



## Course Outline

### EE 211 Principles of Microeconomics

#### Semester 1/2023

**Number of credits:** 3 credits (3-0-6)

**Lecture Time:** **Section 046401:** Tuesday, 09:00 – 12.00 hours

**Lecture Venue:** **Section 046401:** Room 203, 2nd floor, Faculty of Economics

**Instructor:** **Section 046401: Associate Professor Dr. Kaewkwan Tangtipongkul**  
**Office:** Faculty of Economics, Room 458  
**E-mail:** kaewkwan@econ.tu.ac.th  
**Office Hours:** By appointment

#### Course Description:

Principles of microeconomics such as value, price, resource allocation, introduction to theories of consumption and production with an emphasis on factors determining supply and demand of goods and services, determination of price and efficiency of resource allocation in perfect and monopoly markets; competitive factor market and introductory concepts of market failures.

#### Prerequisites:

For economics major students or students aimed to transfer to economics major only.

## Course Objectives:

After completing this course, students should have developed a range of skills enabling them to understand economic concepts and use those concepts to analyze specific questions.

By the end of this course, students should be able to:

- Understand the concept of opportunity cost
- Understand market forces of supply and demand
- Understand the concept of elasticities
- Understand the concept of consumer and producer surpluses
- Understand consumer behavior.
- Understand firm behavior in perfectly competitive and in monopoly structure.
- Analyze different types of market structures (a competitive market Vs. Monopoly).
- Understand how to apply economic principles to a range of policy questions.

Students should also have the skills needed to:

- Use supply and demand diagrams to analyze the impact of overall changes in supply and demand on price and quantity.
- Calculate producer and consumer surplus.
- Solve a consumer's utility maximization problem mathematically and graphically; analyze the impact of changes in price and income on a consumer's decision via shifting income and substitution effects.
- Solve a firm's cost minimization problem mathematically and graphically.
- Analyze the behavior of firms in a perfectly competitive market in the short-run and the long-run.
- Analyze the behavior of firm in a monopoly and calculate the resulting changes in producer or consumer surplus.
- Use economic tools to analyze economic policies.

## 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 sustainable 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 analysis 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.
○	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.

Remark: ● Primary expected outcome ○ Secondary expected outcome

### Textbooks:

Mankiw, N.G., (2023) **Principles of Microeconomics**, 10th ed., Cengage, (ISBN-13: 978-981-5119-30-5)

Krugman, P. and Robin Wells, (2018) **Microeconomics**. 3rd ed. Macmillan Education, (Hereafter, KW)—Earlier editions are applicable.

Pindyck, R. S., & Rubinfeld, D. L. (2018). **Microeconomics**. Upper Saddle River, N.J: Pearson/Prentice Hall.

### Evaluation:

Homework Assignments, Quizzes and Class Attendances	10 points
Midterm Exam	40 points
Final Exam	50 points
<b>Total</b>	<b>100 points</b>

### Remarks:

- **Mid-Term Examination:** Tuesday, October 3, 2023 (12:00-14:00 hrs.)
- **Final Examination:** Thursday, December 14, 2023 (09:00-12:00 hrs.)

**Study Plan:**

The class schedule shown below may be adjusted during the semester as needed.

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
#1: <b>Economics: The Study of Choice</b>	1 lecture (15 Aug 2023)	<ul style="list-style-type: none"> <li>○ <b>What is Economics all about?</b></li> <li>○ <b>The Basic Economic Problems</b></li> <li>○ <b>Circular Flow</b></li> <li>○ <b>Microeconomics Vs. Macroeconomics</b></li> <li>○ <b>Confronting Scarcity: Production Possibilities Curve (PPC)</b> <ul style="list-style-type: none"> <li>▪ Assumptions</li> <li>▪ An Illustration of Scarcity, Choice and Opportunity Costs Using the PPC</li> <li>▪ Economic Growth and Changes in the PPC</li> </ul> </li> <li>○ <b>Economists' Tool Kit</b> <ul style="list-style-type: none"> <li>▪ Equilibrium Analysis</li> <li>▪ Comparative Static Analysis</li> <li>▪ Constrained Optimization</li> </ul> </li> </ul>	<b>Read:</b> Mankiw, chs.1-3; KW, chs.1-2
#2-#3: <b>Demand, Supply, and Equilibrium</b>	2 lectures (22 Aug 2023) (29 Aug 2023)	<ul style="list-style-type: none"> <li>○ <b>Market: Meaning and Components</b></li> <li>○ <b>Demand: Buyers' Behavior</b> <ul style="list-style-type: none"> <li>• Meaning</li> <li>• Law of Demand</li> <li>• Individual and Market Demands</li> <li>• The Determinants of Demand (or Demand Shifters)</li> <li>• The Distinction of "Change in Quantity Demanded" and "Change in Demand"</li> </ul> </li> <li>○ <b>Supply: Sellers' Behavior</b> <ul style="list-style-type: none"> <li>• Meaning</li> <li>• Law of Supply</li> <li>• Firm and Market Supplies</li> </ul> </li> </ul>	<b>Read:</b> Mankiw, ch.4; KW, ch.3

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
		<ul style="list-style-type: none"> <li>• The Determinants of Supply (or Supply Shifters)</li> <li>• The Distinction of “Change in Quantity Supplied” and “Change in Supply”</li> <li>○ <b>Market Equilibrium: When Demand and Supply Meet</b> <ul style="list-style-type: none"> <li>• Meaning and How to Determine the Equilibrium</li> <li>• What Will Happen if Market is Not Yet in an Equilibrium? (<a href="#">Adam Smith's Invisible Hand or Market Clearing Process</a>)</li> </ul> </li> <li>○ <b>Shocking an Equilibrium</b> <ul style="list-style-type: none"> <li>• When demand curve shifts</li> <li>• When supply curve shifts</li> <li>• When both demand and supply curve simultaneously shift</li> </ul> </li> </ul>	
#4: <b>Elasticity: A Measure of Response</b>	1 lecture (30 Aug 2023 Makeup class for Sept 26 2023)	<ul style="list-style-type: none"> <li>○ <b>Elasticity</b> <ul style="list-style-type: none"> <li>▪ Meaning</li> <li>▪ Measurement</li> <li>▪ Why Elasticity? : Absolute Change, Relative Change, and Percentage Change</li> </ul> </li> <li>○ <b>Price Elasticity of Demand: Defined</b> <ul style="list-style-type: none"> <li>▪ Computing Price Elasticity of Demand</li> <li>• Point-Price Elasticity of Demand</li> <li>• Arc-Price Elasticity of Demand</li> <li>• Determinants of Price Elasticity of Demand</li> <li>• Total Revenue and Price Elasticity of Demand</li> </ul> </li> <li>○ <b>Other Demand Elasticities</b> <ul style="list-style-type: none"> <li>• Income Elasticity of Demand</li> </ul> </li> </ul>	<b>Read:</b> Mankiw, ch.5; KW, ch.6

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
		<ul style="list-style-type: none"> <li>• Cross Price Elasticity of Demand</li> <li>○ <b>Elasticity of Supply: Meaning, Measurement and Determinants</b></li> </ul>	
#5: <b>Consumers, Producers, and the Efficiency of Markets</b>	0.5 lecture (5 Sept 2023)	<ul style="list-style-type: none"> <li>○ <b>Consumer Surplus</b> <ul style="list-style-type: none"> <li>▪ Willingness to Pay (WTP)</li> <li>▪ Using the Demand Curve to Measure Consumer Surplus</li> <li>▪ Effect of a Price Change on Consumer Surplus</li> <li>▪ What Does Consumer Surplus Measure?</li> </ul> </li> <li>○ <b>Producer Surplus</b> <ul style="list-style-type: none"> <li>▪ Cost and the Willingness to Sell</li> <li>▪ Using the Supply Curve to Measure Producer Surplus</li> <li>▪ Effect of a Price Change on Producer Surplus</li> <li>▪ What Does Producer Surplus Measure?</li> </ul> </li> <li>○ <b>Market Efficiency</b></li> </ul>	<b>Read:</b> Mankiw, ch.7-8; KW, ch.4
#6 <b>Applications on Demand, Supply, and Government Policies</b>	0.5 lecture (5 Sept 2023)	<ul style="list-style-type: none"> <li>○ <b>Government Intervention in Market Prices</b> <ul style="list-style-type: none"> <li>▪ Price Ceilings <ul style="list-style-type: none"> <li>▪ Its effect on price and quantity</li> <li>▪ Its inefficiency in resource allocation</li> <li>▪ Welfare Analysis of Price Ceilings (Who gain and lose from the policy?)</li> </ul> </li> <li>▪ Price Floors <ul style="list-style-type: none"> <li>▪ Its effect on price and quantity (Case study: Agricultural commodities)</li> <li>▪ Its inefficiency in resource allocation</li> <li>▪ Welfare Analysis of Price Ceilings (Who</li> </ul> </li> </ul> </li> </ul>	<b>Read:</b> Mankiw, ch. 6-8; KW, chs.5 and 7

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
		<p>gain and lose from the policy?)</p> <ul style="list-style-type: none"> <li>▪ Effects of Taxes <ul style="list-style-type: none"> <li>• A Unit Tax Vs. Ad Valorem Tax</li> <li>• Meaning and Effect of a Unit Tax on Supply and Demand Curves</li> <li>• A Unit Tax Imposed on Producers Vs. A Unit Tax Imposed on Consumers <ul style="list-style-type: none"> <li>• Its effect on price consumers paid, price producers received, consumers' tax burden, producers' tax burden, government tax revenue, consumer and producer surplus, and total surplus</li> </ul> </li> <li>• Demand and Supply Elasticities: Implications on tax burdens incurred by consumers and producers</li> <li>• The differences between Unit Tax imposed on producers and on consumers</li> </ul> </li> <li>▪ Effects of Subsidy Given to Producers</li> </ul>	
<b>#7-#9: The Theory of Consumer Choice</b>	2 lectures (12 Sept 2023) (16 Sept 2023)	<ul style="list-style-type: none"> <li>○ <b>Utility Theory (or Cardinal Approach)</b> <ul style="list-style-type: none"> <li>• The Meaning of Utility</li> </ul> </li> </ul>	<b>Read:</b> Mankiw, ch.22; KW, chs.10-11; Frank, chs.3-4;;

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
		<ul style="list-style-type: none"> <li>• Relationship between Total Utility and Marginal Utility</li> <li>• Law of Diminishing Marginal Utility</li> <li>• Consumers' Equilibrium (or Rational Spending Rule) and Change in Equilibrium</li> <li>○ <b>Indifference Curves Theory (or Ordinal Approach)</b></li> <li>○ What a Consumer Wants <ul style="list-style-type: none"> <li>• The Meaning of Indifference Curve</li> <li>• Properties of Indifference Curve</li> <li>• Slope of Indifference Curve and Marginal Rate of Substitution (MRS)</li> </ul> </li> <li>○ What the Consumer Can Afford <ul style="list-style-type: none"> <li>• Budget Line: Meaning, Slope, and Change in Budget Line</li> </ul> </li> <li>○ How the Consumer Optimally Chooses</li> <li>○ Consumer Equilibrium and Change in Equilibrium</li> <li>○ Derivation of an Individual Demand Curve Using Indifference Curves and Budget Lines</li> <li>○ How a Consumer Responds to Change in Price: Substitution and Income Effects (Hicksian Approach)</li> </ul>	Lipsey, ch. 6 (& appendix);
#10-#12: <b>Production and Cost in the Short-Run and in the Long-Run</b>	3.5 lectures (10 Oct 2023) (17 Oct 2023) (24 Oct 2023) (31 Oct 2023)	<ul style="list-style-type: none"> <li>○ <b>Firm and the Objectives of Production</b></li> <li>○ <b>Production Functions</b></li> <li>○ <b>The Meaning of Cost</b> <ul style="list-style-type: none"> <li>▪ Economic and accounting costs</li> <li>▪ Sunk costs</li> <li>▪ Private cost and social cost</li> </ul> </li> <li>○ <b>Distinction between Short-run and Long-run</b></li> </ul>	<b>Production in the Short-Run</b> <b>Read:</b> Mankiw, ch.14; KW, ch.12; Frank, chs.9-10; Supplement Note provided in our class, <b>Production in the Long-Run</b>

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
		<ul style="list-style-type: none"> <li>○ <b>Production and Costs in the Short-run</b> <ul style="list-style-type: none"> <li>▪ Total Product (TP), Average Product (AP), Marginal Product (MP)</li> <li>▪ Relationship of TP, AP, and MP</li> <li>▪ Law of Diminishing Returns</li> <li>▪ Stage of Production</li> </ul> </li> <li>○ <b>Relationship between Costs and Production</b></li> <li>○ <b>Short-run Costs of Production: TFC, TVC, TC, AFC, AVC, ATC, MC</b></li> <li>○ <b>Production and Costs in the Long-run Isoquant</b> <ul style="list-style-type: none"> <li>○ Isocost</li> <li>○ Least Cost Combination</li> <li>○ Expansion Path</li> <li>○ The Meaning of Returns to Scale</li> <li>○ Long-run Costs of Production: LTC, LAC, LMC</li> <li>○ Relationship between Expansion Path and LTC</li> <li>○ Relationship between Long-run and Short-run Costs</li> <li>○ Economies and Diseconomies of Scale</li> </ul> </li> </ul>	<p><b>Read:</b> Supplement Note provided in our class; Frank, chs. 9-10; KW, ch. 12</p>
#11-#13: <b>Market Structure</b>	3 lectures (31 Oct 2023) (7 Nov 2023) (14 Nov 2023) (21 Nov 2023)	<ul style="list-style-type: none"> <li>○ <b>Meaning</b></li> <li>○ <b>Structure of Perfect and Imperfect Markets</b></li> <li>○ <b>Producer's Objectives</b></li> <li>○ <b>The Meanings of Profits and Loss</b></li> <li>○ <b>Profit Maximization</b> <ul style="list-style-type: none"> <li>▪ TR-TC Approach</li> <li>▪ MR-MC Approach</li> </ul> </li> <li>○ <b>Perfectly Competitive Market</b></li> </ul>	<p><b>Read:</b> Mankiw, chs.15-16; KW, chs. 13-14</p>

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
		<ul style="list-style-type: none"> <li>▪ The Nature of Demand, TR, MR, AR and Their Relationships</li> <li>▪ Short-run Equilibrium</li> <li>▪ Derivation of Firm's and Market's Short-run Supply Curves</li> <li>▪ Long-run Equilibrium</li> <li>○ <b>Monopoly</b></li> <li>▪ Causes of Monopoly</li> <li>▪ The Nature of Demand, TR, MR, AR and Their Relationships</li> <li>▪ Short-run Equilibrium</li> <li>▪ Economic Effects of Monopoly</li> <li>○ <b>Comparison between Perfect Competition and Monopoly</b></li> </ul>	
#14: <b>Factor Markets</b>	1 lecture (21 Nov 2023) (28 Nov 2023)	<ul style="list-style-type: none"> <li>○ <b>Demand for factor as a derived demand</b></li> <li>○ <b>The firm's demand for a factor</b></li> <li>○ <b>The supply of a factor</b></li> <li>○ <b>Determination of factor prices</b></li> </ul> <p>Under the two scenarios:</p> <ol style="list-style-type: none"> <li>1) Both factor market and output market are perfectly competitive.</li> <li>2) Factor market is perfectly competitive, but output market is under monopoly</li> </ol>	<b>Read:</b> Mankiw, ch.19; KW, ch. 20; Perloff, ch. 15.1-15.3
#15: <b>Market Failure</b>	0.5 lecture (28 Nov 2023)	<ul style="list-style-type: none"> <li>○ <b>Meaning and Characteristics</b></li> <li>○ <b>Origins of Market Failure</b> <ul style="list-style-type: none"> <li>▪ Monopoly Power</li> <li>▪ Public Goods</li> <li>▪ Externalities</li> <li>▪ Asymmetric Information</li> </ul> </li> <li>○ <b>Consequences of Market Failure</b></li> </ul>	<b>Read:</b> Mankiw, chs.10-11, 16 and 23; KW, chs. 17-18
			<b>Watch:</b> "Erin Brockovich", "Day After Tomorrow".

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
		o Correction of Failure and Imperfections: Government or Private sector	

### Academic Calendar (Semester 1/2023):

Activities	Time Period
Classes Begin	August 15, 2023
Add-drop period	August 15 – 28, 2023 (From 9.00 AM of August 15 to 10.30 PM of August 28)
Mid-term Examination Period	October 1 – 7, 2023
H.M. King Bhumibol Adulyadej the Great Memorial Day*	October 13, 2023
King Chulalongkorn's Day*	October 23, 2023
Withdrawal period with "W" on record	September 4 – October 22, 2023 (From 9.00 AM of September 4 to 10.30 PM of October 22)
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
H.M. King Bhumibol Adulyadej the Great's Birthday*	December 5, 2023
Constitution Day*	December 10, 2023
Substitution for Constitution Day*	December 11, 2023

Public Holiday in red. No classes during this period