competitive factor markets

- 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, Hirsheifer Ch.11, Salvatore Ch. 14, Frank Ch.14, Miller & Fische Ch.14 (pp.565-592), Griffiths & Wall Ch.9 (pp.379-383), Perloff Ch.5 (5.5), 15 (15.1).

6.2 Factor Markets with Monopoly and Monopsony Power

- 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.

Do: The Interactive Excel Exercise in "10Monopsony.xls" file.

6.3 Factor Markets with Monopoly Power of Seller of Input

- 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

- 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 & Wall Ch.9 (pp.400-404), Besanko & Braeutigam Ch. 9.5

7. General Equilibrium Analysis and Welfare Economics

7.1 General Equilibrium: consumption, production, and exchange

- 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 & Fiske Ch.16, Salvatore Ch.17, Frank Ch.16, Griffiths & Wall Ch.9 (pp.421-433), Perloff Ch. 10; Besanko & Braeutigam Ch. 16.1-16.4.
Do: The Interactive Excel Exercise in “11EdgeworthBox.xls” file.

7.2 Market Failure and Imperfections

- 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 & Fiske 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
Watch: “An Inconvenient Truth”, “Inside Job”

Teaching Plan:

| No. | Date | Topics |
|---|------------|--|
| 1 | Wed 20 Jan | Application of Demand and Supply concepts: government intervention |
| 2 | Fri 22 Jan | Application of Demand and Supply concepts: government intervention |
| 3 | Wed 27 Jan | Consumer Behavior and Demand Theory: Indifference Curve Analysis |
| 4 | Fri 29 Jan | Quiz 1 (Government intervention)/ Consumption equilibrium and Changes in equilibrium |
| 5 | Wed 3 Feb | Applications: vouchers vs. income transfers, Revealed preferences, index numbers |
| 6 | Fri 5 Feb | Quiz 2 (Consumer Behavior)/ Intertemporal consumption |
| 7 | Wed 10 Feb | Intertemporal consumption |
| 8 | Fri 12 Feb | Consumption under uncertainty |
| 9 | Wed 17 Feb | Consumption under uncertainty |
| 10 | Fri 19 Feb | Quiz 3 (Index numbers and Intertemporal)/ Production and Costs |
| 11 | Wed 24 Feb | Production and Costs |
| 12 | Fri 26 Feb | Perfectly competitive markets |
| 13 | Wed 2 Mar | Quiz 4 (Uncertainty and Production&Costs)/ Monopoly |
| 14 | Fri 4 Mar | Monopoly |
| Midterm exam: Wednesday, March 9, 11.00-13.00 hrs. | | |
| 15 | Wed 16 Mar | Pricing strategies |
| 16 | Fri 18 Mar | Quiz 5 (Monopoly)/Pricing strategies |
| 17 | Wed 23 Mar | Monopolistic competition and Oligopoly |
| 18 | Fri 25 Mar | Various models of oligopoly |
| 19 | Wed 30 Mar | Quiz 6 (Pricing strategies)/Various models of oligopoly |
| 20 | Fri 1 Apr | Game theory and its application |
| | Wed 6 Apr | Holiday |

| No. | Date | Topics |
|---|-------------|---|
| 21 | Fri 8 Nov | Game theory and its application |
| | 13, 15 Apr | Holidays |
| 22 | Wed 20 Apr | Factor Markets |
| 23 | Fri 22 Apr | Quiz 7 (Oligopoly and Game)/ Factor Markets |
| 24 | Wed 27 Apr | Factor Markets |
| 25 | Fri 29 Apr | General Equilibrium Analysis |
| 26 | Wed 4 May | General Equilibrium Analysis |
| | Fri 6 May | Holiday |
| 27 | Wed 11 May | Market Failure and Imperfections |
| 28 | Fri 13 May | Quiz 8 (General Equilibrium)/Market Failure and Imperfections |
| Final Examination: Monday, May 23, 9.00 – 12.00 hrs. | | |
