Course Outline

EE 311 Microeconomics Theory

Semester: 1/2020 (10 August – 28 November 2020)

Instructor: **Dr. Kittichai Saelee**
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Office hours: **By appointment, by email**

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

Class Venue: Room 303 , Faculty of Economics

Course Description:
Prerequisites: *EE 211 and MA 216*

Demand and supply analysis, consumer behaviour 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.

Ojectives of the course:

1. Understand and able to apply the consumer behavior and demand theory.
2. Understand and be able to explain the relationship between inputs and output in the short run and long run. Understand types of cost curves and their properties as well as understanding the relationship between production and costs.
3. Know the characteristics of each type of product market structure. Know how to determine the equilibrium price and quantity for each market structure.
4. Know how to determine the equilibrium price and quantity for each type of factor market.
5. Understand the three general equilibrium conditions and the Pareto optimality concept.
6. Understand the factors the lead to market failure and the way to solve the market failure.

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:

Group work	10%
Quizzes	5%
Book Summary	5%
On-line exercises	5%
Mid-term examination	30%
Final examination	45%

Important Dates

Add-Drop period	10 – 23 Aug 2020
Examination period (no classes)	28 Sept – 3 Oct 2020
Midterm	2 Oct 2020
Final	4 Dec 2020

Holidays

Wed 12 Aug 2020	HM Queen Sirikit, the Queen Mother's Birthday
Tue 13 Oct 2020	HM King Bhumibol Adulyadeg the Great Memorial Day
Fri 23 Oct 2020	King Chulalongkorn Day

Main Textbooks

There are several textbooks that cover similar materials. **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 materials 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) **Besanko, David, and Ronald R. Braeutigam, *Microeconomics: An Integrated Approach*, (4th ed.) New York:John Wiley& Sons, 2014.**
2) **Pindyck, Robert S. and Daniel E. Rubinfeld. *Microeconomics,* (9th ed.), New Jersey: Prentice -Hall, 2018.**
3) **Perloff, *Microeconomics*, (8th ed.) Boston: Peason, 2018.**
4) Salvatore, Dominick, *Microeconomics: Theory and Applications,* (5th ed.), New York: Oxford University Press. 2008.
5) Frank, Robert H. (8th ed.). *Microeconomics and Behavior,* New York: McGraw-Hill, 2010.
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, 2000.
9) Nicholson, Walter and Christopher M. Snyder, *Intermediate Microeconomics and Its Application,* (11th ed.), Dryden Press, 2009.
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".

Supplemenatary Reading (Choose ONE for Book Summary)

Acemoglu, Daron, and James A Robinson (2012). *Why Nations Fail: The Origins of Power, Prosperity and Poverty* New York: Crown.

Banerjee, A. V., & Duflo, E. (2012). *Poor economics: a radical rethinking of the way to fight global poverty.* Paperback edition. New York: PublicAffairs.

Wheelan, Charles J. (2002) *Naked economics: undressing the dismal science* New York : Norton

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 Decisio*ns, 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.theairporteconomist.com
The Economist Magazine: http://www.economist.com

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Expected Learning Outcomes
●	1.1 Students demonstrate integrity.
○	1.2 Students prioritize social and public benefits over personal ones.
●	1.3 Students are punctual and comply with the code of conduct of the institution and society at large.
○	1.4 Students are responsible and accountable to society, the nation, and the subject of economics.
○	1.5 Students realize the cultural and environmental value of the sustenainable society.

2. Knowledge

Applicability	Expected Learning Outcomes
●	2.1 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.2 Students know and understand Thai and global economic structure, and the importance of major international economic events.
●	2.3 Students know and understand instruments of economic analysis.
●	2.4 Students know and understand applied fields in economics, including monetary, public, international, business, natural resource and environmental, industrial, agricultural, cooperative, political, developmental, and entrepreneurial economics as well as agribusiness.
○	2.5 Students are informed about related fields including sociology, business administration, education, law policy, and science.

3. Intellectual Development

Applicability	Expected Learning Outcomes
●	3.1 Students have developed individual critical thinking.
●	3.2 Students are sufficiently trained in research skills.
●	3.3 Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand causes of current economic problems in Thailand. Based on analsyis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes
●	4.1 Students are responsible for assigned tasks and work in groups effectively.
●	4.2 Students have problem-solving skills
○	4.3 Students show leadership skills and team spirit.
●	4.4 Students are always improving themselves.
○	4.5 Students have good interpersonal skills, adapting and working under different conditions.

5. Quantitative Analysis, Communication and Information Technology

Applicability	Expected Learning Outcomes
○	5.1 Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.
●	5.2 Students communicate effectively and select appropriate presentation methods.
○	5.3 Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.

Teaching Plan (Subect to change):

1. Introduction

1.1 Why Study Microeconomics?

Application of Demand and Supply concepts: government intervention

Review: Concepts of consumer and producer surplus.
Read: Besanko & Braeutigam Chs. 2 & 9, Pindyck & Rubinfeld Chs. 2 and 9, Perloff Chs.2,3,9, Frank Ch. 2, Salvatore Ch.2.

2. Consumer Behavior and Demand Theory

2.1 Indifference Curve Analysis

- assumptions
- analysis of goods, bads, neuters

Review: Properties of indifference curves.
Read: Besanko & Braeutigam Ch. 3 & 4., Pindyck & Rubenfeld Ch. 3, Perloff Ch.4 & App. 4A, Salvatore Ch.3 (3.1-3.2), Frank Ch.3, Hirshleifer Ch. 3(pp.70-73), Miller & Fishe Ch.5, 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: Besanko & Braeutigam Ch. 5, Pindyck & Rubinfeld Ch. 4, Appendix, Perloff Ch. 5; Salvatore Ch 3 (3.4-3.5) Chs.4 -5, Frank Ch.4-5, Appendix; Hirshleifer Ch.4,Ch.5 (pp.117-152), Miller & Fishe 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.

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 resouces

Read: Pindyck & Rubinfeld Ch.15, Perloff Ch. 16, Salvatore Ch.16, Frank Ch.15 Appendix, Hirshleifer Ch.14.

2.4 Consumption under uncertainty

- expected utility
- preference toward risk
- gambling and insurance

- The Demand for Risky Assets

Read: Besanko & Braeutigam Ch. 15 (15.1-15.4), Pindyck & Rubinfeld Ch.5, Perloff Ch.17 (17.1-17.2), Salvatore Ch.6, Frank Ch.6 (pp.198-210), Miller & Fishe Ch.5 (pp.644-649), Griffiths & Wall Ch.3 (pp.102-113).

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 & Fishe Ch.7, Frank Ch.6 Appendix, Griffiths and Wall Ch.5, Baumol W.J.Economic Theory and Operations Analysis, 4 th 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

Review: All product and cost curves; e.g. AP, MP, TP, TC, AC, MC.
Read: Besanko & Braeutigam Ch. 6-8, Pindyck & Rubinfeld Chs.6-7, Perloff Ch.6-7, Salvatore Chs. 7-8, Frank Chs.9-10, Miller & Fishe Chs.8-9, Griffiths & Wall Ch.4.

5.Product Markets

5.1 Perfectly competitive markets

- long-run equilibrium and efficiency

Review: Characteristics of perfectly competitive markets, price and output under perfect competition.
Read: Besanko & Braeutigam Ch. 9, Pindyck & Rubinfeld Ch.8, , Perloff 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.

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

Review:	Simple monopoly
Read:	Besanko & Braeutigam Ch. 11.1-11.6 & 12, 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.

5.3 Monopolistic competition

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

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

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:	Besanko & Braeutigam Ch. 13.1-13.4 & 14, Pindyck and Rubinfeld Ch.12.2-12.6 & Ch.13, Perloff Ch. 13,14, Hirshleifer Ch.10, Salvatore Ch.11 (11.3-11.8) Ch. 12 , Frank Ch.13, Miller & Fishe Ch.13 (pp.526-557); Chiang, Fundamental Methods of Mathematical Economics, Ch. 21.
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, Perloff Ch.5 (5.5), 15 (15.1).Hirsheifer Ch.11, Salvatore Ch. 14, Frank Ch.14, Miller & Fishe Ch.14 (pp.565-592),Griffiths & Wall Ch.9 (pp.379-383).

6.2 Factor Markets with Monopoly and Monopsony Power

- marginal revenue product

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

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

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 & Fishe Ch.14 (pp.599-606).

6.4 Economic Rent

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

Read:	Besanko & Braeutigam Ch. 9.5,Pindyck and Rubinfeld Ch.14 (pp.529-532), Frank Ch.15 (pp.569-70), Hirshleifer Ch.12 (12.7), Miller & Fishe Ch.14 (pp.588-589), Griffiths & Wall Ch.9 (pp.400-404).

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:	Besanko & Braeutigam Ch. 16.1-16.4.Pindyck & Rubinfeld Ch.16 (16.1-16.4, 16.6), Perloff Ch. 10, Hirshleifer Ch.15 (15.2), Miller & Fishe Ch.16, Salvatore Ch.17, Frank Ch.16, Griffiths & Wall Ch.9 (pp.421-433).

7.2 Market Failure and Imperfections

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

Read:	Besanko & Braeutigam Ch. 17, Pindyck & Rubinfeld Ch.16 (16.7) & Chs.17-18, Perloff Ch. 18,19, Hirshleifer Ch.15 (15.3), Miller & Fishe Ch.17,Salvatore Chs.18-19, Frank Chs.17-18, Griffiths & Wall Ch.9 (pp.433-437) & Ch.11.
Watch:	“An Inconvenient Truth”, “Inside Job”

Teaching Plan:

No.		Date	Topics
1	F	14 Aug	Application of Demand and Supply concepts: government intervention
2	W	19 Aug	Application of Demand and Supply concepts: government intervention
3	F	21 Aug	Consumer Behavior and Demand Theory: Indifference Curve Analysis
4	W	26 Aug	Consumption equilibrium and Changes in equilibrium
5	F	28 Aug	Applications: vouchers vs. income transfers, Revealed preferences, index numbers
6	M* (substitute for 12 Aug)		Intertemporal consumption/
7	W	2 Sep	Intertemporal consumption
8	F	4 Sep	Consumption under uncertainty
9	W	9 Sep	Consumption under uncertainty
10	F	11 Sep	Production and Costs
11	W	16 Sep	Production and Costs
12	F	18 Sep	Perfectly competitive markets/
13	W	23 Sep	Monopoly
14	F	25 Sep	Monopoly
Midterm exam: Friday 2 October 2020: 11.30am – 2.00pm			
15	W	7 Oct	Pricing strategies
16	F	9 Oct	Pricing strategies
17	W	14 Oct	Monopolistic competition and Oligopoly
18	F	16 Oct	Various models of oligopoly/
19	W	21 Oct	Various models of oligopoly
20	M* (substitute for 23 Oct)		Game theory and its application
21	W	28 Oct	Game theory and its application
22	F	30 Oct	Factor Markets
23	W	4 Nov	Factor Markets
24	F	6 Nov	Factor Markets/
25	W	11 Nov	General Equilibrium Analysis
26	F	13 Nov	General Equilibrium Analysis
27	W	18 Nov	General Equilibrium Analysis
28	F	20 Nov	Market Failure and Imperfections
29	W	25 Nov	Market Failure and Imperfections
30	F	27 Nov	Market Failure and Imperfections/
Final Examination: Friday 4 December 2020: 09.00 – 12.00hrs			