



### Course Syllabus

#### EE 311 Microeconomics Theory (Section 046401)

Semester: 1/2023 (August 15 - December 4, 2023)

**Lecture Time:** Wednesday and Friday, 09.00-11.00 hours  
**Lecture Venue:** Room EE302  
**Teaching Materials Platform:** Facebook Group “EE311 2023-1”  
<https://www.facebook.com/groups/1743036506141187>  
**Instructor:** **Assoc. Prof. Chayun Tantivasadakarn**  
**Office:** Room # 8 the 60<sup>th</sup> Anniversary Building),  
 Faculty of Economics, Tha Prachan Campus  
**Contact:** [chayunt@econ.tu.ac.th](mailto:chayunt@econ.tu.ac.th), <https://www.facebook.com/AjarnChayun>  
**Office hours:** Wednesday and Friday 13:30 – 15:00 or by appointment via email

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

**Class Venue:** Room 302, 2nd floor, Faculty of Economics

#### Course Description:

*Prerequisites: EE 211 and MA 216*

Consumer behavior focusing on indifference curve analysis, intertemporal consumption, consumption and risks. Theory of production and cost, the birth of the firm using information cost, structure and behavior of imperfect competitive markets which are monopoly, monopolistic competition and duopoly markets. Introduction to game theory. Price setting in practice. Price determination in factor markets, general equilibrium analysis, welfare Economics, market failures and measures to correct.

#### 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:**

Quizzes/assignment	15%
Mid-term examination	40%
Final examination	45%

**Important Dates**

Add-Drop period	<b>August 15 – 28, 2023</b>
Midterm	<b>Wed, October 4, 2023; 15.00 - 17.30 hrs.</b>
Final	<b>Sat, December 16, 2023; 13.30 - 16.30 hrs.</b>
Last day for course withdrawal	<b>22 October, 2023</b>

**Expected Learning Outcomes****1. Morality and Ethics EE311**

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students demonstrate integrity.	Exercices and quizzes
○	2. Students prioritize social and public benefits over personal ones.	
●	3. Students are punctual and comply with the code of conduct of the institution and society at large.	
○	4. Students are responsible and accountable to society, the nation, and the subject of economics.	
○	5. Students realize the cultural and environmental value of a sustainable society.	

**2. Knowledge**

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students know and understand modern economics principles and theories, and are up to date with new developments.	Exercices, quizzes, and exams
●	2. Students know and understand Thai and global economic structure and the importance of major international economic events.	
●	3. Students know and understand the instruments of economic analysis.	
●	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.	
○	5. Students are informed about related fields including sociology, business administration, education, law policy, and science.	

### 3. Intellectual Development

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

### 4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students are responsible for assigned tasks and work in groups effectively.	Exercises, quizzes, discussion
●	2. Students have problem-solving skills.	
○	3. Students show leadership skills and team spirit.	
●	4. Students are always improving themselves.	
○	5. Students have good interpersonal skills, adapt, and work under different conditions.	

### 5. Quantitative Analysis, communication, and information technology

Applicability	Expected Learning Outcomes	Evaluation Method
○	1. Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	Exercises, quizzes, discussion

○	2. Students communicate effectively and select appropriate presentation methods.	
○	3. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	

Remark: ● Primary expected outcome ○ Secondary expected

### 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*, (4<sup>th</sup> ed.) New York: John Wiley & Sons, 2014.**
- 2) **Pindyck, Robert S. and Daniel E. Rubinfeld. *Microeconomics*, (9<sup>th</sup> ed.), New Jersey: Prentice -Hall, 2018.**
- 3) **Perloff, *Microeconomics*, (8<sup>th</sup> ed.) Boston: Peason, 2018.**
- 4) Salvatore, Dominick, *Microeconomics: Theory and Applications*, (5<sup>th</sup> ed.), New York: Oxford University Press. 2008.
- 5) Frank, Robert H. (8<sup>th</sup> 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* (6<sup>th</sup> 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*, (11<sup>th</sup> ed.), Dryden Press, 2009.
- 10) Varian, Hal *Intermediate Microeconomics*, (5<sup>th</sup> ed.) New York: Norton, 1999.

### 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](http://highered.mcgraw-hill.com/sites/0073375942/student_view0/index.html)

Nobel Prize in Economic Sciences:

[http://nobelprize.org/nobel\\_prizes/economics/shortfacts.html](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>

## Teaching Plan (Subject 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 & Rubinfeld Ch. 3, Perloff Ch.4 & App. 4A, Salvatore Ch.3 (3.1-3.2), Frank Ch.3, Hirshleifer Ch. 3(pp.70-73), Miller & Fische 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 & 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.

#### 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 & Fische 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 & 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

#### 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 & Fische 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 Fische 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 & Fische 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 & Fische 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 & Fische 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).Hirshleifer Ch.11, Salvatore Ch. 14, Frank Ch.14, Miller & Fische 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 & Fische 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:**

<b>No.</b>	<b>Topics</b>
1 Aug 16	Application of Demand and Supply concepts: government intervention
2 Aug 18	Application of Demand and Supply concepts: government intervention
3 Aug 23	Consumer Behavior and Demand Theory: Indifference Curve Analysis
4 Aug 25	Consumption equilibrium and Changes in equilibrium
5 Aug 30	Applications: vouchers vs. income transfers, revealed preferences, index numbers
6 Sep 1	Intertemporal consumption
7 Sep 6	Intertemporal consumption
8 Sep 8	Consumption under uncertainty
9 Sep 13	Consumption under uncertainty
10 Sep 15	Production and Costs
11 Sep 20	Production and Costs
12 Sep 22	Perfectly competitive markets
13 Sep 27	Monopoly
14 Sep 29	Monopoly
<b>Midterm: Wednesday, October 4, 2023; 15.00 - 17.30 hrs.</b>	
15 Oct 11	Pricing strategies
Oct 13	Chulalongkorn Day, No class
16 (TBA)	Pricing strategies
17 Oct 18	Monopolistic competition and Oligopoly
18 Oct 20	Various models of oligopoly
19 Oct 25	Various models of oligopoly
20 Oct 27	Game theory and its application
21 Nov 1	Game theory and its application
22 Nov 3	Factor Markets
23 Nov 8	Factor Markets
24 Nov 10	Factor Markets
25 Nov 15	General Equilibrium Analysis
26 Nov 17	General Equilibrium Analysis
27 Nov 22	General Equilibrium Analysis and Market Failure and Imperfections
28 Nov 24	Market Failure and Imperfections
29 Nov 29	Market Failure and Imperfections
30 Dec 1	Market Failure and Imperfections
<b>Final Examination: Saturday, December 16, 2023; 13.30 - 16.30 hrs.</b>	

## ACADEMIC CALENDAR & HOLIDAY SEMESTER 1/2023

Semester 1/2023 (August 15 – December 4, 2023)	
<b><i>the TU Office of the Registrar (TU REG) will process the registration (semester 1/2023) for all BE students who have completed the pre-registration via BE Portal.</i></b>	July 17 – 20, 2023
Tuition Fee Payment Period (Via TU Greats App)	July 21 – August 11, 2023
Create Plan from Quota via TU Greats App (*ID.66)	August 1 - 9, 2023
Registration via TU Greats App (*ID.66)	August 10, 2023
Classes Begin	August 15, 2023
Add-drop period	August 15 – 28, 2023 <i>(from 9.00 AM of August 15 to 10.30 PM of August 28)</i>
Tuition Fee Payment Period (Via TU Greats App)	August 15 – 29, 2023 <i>(9 AM - 10.30 PM)</i>
Mid-term Examination Period	October 1 – 7, 2023
<i>H.M. King Bhumibol Adulyadej The Great Memorial Day*</i>	<i>October 13, 2023</i>
<i>King Chulalongkorn's Day*</i>	<i>October 23, 2023</i>
Withdrawal period with "W" on record	September 4 – October 22, 2023 <i>(from 9.00 AM of September 4 to 10.30 PM of October 22)</i>
Special Withdrawal with "w" on record	October 24 – November 20, 2023
Last day of class for Semester 1/2023	December 4, 2023
Final exam period	December 12 – 23, 2023
<i>H.M. King Bhumibol Adulyadej The Great's Birthday*</i>	<i>December 5, 2023</i>
<i>Constitution Day*</i>	<i>December 10, 2023</i>
<i>Substitution for Constitution Day*</i>	<i>December 11, 2023</i>
Submitting Forms for Degree Conferral	August 15 – 28, 2023

Remark \* Holiday, No classes during this period  
Updated: July 24, 2023