



(Tentative) Course Syllabus
For
Economics Courses (EE-course)
Semester 1/2025

Course Outline

EE211 Principles of Microeconomics

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: -

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.

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 EE211

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

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.	Homework and reading assignments Class discussion
●	2. Students know and understand Thai and global economic structure, and the importance of major international economic events.	Homework and reading assignments Class discussion
●	3. Students know and understand instruments of economic analysis.	Homework and reading assignments Class discussion

Applicability	Expected Learning Outcomes	Evaluation Method
●	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.	Homework and reading assignments Class discussion
○	5. Students are informed about related fields including sociology, business administration, education, law policy, and science.	Homework and reading assignments Class discussion

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students have developed individual critical thinking.	Quizzes activities, Homework assignments, and Case studies
●	2. Students are sufficiently trained in research skills.	Quizzes activities, Homework assignments, and Case studies
●	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.	Quizzes activities, Homework assignments, and Case studies

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students are responsible for assigned tasks and work in groups effectively.	Quizzes activities and Case studies
○	2. Students have problem-solving skills.	Quizzes activities and Case studies
○	3. Students show leadership skills and team spirit.	Case studies
●	4. Students are always improving themselves.	Quizzes activities, Homework assignments, and Case studies

○	5. Students have good interpersonal skills, adapting and working under different conditions.	
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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.	Homework assignments
○	2. Students communicate effectively and select appropriate presentation methods.	Case study
○	3. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	Case study

Remark: ● Primary expected outcome ○ Secondary expected outcome

EE211 Course Learning Outcomes: CLOs

CLO	Program Learning Outcomes (PLOs)	Learning Process	Assessment Method
Knowledge			
K1	Acquiring knowledge and understanding of economic theories, fundamental economic tools, theory development, and applied economics	1. Lecture on theoretical knowledge 2. Problem-based learning by emphasizing problem analysis/problem-solving 3. Demonstrating knowledge integration in related study fields 4. Brainstorming to encourage active learning and applied knowledge	1. From assigned homework 2. From quizzes and exams 3. From case study analysis/displaying knowledge and conceptual understanding
K2	Ability to apply theoretical knowledge to analyze and provide practical suggestions for economic and social issues		
K4	Ability to attain lifelong learning and thoroughly understand		

CLO	Program Learning Outcomes (PLOs)	Learning Process	Assessment Method
	world economic and societal changes and impacts		
Skills			
S1	Acquiring intellectual skill and ability to think systematically to identify research topics, perform research, process data, and evaluate findings	1. Problem-based learning by emphasizing analysis of problems/problem-solving sources 2. Brainstorming to encourage class discussion and applied knowledge activities	1. Quizzes and examinations 2. Observation of participation in analytical thinking and proposing problem-solving guidelines 3. From extracurricular activity participation 4. From self-and peer- evaluated participation and personal development
S2	Acquiring analytical and communication skills and ability to interpret data from different sources, analyze, and integrate knowledge to propose appropriate problem-solving guidelines for economic and social issues		
Ethics			
E1	Acknowledge moral values and exhibit ethical traits, including decency, selflessness, and integrity	1. Learn from case studies covering ethics-related topics 2. Incorporating moral value instruction in lectures and class discussions 3. Experiencing real-life situations 4. Developing social responsibility activities	1. From punctuality, class participation, and meeting deadlines 2. Observation 3. Peer- and self-reflections
E3	Respect rights, opinions, values, and dignity of others. Obey organizational and societal rules and regulations		

CLO	Program Learning Outcomes (PLOs)	Learning Process	Assessment Method
Skills			
C1	Ability to effectively complete assigned tasks and responsibilities	1. Individual/group assignments 2. Lecture/debate/brainstorming/class discussion/knowledge sharing	1. Assignment quality 2. From problem-solving Processes 3. From teamwork skills and problem/case study analysis
C2	Show active learning characteristics and aspire to personal development	3. Encourage asking questions in class to promote student engagement 4. Activities to encourage problem-based learning by emphasizing analysis of problem /problem-solving sources	4. Examine thought processes, connected thinking, and reasoning

Main Text:

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

Recommended Texts & Materials

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.

Grading Criteria*:

Homework Assignments (submit 5 HWs), Quizzes (submit at least 10 in-class quizzes) and Class Attendances	20 points
Midterm Exam	35 points
Final Exam	45 points
Total	100 points

*Note: A (85-100) ; D-B+ (40-84) ; F (0-39)

Tentative Class Schedule:

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

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

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

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

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
		<p>incurred by consumers and producers</p> <ul style="list-style-type: none"> • The differences between Unit Tax imposed on producers and on consumers ▪ Effects of Subsidy Given to Producers 	
<p>#7-#9: The Theory of Consumer Choice</p>	<p>2 lectures</p>	<ul style="list-style-type: none"> ○ Utility Theory (or Cardinal Approach) <ul style="list-style-type: none"> • The Meaning of Utility • Relationship between Total Utility and Marginal Utility • Law of Diminishing Marginal Utility • Consumers' Equilibrium (or Rational Spending Rule) and Change in Equilibrium ○ Indifference Curves Theory (or Ordinal Approach) ○ What a Consumer Wants <ul style="list-style-type: none"> • The Meaning of Indifference Curve • Properties of Indifference Curve • Slope of Indifference Curve and Marginal Rate of Substitution (MRS) ○ What the Consumer Can Afford <ul style="list-style-type: none"> • Budget Line: Meaning, Slope, and Change in Budget Line ○ How the Consumer Optimally Chooses ○ Consumer Equilibrium and Change in Equilibrium ○ Derivation of an Individual Demand Curve Using 	<p>Read: Mankiw, ch.22; KW, chs.10-11; Frank, chs.3-4;; Lipsey, ch. 6 (& appendix);</p>

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
		Indifference Curves and Budget Lines ○ How a Consumer Responds to Change in Price: Substitution and Income Effects (Hicksian Approach)	
Mid-Term Examination			
#10-#12: Production and Cost in the Short-Run and in the Long-Run	3.5 lectures	<ul style="list-style-type: none"> ○ Firm and the Objectives of Production ○ Production Functions ○ The Meaning of Cost <ul style="list-style-type: none"> ▪ Economic and accounting costs ▪ Sunk costs ▪ Private cost and social cost ○ Distinction between Short-run and Long-run ○ Production and Costs in the Short-run <ul style="list-style-type: none"> ▪ Total Product (TP), Average Product (AP), Marginal Product (MP) ▪ Relationship of TP, AP, and MP ▪ Law of Diminishing Returns ▪ Stage of Production ○ Relationship between Costs and Production ○ Short-run Costs of Production: TFC, TVC, TC, AFC, AVC, ATC, MC ○ Production and Costs in the Long-run Isoquant <ul style="list-style-type: none"> ○ Isocost ○ Least Cost Combination ○ Expansion Path ○ The Meaning of Returns to Scale 	Production in the Short-Run Read: Mankiw, ch.14; KW, ch.12; Frank, chs.9-10; Supplement Note provided in our class, Production in the Long-Run Read: Supplement Note provided in our class; Frank, chs. 9-10; KW, ch. 12

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
		<ul style="list-style-type: none"> ○ Long-run Costs of Production: LTC, LAC, LMC ○ Relationship between Expansion Path and LTC ○ Relationship between Long-run and Short-run Costs ○ Economies and Diseconomies of Scale 	
#11-#13: Market Structure	3 lectures	<ul style="list-style-type: none"> ○ Meaning ○ Structure of Perfect and Imperfect Markets ○ Producer's Objectives ○ The Meanings of Profits and Loss ○ Profit Maximization <ul style="list-style-type: none"> ▪ TR-TC Approach ▪ MR-MC Approach ○ Perfectly Competitive Market <ul style="list-style-type: none"> ▪ The Nature of Demand, TR, MR, AR and Their Relationships ▪ Short-run Equilibrium ▪ Derivation of Firm's and Market's Short-run Supply Curves ▪ Long-run Equilibrium ○ Monopoly <ul style="list-style-type: none"> ▪ Causes of Monopoly ▪ The Nature of Demand, TR, MR, AR and Their Relationships ▪ Short-run Equilibrium ▪ Economic Effects of Monopoly ○ Comparison between Perfect Competition and Monopoly 	Read: Mankiw, chs.15-16; KW, chs. 13-14

Sessions	Lectures	Topics	Activities/Text & Materials/ Media
#14: Factor Markets	1 lecture	<ul style="list-style-type: none"> ○ Demand for factor as a derived demand ○ The firm's demand for a factor ○ The supply of a factor ○ Determination of factor prices <p>Under the two scenarios:</p> <ol style="list-style-type: none"> 1) Both factor market and output market are perfectly competitive. 2) Factor market is perfectly competitive, but output market is under monopoly 	<p>Read: Mankiw, ch.19; KW, ch. 20; Perloff, ch. 15.1-15.3</p>
#15: Market Failure	0.5 lecture	<ul style="list-style-type: none"> ○ Meaning and Characteristics ○ Origins of Market Failure <ul style="list-style-type: none"> ▪ Monopoly Power ▪ Public Goods ▪ Externalities ▪ Asymmetric Information ○ Consequences of Market Failure ○ Correction of Failure and Imperfections: Government or Private sector 	<p>Read: Mankiw, chs.10-11, 16 and 23; KW, chs. 17-18</p> <p>Watch: "Erin Brockovich", "Day After Tomorrow".</p>
Final Examination			

Course Outline

EE212 Principles of Macroeconomics

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: -

Course Description:

Indicators, goals, and problems in Macroeconomics. Determination of national income, theories of aggregate consumption and aggregate investment, the accelerator principle, money markets, the theory of supply and demand for money, the joint equilibrium model of product and money markets (IS-LM model), the balance of payments, and fiscal and monetary policies as means to stabilize an economy. Collecting and managing Thai macroeconomic for analyzing economic conditions are introduced.

Course Objectives:

Student comprehends the principle of macroeconomics theories and can apply those theories to analyze causes and effects of the movement of various macroeconomic variables in Thailand and some other countries' economies.

Expected Learning Outcomes

The student shall be equipped with knowledge of the principles of macroeconomics. By the end of the semester, students should understand macroeconomic news and be able to analyze the causes and effects of the movement of key macroeconomic variables in Thailand

1. Morality and Ethics

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students demonstrate integrity.	
○	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.	
●	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.	
●	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.	
○	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.	
○	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.	
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Remark: ● Primary expected outcome ○ Secondary expected

Main Text:

Case, Karl E., Ray C. Fair and Sharon M. Oster (2017), Principles of Macroeconomics (13th ed.): Pearson International Edition.

Froyen, Richard T. (2009), Macroeconomics, Theories and Policies (9th ed.): Prentice Hall.

Recommended Texts & Materials

Lipsey, R.G., Ragan, C.T.S. and Storer, P.A. (2008), Economics (13th ed.): Pearson Addison-Wesley

Mankiw, N.G., Principles of Macroeconomics (2009): South-Western Cengage Learning

Suggested Readings:

To be announced.

Grading Criteria:

Homework and other individual or group assignments/quizzes.	20%
Midterm exam	35%
Final exam	45%

Tentative Class Schedule:

1. Introduction to Macroeconomics (4.5 hours)

- 1.1 Introduction to Economics
 - 1.2 Macroeconomic objectives and macroeconomic policy
 - 1.3 Types of macroeconomics variables
 - 1.3.1 Stock vs flow variables
 - 1.3.2 Real vs nominal variables
 - 1.4 Key Macroeconomic variables
 - 1.4.1 Output/Input
 - 1.4.2 Employment/Unemployment
 - 1.4.3 Price level/Inflation
 - 1.4.4 Interest rate
 - 1.4.5 Exchange rate
 - 1.4.6 Inequality
 - 1.5 A brief history of macroeconomics
- Read: Case, Fair & Oster, Ch. 5, 7; LRS, Ch. 1, 2, 19, 31; Mankiw Ch. 1, 2, 23

2. National Income and National Product (4.5 hours)

- 2.1 The component of the macroeconomy
 - 2.2 Circular flow diagram
 - 2.3 National income and product account
 - 2.4 GDP vs GNP
 - 2.5 Measurement of GDP
 - 2.5.1 Product approach
 - 2.5.2 Expenditure approach
 - 2.5.3 Income approach
 - 2.6 Nominal GDP vs. Real GDP and GDP deflator
 - 2.7 Limitation of GDP concept
- Read Case, Fair & Oster, Ch. 6; LRS, ch.20, Mankiw Ch. 10, 11

3. National Income and Equilibrium Determination (9 hours)

- 3.1 Introduction
- 3.2 Composition of desired aggregate expenditure (DAE)
 - 3.2.1 Desired aggregate consumption expenditure
 - 3.2.2 Desired aggregate investment expenditure
 - 3.2.3 Desired aggregate government expenditure
 - 3.2.4 Desired aggregate net exports
- 3.3 Equilibrium national income
 - 3.3.1 Definition
 - 3.3.2 Determination of equilibrium national income
 - 3.3.2.1 $Y = DAE$ approach
 - 3.3.2.2 Leakage = Injection approach
 - 3.3.3 Changes in equilibrium national income and adjustment to new equilibrium

- 3.4 Paradox of Thrift
- 3.5 Inflationary and deflationary gap
- 3.6 Keynesian, Classical and Non-Keynes non-classical concept

Read: Case, Fair & Oster, Ch. 8; LCR, ch.21, 22

4. Fiscal Policy at Work (3 hours)

- 4.1 Meaning of fiscal policy
- 4.2 Objectives of fiscal policy
- 4.3 Fiscal policy tools
 - 4.3.1 Government expenditure
 - 4.3.2 Government transfer payment
 - 4.3.3 Government revenue
 - 4.3.4 Public debt
- 4.4 Types of government policy

Read: Case, Fair & Oster, Ch. 9; LCR, Ch. 32, Froyen Ch. 18, Mankiw Ch. 21

5. The Money Market and Monetary Policy (3 hours)

- 5.1 Money creation and money multiplier
- 5.2 Money and money market
- 5.3 Money supply and Central bank roles
 - 5.3.1 Money supply
 - 5.3.2 Central bank roles
- 5.4 Demand for money
- 5.5 Equilibrium in money market
- 5.6 Changes in equilibrium money market

Read: Case, Fair & Oster, Ch. 10; LRS, Ch. 27, 28, 29, Froyen Ch. 16, Mankiw Ch. 16

6. The IS-LM Model (9 hours)

- 6.1 Product market and IS curve
 - 6.1.1 Investment, interest rate and product market equilibrium
 - 6.1.2 The derivation of IS curve
 - 6.1.3 Factors determining slope of IS curve
 - 6.1.4 Shifts in IS curve
- 6.2 Money market and LM curve
 - 6.2.1 The derivation of LM curve
 - 6.2.2 Factors determining slope of LM curve
 - 6.2.3 Shifts of LM curve
- 6.3 IS-LM in terms of equation
- 6.4 The IS-LM combined
- 6.5 Changes in equilibrium of product and money market

Read Froyen, Ch. 7

7. Policy Effectiveness (3 hours)

7.1 Fiscal policy effectiveness

7.1.1 Fiscal policy effectiveness and slope of IS curve

7.1.2 Fiscal policy effectiveness and slope of LM curve

7.2 Monetary policy effectiveness

7.2.1 Monetary policy effectiveness and slope of IS curve

7.2.2 Monetary policy effectiveness and slope of LM curve

Read Froyen, Ch. 7

8. The Ad-AS Model and inflation (6 hours)

8.1 Aggregate Demand (AD)

8.1.1 The derivation of the AD curve from the IS-LM model

8.1.2 Move along the AD curve

8.1.3 The shift of AD curve

8.2 Aggregate Supply (AS)

8.2.1 Short-run AS

8.2.2 Long-run AS

8.2.3 Move along AS and shift of AS

8.3 Equilibrium and changes in equilibrium

8.3.1 Equilibrium in the AD-AS model

8.3.2 Changes in equilibrium in the AD-AS model

8.4 The analysis of fiscal policy and monetary policy using the AD-AS model

8.5 Inflation

8.5.1 Definition

8.5.2 Causes of inflation

8.5.2.1 Demand-pull inflation

8.5.2.2 Cost-push inflation

8.5.3 Phillips Curve

Read: Case, Fair & Oster, Ch. 12, 13; Froyen, Ch. 8, Ch. 10; LRS, Ch. 23, 24, 25, 30;

Mankiw Ch. 20, 21, 22

9. International Economics (3 hours)

9.1 Introduction to international trade

9.2 The Balance of Payment

9.3 Relationship between difference in saving and investment and current account

9.4 The market for foreign exchanges

9.4.1 Meaning and importance of foreign exchange rate

9.4.2 Demand for foreign exchanges

9.4.3 Supply of foreign exchanges

9.4.4 Exchange rate system

Read: Case, Fair & Oster, Ch. 19; LRS, Ch. 34, 35, Froyen Ch. 14, Mankiw Ch. 18



Course Outline

EE301 History of Thai Economy

Semester 1/2025

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

Prerequisite: -

Course Description:

This course focuses on developing students' critical understanding the development of the Thai economy. The course explores changes and transformation in economic, political, and societal aspects of Thailand. The main goal of this course is to examine the development of Thai economics and politics that led to the birth of modern state and economy in Siam state, and the resulting divergence between the "city" and the "rural". This attempt is done together with the investigation of the roles of Thai politics and policies in contributing to the changes.

The course puts the emphasis on exploring the changes associate with 3 groups of actors; 1) the Chinese merchants; 2) the peasants; and 3) the elite (Kings and aristocrats). These groups are explained as the three main "drivers" of changes in the Thai economy.

The historical period that this course focuses on from Late Ayutthata to Rattanakosin (Bangkok) period. The examination starts with re-examining the characteristics of Ayuthaya, to investigating the fall of Ayutthaya and the birth of Early Rattanakosin. The course then proceeds to examine the rise and fall of Thai absolutism, and the causes and consequences of 2475 revolution. The exploration of modern Siam followed, starting with the look into the rise of Sarit Thanarat and his long era of Thai development authoritarianism. The final parts of the course then examine the end of Sarit-Thanom authoritarian regime, the eventual liberalisation and growth of the Thai economy, and the economic crisis of 1997.

Course Objectives:

To develop critical understanding of the economic history Thailand, using the political economy approach. The ability to delve into the debates on the following issues will be key to the course

1. What were the key characteristics of Ayutthaya's economics and society?
2. How did the market system develop in early Rattanakosin?
3. What propelled Siam toward the modernization of the state?
4. What were the contexts underlying the modernization of the Thai economy?
5. How was the Thai economy shifted to the path of neo-liberalism?

In discussing the above questions, the course also shed light on the following aspects throughout Thai history

1. The changing lives of Thai peasants
2. The changing lives of Thai nobles, merchants, and labour
3. The economic and political factors that had driven the above changes, including the changing relationships between actors such as the monarchy, aristocrats, military, merchants, peasants, and labour.
4. The international factors that influenced the changes in Thailand

Main Textbook

- Pasuk Phongpaichit and Chris Baker (2002). Thailand: Economy and Politics, KL: Oxford University Press
- Chris Baker and Pasuk Phongpaichit (2017). A History of Ayutthaya: Siam in the Early Modern World. Cambridge University Press.

Suggested readings

- Jeffery Sng and Pimpraphai Bisalputra. (2015). A History of the Thai-Chinese. Didier Millet, CSI.
- Van Roy, Edward. (2017). Siamese Melting Pot: Ethnic Minorities in the Making of Bangkok. ISEAS-Yusof Ishak Institute

Lecture Notes

- Thorn Pitidol, EE301 Thai Economic History Lecture Note
Please see additional readings for each topic below in the Topics section.

Evaluation

Mid-term exam	30	percent
Final exam	40	percent
Discussions and participation in class	10	percent
Group projects	20	percent

The details of discussions, group works, and the essay will be announced during the semester.

Topics

Topic 1: From late Ayutthaya to early Rattanakosin

- Ayutthaya: Reunderstanding the old Siam state
 - Peace and Commerce
 - An Urban and Commercial Society
 - The Fall of Ayutthaya
- Thonburi and Bangkok
- Early Rattanakosin: basic economic and political challenges
- The Birth of Market System: Chinese merchants in early Rattanakosin
 - Siam peasants: Thai villages in the past

Additional reading

- Chris Baker and Pasuk Phongpaichit (2017). *A History of Ayudttthaya: Siam in the Early Modern World*. Cambridge University Press.
- Chattip Nartsupha (1999) ***Thai Village Economy in the Past***. Translated by Pasuk Phongpaichit and Chris Baker. Bangkok: Silkworm

Topic 2: The reform of Rama V

- The aftermath of Bowring Treaty and the transformed nature of the Thai farmers
 - The rise of Klongs and the birth of small independent farmers
- The tax-collectors, the Western companies, and Royal businesses
- The rise of Siam Absolute State
 - Rama V's reform
 - The building of Siam's modern state
 - Ideological apparatuses
 - Bureaucratic systems
 - Implications of Siam's modernization of state

Additional reading

- Kullada Kesboonchoo Mead (2004) ***The rise and decline of Thai absolutism***. New York : Routledge Curzon, 2004.

Topic 3: The fall of absolutism and the 2475 revolution

- The persisting problems of Thai farmers
- The new group of Chinese merchants
- 1932 revolution.
 - Post 2475 economic and politics
 - Phibul's military nationalism and the Pridi's socialism
 - The rise of bureaucratic capitalism

Topic 4: The rise of Sarit Thanarat and his authoritarian developmental state

- Cold war and the rise of Sarit Thanarat
- From Phibul's nationalist economic policies to Sarit's development plans
 - The rise of Bankers' Capitalism and the rent-allocating economy
 - Import-substitution and foreign direct investment
- Thai farmers under development plans
 - Disintegrating farmers' societies
 - The expansion of upland farmers

Additional reading

- Suehiro, Akira (1996) ***Capital Accumulation in Thailand 1855–1985***. Bangkok: Silkworm Books

Topic 5: From October events to the 1997 economic crisis

- The two Octobers: The uprising of farmers and students movements
- The export-oriented growth and economic liberalisation
- 1997 economic crisis: causes and consequences

Additional reading

- Hewison, Kevin (1999). ***Thailand Capitalism: The Impact of the Economic Crisis***. UNEAC Asia Paper, No.1 1999.
- Hewison, K. (2001). Resisting globalization: A study of localism in Thailand. *The Pacific Review*, 13(2), pp. 279-96.
- McCargo, Duncan. (2001). Populism and reformism in contemporary Thailand, *South East Asia Research*, 9, 1, pp. 89–107.

Teaching schedule

Week	Content
Week 1	Introduction to the course Ayutthaya: Peace and Commerce
Week 2	Ayutthaya: Society Fall of Ayutthaya and Thonburi
Week 3	Early Rattanakosin : Restoration of Ayutthaya & Chinese Merchants
Week 4	Thai village in the past
Week 5	Bowring treaty – Canals and rice farmers
Week 6	Tax-collectors and foreign businesses
Week 7	Building the Absolutist Modern State
Week 8	Mid-term exam
Week 9	The fall of Thai Absolutism and 2475 Revolution
Week 10	Phibul's Nationalism and Economic Nationalism Policies
Week 11	Cold War and the rise of Sarit The rise of Bankers' Capitalism
Week 12	Import-substitution strategy
Week 13	Rice Farmers and Highland Peasants
Week 14	October Events and the Export-Oriented Miracle
Week 15	1997 economic crisis
Week 16	Conclusion to the course

Expected Learning Outcomes

1. Morality and Ethics

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

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.	Group works and exams
●	2. Students know and understand Thai and global economic structure and the importance of major international economic events.	Group works and exams
○	3. Students know and understand the instruments of economic analysis.	Group works and exams
●	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.	Group works and exams

●	5. Students are informed about related fields including sociology, business administration, education, law policy, and science.	Group works and exams
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3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students have developed individual critical thinking.	Exams
●	2. Students are sufficiently trained in research skills.	Group works and exams
●	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.	Group works and exams

4. Interpersonal Skills and Responsibilities

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

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.	Exams
○	2. Students communicate effectively and select appropriate presentation methods.	Group works and in-class activities
○	3. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	Group works and in-class activities

Remark: ● Primary expected outcome ○ Secondary expected

Learning Management and Evaluation

CLO	Learning Management	Evaluation
CLO1.1 Describe and explain major economic, political, and societal transformations in Thai history.	Lectures, timeline-based thematic instruction, assigned textbook and reading materials.	Midterm and final exams; group projects.
CLO1.2 Analyze the roles of Chinese merchants, peasants, and elites in shaping the Thai economy.	Group discussions, lecture case studies, in-class critical thinking questions.	Participation; final exam short-essay questions.
CLO2.1 Examine the causes and consequences of economic transitions using political economy reasoning.	Group projects with guided research; peer review sessions; source analysis exercises.	Group project report and presentation; final exam essay.
CLO2.2 Compare competing interpretations of Thai economic development	Weekly assigned readings; in-class debates and guided questioning.	Participation; midterm and final exams.

in various historical periods.		
CLO3.1 Express historical-economic insights clearly in oral and written form.	Group work; peer feedback; collaborative presentations; formative comments from instructor.	Group presentation; in-class participation.
CLO4.1 Demonstrate responsibility, punctuality, and collaboration in classroom activities.	In-class discussion facilitation; group planning and execution of assignments.	Participation tracking; peer evaluations.

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
CLO1.1 Describe and explain major economic, political, and societal transformations in Thai history.	Midterm and final exams; group project short answers and essays	Weeks 8, 16	30%
CLO1.2 Analyze the roles of Chinese merchants, peasants, and elites in shaping the Thai economy.	Final exam (essay); in-class discussion and participation	Weeks 8, 16	10%
CLO2.1 Examine the causes and consequences of economic transitions using political economy reasoning.	Group project report and in-class presentation; final exam essay	Weeks 9–15	20%
CLO2.2 Compare competing interpretations of Thai economic development in various historical periods.	Weekly class debates and thematic essay questions on exams	Throughout semester	10%

CLO3.1 Express historical-economic insights clearly in oral and written form.	Group presentation and written project summary	Weeks 13-16	20%
CLO4.1 Demonstrate responsibility, punctuality, and collaboration in classroom activities.	Class attendance and participation records; peer and instructor evaluations	Throughout semester	10%

Course Outline

EE311 Microeconomic Theory

Semester 1/2025

Number of Credit: 4 Credits (4-0-8)

Prerequisite: EE211 (or EE213) and MA216 (or MA211)

Course Description:

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.

Course Objectives:

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 that 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 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/assignments	15%
Mid-term examination	40%
Final examination	45%

Learning Management and Evaluation

CLOs	Learning Management	Evaluation Method
CLO K 1 K2 K4 Able to analyze and propose solutions to economic problems using economic theory and tools, and apply such knowledge effectively in practical work settings.	<ul style="list-style-type: none">• Lecture• Case study• Self-directed learning through in-class activities and assignments	<ul style="list-style-type: none">• Written exam (85%)• Assignments/quizzes (15%)
CLO S 1 S2 Able to select and apply appropriate tools, such as demand and cost theory, pricing, and game theory, to solve economic problems.	<ul style="list-style-type: none">• Lecture• Case study• Self-directed learning through in-class activities and assignments	<ul style="list-style-type: none">• Written exam (85%)• Assignments/quizzes (15%)
CLO E 1 Adheres to academic ethics and properly cites academic work.	<ul style="list-style-type: none">• Self-directed learning through in-class activities and assignments	<ul style="list-style-type: none">• Proper citation of sources (included in the 15%)
CLO E 3 Able to assess ethical impacts on society, resource distribution, and sustainability, and	<ul style="list-style-type: none">• Lecture• Case study• Self-directed learning through in-class activities and assignments	<ul style="list-style-type: none">• Written exam (85%)• Ethical analysis and recommendations in assignments and quizzes (15%)

CLOs	Learning Management	Evaluation Method
capable of recommending economic decisions and designing policies with social responsibility in mind.		
CLO C 1 Able to complete assignments/quizzes.	<ul style="list-style-type: none"> Self-directed learning through in-class activities and assignments 	<ul style="list-style-type: none"> Assignments/quizzes (15%)
CLO C 2 C4 Possesses creativity, accepts differing opinions, plans work systematically, and continuously develops oneself.	<ul style="list-style-type: none"> Self-directed learning through in-class activities and assignments 	<ul style="list-style-type: none"> Development of the assignments based on feedback (included in the 15%)

Main Text:

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: Pearson, 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. Fische. *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.

Suggested Readings (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)

Suggested Movies and useful links:

Movies

- "A Beautiful Mind" Universal Studios, 2001.
- "An Inconvenient Truth", 2006.
- "Inside Job", 2010.

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>

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. Miller & Fishe Ch. 3. and newspaper articles!

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 & 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 resources

Read: Pindyck & Rubinfeld Ch.15, Perloff Ch. 16, Salvatore Ch.16, Frank Ch.15 Appendix, Hirshleifer Ch.14. Miller & Fishe Ch.5 (pp.617-632), Varian Ch. 10.

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 transaction 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

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.

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 & Fische 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 & Fische Ch.14 (pp.588-589), Griffiths &

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 & Fische 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"

Tentative Learning Activities:

Class No.	Date	Topics
1	Aug 6	Application of Demand and Supply concepts: government intervention
2	Aug 8	Application of Demand and Supply concepts: government intervention
3	Aug 13	Consumer Behavior and Demand Theory: Indifference Curve Analysis
4	Aug 15	Consumption equilibrium and Changes in equilibrium
5	Aug 20	Applications: vouchers vs. income transfers, revealed preferences, index numbers
6	Aug 22	Intertemporal consumption
7	Aug 27	Intertemporal consumption
8	Aug 29	Consumption under uncertainty
9	Sep 3	Consumption under uncertainty
10	Sep 5	Production and Costs
11	Sep 10	Production and Costs
12	Sep 12	Perfectly competitive markets
13	Sep 17	Monopoly
14	Sep 19	Monopoly
Midterm Examination		
15	Oct 1	Pricing strategies
16	Oct 3	Pricing strategies
17	Oct 8	Monopolistic competition and Oligopoly
18	Oct 10	Various models of oligopoly
19	Oct 15	Various models of oligopoly
20	Oct 17	Game theory and its application
21	Oct 22	Game theory and its application
22	Oct 24	Factor Markets
23	Oct 29	Factor Markets

Class No.	Date	Topics
24	Oct 31	Factor Markets
25	Nov 5	General Equilibrium Analysis
26	Nov 7	General Equilibrium Analysis
27	Nov 12	General Equilibrium Analysis and Market Failure and Imperfections
28	Nov 14	Market Failure and Imperfections
29	Nov 19	Market Failure and Imperfections
30	Nov 21	Review
Final Examination		

Course Outline

EE312 Macroeconomic Theory

Semester 1/2025

1. **Number of Credit:** 4 Credits (4-0-8)
2. **Prerequisite:** a) EE211 and EE212 or b) EE213 and EE214
3. **Course Descriptions:**

The model of joint equilibrium in product markets, money markets, and foreign exchange markets (the IS-LM-BP model); changes in equilibrium; product markets and labor markets; the model of aggregate supply and demand in closed and open economies; inflation, unemployment, and the Phillips curve; dynamic AD-AS framework; economic stabilization policies; growth theory, microfoundation of macroeconomics focusing on real business cycle model, new classical model, and new Keynesian model; applications of Macroeconomic theory to analyze economic situations.

4. **Course Learning Outcomes (Objectives)**

- CLO1: Explain the core theories of intermediate macroeconomics and describe the working of closed and open macroeconomy.
- CLO2: Identify key sources of economic data and interpret various types of economic indicators.
- CLO3: Apply macroeconomic theories to interpret changes in economic indicators, and provide comprehensive evaluations of changing conditions that affects the macroeconomy and key indicators.
- CLO4: Construct and communicate ideas effectively through academic-standard written and oral formats.
- CLO5: Demonstrate responsibility and accountability in completing individual and group assignments punctually.

5. Expected Learning Outcomes

1. Morality and Ethics **EE312**

Applicability	Expected Learning Outcomes	Evaluation Method
□	1. Students demonstrate integrity.	Quizzes/ Assignment /Exams/ Observed Class participation / Observed punctuality of submitted group assignment
□	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.	Quizzes/ Assignment /Exams/ Observed Class participation / Observed punctuality of submitted group assignment
□	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.	Quizzes/ Assignment /Exams/ Observed Class participation / Observed punctuality of submitted group assignment
☐	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.	Quizzes/ Assignment /Exams/ Observed Class participation / Observed
☐	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.	punctuality of submitted group assignment
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4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
□	1. Students are responsible for assigned tasks and work in groups effectively.	Quizzes/ Assignment /Exams/ Observed Class participation
□	2. Students have problem-solving skills.	/ Observed punctuality of submitted group assignment
□	3. Students show leadership skills and team spirit.	
□	4. Students are always improving themselves.	Quizzes/ Assignment /Exams/ Observed Class participation / Observed punctuality of submitted group assignment
□	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.	

□	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

8. Learning Management and Evaluation

CLO	Learning Management	Evaluation
CLO1	Develop lectures, case Examples, class discussions, and evaluations that ensure the fulfillment of course's CLOs and PLOs.	Quizzes/ Assignment /Exam/ Observed Class participation
CLO2	Develop lectures, case Examples, class discussions, and evaluations that ensure the fulfillment of course's CLOs and PLOs.	Quizzes/ Assignment /Exam/ Observed Class participation
CLO3	Develop lectures, case Examples, class discussions, and evaluations that ensure the fulfillment of course's CLOs and PLOs.	Quizzes/ Assignment /Exam/ Observed Class participation
CLO4	Develop lectures, case Examples, class discussions, and evaluations that ensure the fulfillment of course's CLOs and PLOs.	Observed punctuality of submitted group assignment / Observed Class participations
CLO5	Develop lectures, case Examples, class discussions, and evaluations that ensure the fulfillment of course's CLOs and PLOs.	Observed punctuality of submitted group assignment / Observed Class participations

9. Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
CLO1	Develop lectures, case Examples, class discussions, and evaluations that ensure the fulfillment of course's CLOs and PLOs.	6 Quizzes (approximately given every 3 weeks) 4 Group assignments (given monthly) Midterm Exam (Week 8th) Final Exam (Week 16th)	Quizzes = 9% Group homework = 6% Midterm Exam 40% Final Exam 45%
CLO2			
CLO3			
CLO4			
CLO5			

10. Learning assesment plna for EE312 (Applicable)

Catergories Program Learning Outcome	(applicable)	CLOs	Teaching methods	Assesment methods	ASSESSMENT PROPORATION AND WEEK
<i>Knowledge</i>	K1. Demonstrate the ability to analyze and solve problems using economic theories and tools, and apply this knowledge effectively in practical work.	CLO 1/ CLO2 / CLO3	Develop lectures, case Examples, and class discussions that ensure the fulfillment of course's CLOs and PLOs.	Quizzes/ Assignment /Exams/ Observed Class particiation	<p>Comprehensive Evaluation:</p> <ul style="list-style-type: none"> • 6 Quizzes (approximately given every 3 weeks) = 9% • 4 Group assignments (given every month) = 6% • Midterm Exam (Week 8th) = 40% • Final Exam (Week 16th) = 45% <p>=====</p> <p>Overall KPIs</p>
<i>Skills</i>	S1. Select and apply economic principles, tools, and methods appropriately to solve economic and social challenges.	CLO 1/ CLO2 / CLO3	Develop lectures, case Examples, and class discussions that ensure the fulfillment of course's CLOs and PLOs	Quizzes/ Assignment /Exams/ Observed Class particiation	
	E1. Uphold academic integrity and respect academic freedom	CLO3	Develop lectures, case Examples, and class discussions that ensure the fulfillment of course's CLOs and PLOs	Quizzes/ Assignment /Exam/ Observed Class particiation	

<i>Ethics</i>	E3. Recognize the ethical dimensions of economic decision-making and policy design, particularly in relation to social impacts, resource distribution, and sustainability, with a focus on social responsibility.	CLO3	Develop lectures, case Examples, and class discussions that ensure the fulfillment of course's CLOs and PLOs	Quizzes/ Assignment /Exam/ Observed Class participation /	<ul style="list-style-type: none"> • Observed average participation rate • Observed cases of academic dishonesty and late submissions • Observed overall distribution of midterm and final exam scores.
<i>Character</i>	C2. Demonstrate a commitment to lifelong learning, creative thinking, openness to diverse perspectives, systematic planning, and continuous self-improvement.	CLO4 /CLO5	Develop lectures, case Examples, and class discussions that ensure the fulfillment of course's CLOs and PLOs	Observed punctuality of submitted group assignment / Observed Class participations	

11. Main Texts:

- Mankiw Gregory. Macroeconomics. Pearson Education, 2016 (M.)
- Froyen Richard. Macroeconomics: Theories and Policies. 10th edition. Pearson Education Limited, 2013. (F.)
- Williamson Stephen D. Macroeconomics. 5th edition. Pearson Education Limited, 2018. (W.)

12. Suggested Readings:

Supplement readings will be posted on the instructor's LMS platform.

13. Assessments:

Types of assessment methods	Weight	Remarks
Quizzes	9 %	<ul style="list-style-type: none">• There are 6 quizzes. Each quiz will take around 20 minutes to complete.• Each quiz will be announced one week in advance during the lecture.• We use drop-the-lowest-one policy. Your quiz score will be computed from the best five.• No makeup quiz will be given.

Group assignments	6 %	<ul style="list-style-type: none"> • 4 Group assignments. All count. Check the date posted and due date from the table below. • You must have at least 4 students in your group. The number is capped at a maximum of 5 students. • Select a member in your team as the group leader. Group head will submit the ID lists of your group members by Sept 15th, before 1600. Use the following links -> https://forms.gle/PdUurPvWPEePFFdx6 • The group head will also be responsible for uploading the answer file to Google classroom. Discuss with all group members before submitting the name list. (I don't accept submissions from others.) • To submit your group homework, followings are required <ul style="list-style-type: none"> o Upload the answer file (in .pdf only) to Google classroom. Followings. <ul style="list-style-type: none"> o The required format of your filename is <i>group_x_hw_y</i> when x is your group number, and y is the assignment number. If you do not follow this instruction, your marking score will be deducted by 50%. o In your first submission, put your group number and IDs of all members into the private comment box. Your information will be cross-checked with your form. • As usual, no late homework will be accepted. That is, you get zero for the whole group.
Midterm exam (with max raw score = 180 points)	40 %	<ul style="list-style-type: none"> • Please refer to the guideline on exam policy below.
Final exam (with max raw score = 180 points)	45%	<ul style="list-style-type: none"> • <i>Saturday, Dec 3, 2025 (09.00-12.00: 3 hours)</i> • Please refer to the guideline on exam policy below.

Note:

1. Each student's cumulative score will be updated via LMS platform. Check the link to grade spreadsheet posted on the LMS platform. Alert the instructor if you see any errors.
2. Guideline for midterm and final exams:
 - You must strictly follow the guidelines on the exam set out in the official announcement of the faculty of economics and B.E. international program.
 - Accommodation for students with verified medical conditions will be made according to the University's and Faculty's policies. For privacy purposes and record tracking, please contact B. E. office by email. Your request will be reviewed by B.E. office.
 - Students who miss the exam due to an emergency or unforeseen circumstance should contact the B.E. office as soon as possible. You may file the request to schedule a makeup exam. Your request will be reviewed by B.E. office.

14. Grading Criteria:

Grading is conducted separately for each section. I generally adopt a **mixed approach**, combining both criteria-based and distribution-based methods. When criteria-based grading is appropriate and applicable, I follow the university's general guidelines outlined below. However, given the many factors that must be considered, **I reserve the right to adjust the grading brackets, criteria, and final decisions as I deem appropriate.**

A = 4.0 (85-100)	B+ = 3.5 (75-84)
B = 3.0 (70-74)	C + = 2.5 (65-69)
C = 2.0 (60-64)	D+ = 1.5 (50-59)
D = 1.0 (40-49)	F = 0 (0-39)

Note: When the final grade is posted on the Reg-TU system, students may file their request for a grade reconsideration. Contact the BE office if you would like to do so.

15. Teaching Class Schedule:

2	8		Fri	Long run	Long-run 1: Labor market	F. Ch. 3 - 4		
3	13		Wed		Long-run 2: Potential (Trend) level of key aggregate variables			
					IS-LM & AD framework		Self-study from Video Clip	
4	15		Fri	Core-AD-AS	AS framework: Derivation and Determinants	F. Ch 5 – 8		
5	20		Wed		AD-AS Equilibrium: Representation & Analysis 1		M. Ch 11 – Ch 14	
6	22		Fri		AD-AS Equilibrium: Analysis 2 & Self-adjustment theorem			
7	27		Wed	Inflation	Inflation: Stylized facts & Long run behavior	M. Ch 5 & M. Ch 14		
8	29		Fri		Short-run PC: History and Derivation			
9	3	Sept	Wed		Short-run PC: Determinants & Implications			
10	5		Fri	Dynamic AD-AS	Model structure	M. Ch 15		
11	10		Wed		Analysis			
12	12		Fri		Policy implications 1			
Session Date	Month			Topic	Issue	Textbook	Note	
1	6	Aug	Wed	Overview	Concepts & Important Tools	W. Ch. 1 / Ch. 2 W. Ch. 3 M. Ch. 10 M. Ch 3		

13	17	Wed		Policy implications 2	
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14	19	Fri		Forex Market Q&A session	Topics will be tested in the final exam.
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Midterm Exam: Wednesday, Sept 24, 2025 (15.00-18.00: 3 hours)

15	1	Oct	Wed			Forex Market
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(contd.)

16				3	Fri	Open-Economy	BOPmodel: curve
						-Fleming	F. Ch. 14 – Ch. 15
						macro	

17	8	Wed				BOP curve & Mundell-Fleming model: Analysis 2	
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18	10	Fri	Static GE	Consumer Optimization	W. Ch 4 - Ch. 5	
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Session	Date	Month	Topic	Issue	Textbook	Note
19	15			Firms Optimization		
20	17			PPF, Edgeworth Box and General Equilibrium		
21	22			Analysis		
22	24			Model set up		
23	29		Dynamic GE	Behavior & Credit market	W. Ch 9	
24	31			Equilibrium analysis		
25	5	Nov	Real Intertemporal GE	Dynamic Behavior		
26	7			Equilibrium & Analysis	W. Ch 11	
27	12			Analysis		
28	14		Growth Economics	Growth stylized facts & Solow model 1		
29	19			Solow 2: Analysis	W. Ch 7 / Ch. 8	
30	21			Solow 3: Policy Q & A session		

Final Exam: Wednesday, Dec 3, 2025 (09.00-12.00: 3 hours)

Note: Teaching schedules can be adjusted as the instructor deems fit.



Course Outline

EE320 Introductory Mathematical Economics

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: a) EE211, EE212 and MA216 (or MA211) or b) EE213, EE214 and MA 216 (or MA 211)

(Credits will not be awarded to students who are taking or have completed EE421)

Course Description:

Applying mathematical concepts and tools such as functions, equations, matrices, univariate and multivariate differential calculus, constrained and unconstrained optimization, and basic integral to understand the relationship between different economic variables and explain concepts of Microeconomic theory and Macroeconomic theory. An emphasis will be placed on relationships between total, average, and marginal functions, the analyses of elasticity, market equilibrium, impacts of taxation, and the basic input output model.

Course Objectives:

1. To equip students with essential mathematical concepts and tools in studying economics.
2. To expose students to the application of mathematical concepts in analyzing economic problems.

Expected Learning Outcomes

1. Morality and Ethics

Applicability	Expected Learning Outcomes	Evaluation Method
●	6. Students demonstrate integrity.	Assignment plagiarism.
○	7. Students prioritize social and public benefits over personal ones.	
●	8. Students are punctual and comply with the code of conduct of the institution and society at large.	Assignment deadlines and class attendance records.
○	9. Students are responsible and accountable to society, the nation, and the subject of economics.	
○	10. Students realize the cultural and environmental value of a sustainable society.	

2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	6. Students know and understand modern economics principles and theories, and are up to date with new developments.	Assignments and Exams.
●	7. Students know and understand Thai and global economic structure and the importance of major international economic events.	Assignments and Exams.
●	8. Students know and understand the instruments of economic analysis.	Assignments and Exams.
●	9. 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.	Assignments and Exams.

○	10. Students are informed about related fields including sociology, business administration, education, law policy, and science.	
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3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	4. Students have developed individual critical thinking.	Examinations.
●	5. Students are sufficiently trained in research skills.	Examinations.
●	6. 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.	Examinations.

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
●	6. Students are responsible for assigned tasks and work in groups effectively.	Assignments.
●	7. Students have problem-solving skills.	Assignments and Exams.
○	8. Students show leadership skills and team spirit.	
●	9. Students are always improving themselves.	Assignments and Exams.
○	10. Students have good interpersonal skills, adapt, and work under different conditions.	

5. Quantitative Analysis, communication, and information technology

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

Remark: ● Primary expected outcome ○ Secondary expected

Learning Management and Evaluation

CLO	Learning Management	Evaluation
K1	Acquire and apply knowledge of mathematical functions and equilibrium analysis to microeconomic and macroeconomic models.	Exams
K2	Apply mathematical tools to analyze policy impacts and solve economic and social problems.	Exams
K4	Reflect on learning progress and adjust strategies to improve understanding of mathematical economics in real-world contexts.	Quizzes/Assignments

CLO	Learning Management	Evaluation
S1	Develop systematic thinking and apply mathematical reasoning to economic problem-solving.	Exams Quizzes/Assignments
S2	Interpret data and use mathematical analysis to propose solutions to economic issues.	Exams
S3	Utilize quantitative techniques such as calculus and matrix algebra in economic modeling.	Exams
E1	Demonstrate ethical awareness when analyzing the societal implications of economic models.	Quizzes/Assignments
E3	Respect differing views in discussions on policy impacts derived from mathematical analysis.	Quizzes/Assignments
C1	Complete written tasks accurately using appropriate mathematical economic tools.	Quizzes/Assignments
C2	Independently and collaboratively analyze economic problems using quantitative methods.	Quizzes/Assignments

CLO	Learning Management	Evaluation
C4	Engage in self-directed learning and actively seek improvement in mathematical skills.	Quizzes/Assignments

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
K1, S1	Problem-solving exam on mathematical foundations, static models, and single-variable optimization in economics	Midterm Exam	35%
K2, S2, S3	Applied problem-solving exam on multivariable optimization, constraint analysis, and integral-based policy applications	Final Exam	50%
K4, E1, E3, C1, C2, C4	Assignments, reflections, participation, group work, and self-assessment	Throughout Semester	15%

Main Text:

Chiang, A. C. and Wainwright, K. (2005) *Fundamental Methods of Mathematical Economics*, 4th edition, McGraw-Hill, Inc., Singapore. **(CW)**

Assessments:

- | | |
|---|-------------|
| 1. Quiz | 15 % |
| <ul style="list-style-type: none"> - Total of 3 Quizzes will be given. - All quizzes will be informed at least one week in advance. - No makeup quiz will be given. | |
| 2. Midterm Exam | 35% |
| 3. Final Exam | 50% |

Note: Practice problems for each topic will be posted on the class website. Students are encouraged to practice these exercises by themselves regularly.

Grading Criteria:

- Grading will be determined within only this section (046401).
- Letter grades are determined based on your relative performance in the class. However, any **score below 60 out of 100 is assigned an F**, and **any score of 70 or above is assigned an A**.

Course Outline and Tentative Class Schedule:

Topics	
1. Introduction - Importance and needs to use mathematics in economics. - The nature of theory, economic model, and mathematics.	CW.Ch. 1
2. Mathematics and Economic Relations - Relations and functions - Types of functions	CW.Ch. 2

Topics	
<p>3. Static and Comparative Static Equilibrium Analysis</p> <ul style="list-style-type: none"> - Linear models in economics - Simultaneous system of equations - Linear equation and graph - Breakeven analysis - Individual and market demand - Individual and market supply - Partial market equilibrium - Excise tax and market equilibrium - Elasticity concept - Simple macroeconomic model - IS-LM model 	<p>CW. Ch. 3</p>
<p>4. Linear Model, Basic Matrix Algebra and Applications</p> <ul style="list-style-type: none"> - Terminology (Type of matrix) - Matrix operations (add, subtract, multiply) - Representation of system of equation by matrix notation - Matrix inversion by determinants - Determinant and singularity of matrix - Cramer's rule - Matrix applications in: <ul style="list-style-type: none"> - Partial market equilibrium - Excise tax and market equilibrium - Simple macroeconomic model - IS-LM model 	<p>CW. Ch. 4, 5</p>
<p>5. Nonlinear Model and Differential Calculus in Economic Theory</p> <ul style="list-style-type: none"> - Quadratic theory - Other nonlinear functions - Slope and derivatives of a function - Rule of differentiation - Non differentiable functions - Examples in Economics <ul style="list-style-type: none"> - Derivative and marginality - Relations among the total, the average, and the marginal functions - Elasticity, total revenue, and marginal revenue 	<p>CW. Ch. 6, 7, 8</p>
<p>6. Optimization without Constraints. One Independent Variable Case</p> <ul style="list-style-type: none"> - Maxima, minima, and inflection point - Convexity and concavity - Maximize profits <ul style="list-style-type: none"> - Competitive market case - Monopoly case 	<p>CW. Ch. 9</p>

Topics	
<ul style="list-style-type: none"> - Effects of taxes - Lump-sum tax - Profit tax - Excise tax - Maximization of tax revenue 	
MIDTERM	
<p>7. Derivatives of More Than One Independent Variable Function</p> <ul style="list-style-type: none"> - First-order partial derivatives - Second-order partial derivatives - Differential - Total differential - Total derivatives - Implicit function and its derivative - Examples in economics <ul style="list-style-type: none"> - Partial market equilibrium - Multipliers in macroeconomic models - Utility function - Production function 	CW. Ch. 7, 8
<p>8. Optimization without Constraint: More Than One Independent Variable Cases</p> <ul style="list-style-type: none"> - Conditions for maximum or minimum - Third degree price discrimination - Multiplant-firm - Multiproduct-firm 	CW. Ch. 11
<p>9. Optimization under Equality Constraint</p> <ul style="list-style-type: none"> - Lagrange multiplier - Conditions for optimization - Maximize output level subject to cost constraint - Minimize cost subject to output constraint - Maximize utility subject to fixed budget 	CW. Ch. 12
<p>10. Integration and Its Application</p> <ul style="list-style-type: none"> - Terminology in Integration - Rules of Integration - Definite Integration - Applications: <ul style="list-style-type: none"> - Total revenue function from marginal revenue function - Total cost function from marginal cost function - Profit function from MR-MC - Utility function from marginal utility function 	CW. Ch. 14

Topics	
<ul style="list-style-type: none">- Consumption and saving functions from marginal propensity functions- Capital formation and investment functions- Consumer surplus, producer surplus and total surplus- First degree price discrimination	
FINAL	



Course Outline

EE325 Introductory Econometrics

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: EE211 (or EE213), EE212 (or EE214), MA216 (or MA211) and ST216 (or ST211)

(Credit will not be awarded to students who are taking or have completed EE425)

Course Description:

Applying statistical methods and economic theories to analyze economic data using the simple and multiple regression. Topics also include dummy variable, multicollinearity, heteroscedasticity, autocorrelation, and specification error. This course focuses on how to choose the appropriate tool for an empirical study, with the emphasis placed on using some econometric software.

Course Objectives:

This class aims to equip students with a comprehensive understanding of useful econometrics concepts and methods. Through practical applications, students will develop statistical reasoning skills and gain proficiency in analyzing economic data using STATA. They will learn to interpret and evaluate regression results, and recognize the assumptions and limitations of econometrics models. Through in-class and take-home assignments, this class seeks to promote students' collaborative and independent learning skills.

Expected Learning Outcomes

1. Morality and Ethics **EE325**

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

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.	Class participation and exam
●	2. Students know and understand Thai and global economic structure and the importance of major international economic events.	Class participation and exam
●	3. Students know and understand the instruments of economic analysis.	Class participation and exam
●	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.	Class participation and exam

○	5. Students are informed about related fields including sociology, business administration, education, law policy, and science.	Class participation and exam
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3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students have developed individual critical thinking.	Class participation and exam
●	2. Students are sufficiently trained in research skills.	Class participation and exam
●	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.	Class participation and exam

4. Interpersonal Skills and Responsibilities

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

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

Remark: ● Primary expected outcome ○ Secondary expected

Learning Management and Evaluation

CLO	Learning Management	Evaluation
CLO1.1 Use simple and multiple regression methods to analyze economic data.	Lectures, worked examples using STATA, homework assignments using real datasets.	Homework; Midterm Exam; Final Exam
CLO1.2 Interpret STATA regression output and diagnostic tests.	In-class software sessions; STATA demonstrations; quiz-based interpretation practice.	Quizzes; Participation; Final Exam
CLO1.3 Identify and evaluate econometric issues such as multicollinearity, heteroscedasticity,	Lectures; in-class exercises; assigned readings from Wooldridge and supplementary texts.	Quizzes; Midterm and Final Exams

autocorrelation, and model misspecification.		
CLO2.1 Use STATA to perform econometric analysis.	Hands-on STATA tutorials; instructor-led lab practice; data exercises.	Homework; Quizzes; Final Exam
CLO2.2 Communicate regression findings clearly and ethically.	Group discussion of STATA results; written assignments with emphasis on presentation clarity.	Homework; In-class discussions; Participation

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
CLO1.1 Use simple and multiple regression methods to analyze economic data.	Homework assignments; Midterm Exam; Final Exam	Weeks 4, 7, 15	20%
CLO1.2 Interpret STATA regression output and diagnostic tests.	Quizzes; Participation in class discussions	Random weeks throughout semester	10%
CLO1.3 Identify and evaluate econometric issues such as multicollinearity, heteroscedasticity, autocorrelation, and model misspecification.	Quizzes; Final Exam (diagnostics sections)	Weeks 6-15	10%

CLO2.1 Use STATA to perform econometric analysis.	Homework; STATA exercises; Final Exam	Weeks 3–12; Week 15	20%
CLO2.2 Communicate regression findings clearly and ethically.	Written explanations in homework; in-class presentation/discussion	Weeks 4–13	5%
Total Marks (combined CLOs)	Midterm Exam (Sep 23) Final Exam (Dec 8)	Week 7, Week 15	35% Midterm 45% Final

Main Text:

Wooldridge, J. M. ***Introductory Econometrics: A Modern Approach***. Thompson: South-Western.

Recommended Texts & Materials:

Gujarati, D.N., and D.C. Porter, ***Basic Econometrics***. 5th ed., N.Y., McGraw-Hill, 2009.

Jame H. Stock and Mark W. Watson, ***Introduction to Econometrics***, 2nd Edition, Boston: Pearson Addison Wesley (2007)

William E. Griffiths, R. Carter Hill and George G. Judge, ***Learning and Practicing Econometrics***, John Willey & Sons (1993 or latest edition)

Joshua D. Angrist and Jörn-Steffen Pischke, ***Mostly Harmless Econometrics: An Empiricist's Companion***, Princeton University Press (2009)

ISBN-13: 978-0-691-12035-5

Grading Criteria:

Homework and Assignments	10%
Quizzes and Participation	10%
Midterm Exam	35%
Final Exam	45%

Homework – Submissions must be in each student's own handwriting. Late homework will be accepted up to two weeks after the due date and will receive 50% of the total possible marks. Submissions more than two weeks late will receive no marks. Homework is graded based on effort, so if you attempt all the questions, you will receive full marks. I will also provide the solutions along with the homework.

Quizzes – In-class quizzes and in-class exercises will be given on a random basis. Quiz questions will usually be taken directly from your homework.

Absence policy – there is no make-up quiz/in-class assignment. However, each student can miss up to 2 quizzes or in-class assignments without affecting their final grade. (e.g. a student who misses 1 quiz and 1 in-class assignments will have used up all their absence quota.)

*If there is any handout or additional reading, it will be posted on Google Classroom prior to class. Students are responsible to review the topic ahead of the class for more effective learning.



Course Outline

EE364/EE363 Gender Economics

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214

Course Description:

Evolution of male and female roles in the economic system. Theories of family formation. Differences in gender related time allocation for market and non-market activities. Supply and demand factors determining gender related differences in occupation and income, and gender roles switching in occupation. Roles of female in socio economy and politics. Different effects of policies or welfare programs on gender. Gender in the aging economy. Effects of economic crisis on family and gender in the labor market. Roles of the LGBT in the economy. Gender equality in international criteria, and other interesting issues.

Course Objectives:

To provide students with basic theories and empirical studies related to topics in gender economics and to prepare students to further their research in the future.

Expected Learning Outcomes

1. Morality and Ethics - EE364/EE363

Applicability	Expected Learning Outcomes	Evaluation Method
●	11. Students demonstrate integrity.	Assignments/Quizzes/Final & Midterm Exams
○	12. Students prioritize social and public benefits over personal ones.	Participation/ In-class behavioral observation
●	13. Students are punctual and comply with the code of conduct of the institution and society at large.	Assignments/In-class Exercises/Participation/ In-class behavioral observation
○	14. Students are responsible and accountable to society, the nation, and the subject of economics.	Participation/ In-class behavioral observation
○	15. Students realize the cultural and environmental value of a sustainable society.	Participation/ In-class behavioral observation

2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	11. Students know and understand modern economics principles and theories, and are up to date with new developments.	Assignments/Quizzes/Final & Midterm Exams
●	12. Students know and understand Thai and global economic structure and the importance of major international economic events.	Assignments/Quizzes/In-class Exercises
○	13. Students know and understand the instruments of economic analysis.	Assignments/Quizzes/In-class Exercises
●	14. Students know and understand applied fields in economics, including monetary, public, international, business, natural resource, and environmental, industrial, agricultural, cooperative, political, developmental, and	Assignments/Quizzes/Final & Midterm Exams

	entrepreneurial economics as well as agribusiness.	
○	15. Students are informed about related fields including sociology, business administration, education, law policy, and science.	Participation/ In-class behavioral observation

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	7. Students have developed individual critical thinking.	Assignments/Final & Midterm Exams
●	8. Students are sufficiently trained in research skills.	Assignments/Final & Midterm Exams
●	9. 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.	Assignments/Final & Midterm Exams

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
●	11. Students are responsible for assigned tasks and work in groups effectively.	Assignments/In-class Exercises/Participation
●	12. Students have problem-solving skills.	Assignments/In-class Exercises/Participation
○	13. Students show leadership skills and team spirit.	Assignments/In-class Exercises/Participation
●	14. Students are always improving themselves.	Assignments/In-class Exercises/Participation
○	15. Students have good interpersonal skills, adapt, and work under different conditions.	Assignments/In-class Exercises/Participation

5. Quantitative Analysis, communication, and information technology

Applicability	Expected Learning Outcomes	Evaluation Method
○	7. Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	Assignments/In-class Exercises/Participation
○	8. Students communicate effectively and select appropriate presentation methods.	Assignments/In-class Exercises/Participation
○	9. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	Assignments/In-class Exercises/Participation

Remark: ● Primary expected outcome ○ Secondary expected

Learning Management and Evaluation

CLO	Learning Management	Evaluation
CLO K1: Acquiring knowledge and understanding of economic theories, fundamental economic	1. Lecture on theoretical knowledge 2. Problem-based learning by emphasizing problem analysis/problem solving 3. Independent study by assigned research papers and academic projects 4. Training sessions on quantitative analysis and using technology for	1. From assigned homework/projects/reports/quizzes/research papers (50%) 2. From midterm/final exams (50%)

CLO	Learning Management	Evaluation
tools, theory development, and applied economics	processing, analysis, interpretation, and effective presentation 5. Demonstrating knowledge integration in related study fields 6. Brainstorming to encourage active learning and applied knowledge	
CLO K2: Ability to apply theoretical knowledge to analyze and provide practical suggestions for economic and social issues		
CLO K4: Ability to attain lifelong learning and thoroughly understand world		

CLO	Learning Management	Evaluation
<p>economic and societal changes and impacts</p>		
<p>CLO S1: Acquiring intellectual skill and ability to think systematically to identify research topics, perform research, process data, and evaluate findings</p>	<ol style="list-style-type: none"> 1. Problem-based learning by emphasizing analysis of problems/problem solving sources 2. Brainstorming to encourage class discussion and applied knowledge 3. Preparing research papers/projects 4. Training sessions on essential technology for education, work, and lifelong learning 5. Written and oral presentations using technology 6. Soft skills and extracurricular learning activities 	<ol style="list-style-type: none"> 1. From assigned homework/projects/reports/quizzes/research papers (50%) 2. From midterm/final exams (50%)
<p>CLO S2: Acquire analytical and communication skills and ability to interpret data from different sources,</p>		

CLO	Learning Management	Evaluation
analyze, and integrate knowledge to propose appropriate problem solving guidelines for economic and social issues		
CLO E1: Acknowledge moral values and exhibit ethical traits, including decency, selflessness, and integrity	1. Learn from case studies covering ethics-related topics 2. Incorporating moral value instruction in lectures and class discussions 3. Assigning independent research projects	1. From punctuality, class participation, and meeting deadlines 2. Observation 3. Peer- and self-reflections 4. From assigned homework/projects/reports/quizzes/research papers (50%)
CLO E3: Respect rights, opinions, values, and dignity of others. Obey organizational and societal	4. Assigning group research projects 5. Participating in analysis and providing ethical insights in case studies 6. Experiencing real-life situations 7. Developing social responsibility activities	5. From midterm/final exams (50%)

CLO	Learning Management	Evaluation
rules and regulations		
CLO C1: Ability to effectively complete assigned tasks and responsibilities	1. Individual/group assignments 2. Lecture/debate/brainstorming/class discussion/knowledge sharing 3. Encourage asking questions in class to promote student engagement 4. Activities to encourage problem based learning by emphasizing analysis of problem /problem solving sources	1. Assignment quality 2. From problem-solving processes 3. From observations of behavior/research presentations/projects/ assignments 4. From ability to convey leadership and teamwork in different situations
CLO C2: Ability to initiate problem analysis independently and/or in teamwork	5. Involvement in problem-solving processes by projects/research papers 6. Oral presentation 7. Extracurricular learning experiences	5. From teamwork skills and problem/case study analysis 6. Examine thought processes, connected thinking, and reasoning 7. From assigned
CLO C4: Show active learning characteristics and aspire to personal development		homework/projects/reports/ quizzes/research papers (50%) 8. From midterm/final exams (50%)

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
K1, K2, K4	1. From assigned homework/projects/reports/ quizzes/research papers (50%) 2. From midterm/final exams (50%)	1-15	100%
S1, S2	1. From assigned homework/projects/reports/ quizzes/research papers (50%) 2. From midterm/final exams (50%)	1-15	100%
E1, E3	1. From punctuality, class participation, and meeting deadlines 2. Observation 3. Peer- and self-reflections 4. From assigned homework/projects/reports/ quizzes/research papers (50%) 5. From midterm/final exams (50%)	1-15	100%

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
C1, C2, C4	1. Assignment quality 2. From problem-solving processes 3. From observations of behavior/research presentations/projects/ assignments 4. From ability to convey leadership and teamwork in different situations 5. From teamwork skills and problem/case study analysis 6. Examine thought processes, connected thinking, and reasoning 7. From assigned homework/projects/reports/ quizzes/research papers (50%) 8. From midterm/final exams (50%)	1-15	100%

Main Text:

Blau, F., and Winkler, A. 2017. The Economics of Women, Men, and Work (8th Edition), Oxford University Press.

Hoffman, S. and Averett, S. 2021. *Women and the Economy: Family, Work, and Pay* (4th edition), Red Globe Press.

Jacobsen, J. 2007. *The Economics of Gender* (3rd Edition), Blackwell Publishing.

Recommended Texts & Materials:

Averett, S., Argys, L., and Hoffman, S. 2018. *The Oxford Handbook of Women and the Economy* (Illustrated edition), Oxford University Press.

Eswaran, M. 2014. *Why Gender Matters in Economics* (1st edition), Princeton University Press.

Goldin, C. 1990. *Understanding the Gender Gap: An Economic History of American Women*, Oxford University Press.

Wooldridge, J. 2003. *Introductory Econometrics*. Thomson Learning.

Suggested Readings:

Adams, R. and Ferreira, D. 2009. "Women in the boardroom and their impact on governance and performance," *Journal of Financial Economics*, 94(2): 291–309

Blau, F. and Kahn, L, 2017. "The Gender Wage Gap: Extent, Trends, and Explanations," *Journal of Economic Literature*, 55(3): 789-865.

Dollar, D., Fisman, R. and Gatti, R. 2001. "Are women really the "fairer" sex? Corruption and women in government," *Journal of Economic Behavior & Organization*, 46(4): 423–429

Duflo, E. 2012. "Women Empowerment and Economic Development," *Journal of Economic Literature*, 50(4): 1051-1079

Liao, L. and Paweenawat, S.W. 2021. "The Inversion of Married Women's Labor Supply and Wage: Evidence from Thailand," *Asian-Pacific Economic Literature*, 35(1): 82–98

Liao, L. and Paweenawat, S. W. (2022). "Alternative Boomerang Kids, Intergenerational Co-residence, and Maternal Labor Supply," *Review of Economics of the Household*, 20(2), 609–634

Paweenawat, S.W. 2018. "The Gender-Corruption Nexus in Asia," *Asian-Pacific Economic Literature*, 32 (1): 18–28.

Paweenawat, S.W. 2019. "Women on Boards and Corporate Governance: Evidence from Listed Companies in Thailand," *International Journal of Business Governance and Ethics*, 13 (4): 408–425.

Paweenawat, S.W. 2024. "The Effect of Parental Education on Children's Education and Skills in Thailand" *Singapore Economic Review*, 69 (3): 1231-1263

Paweenawat, S. W., and Liao, L. 2022. "Parenthood Penalty and Gender Wage Gap: Recent Evidence from Thailand," *Journal of Asian Economics*, 78, 101435.

- Paweenawat, S. W., and Liao, L. 2023. "Educational Assortative Mating and Income Inequality in Thailand," *Journal of Demographic Economics*, 89(2), 283–298.
- Paweenawat, S. W., and Liao, L. 2023. "A 'She-cession'? The Impact of COVID-19 on the Labour Market in Thailand," *Journal of Southeast Asian Economies*, 40(2), 214–233.
- Paweenawat, S. W., and Liao, L. 2024. "Occupational Feminization, Gender, and Wages: Evidence from Thailand," *Journal of the Asia Pacific Economy*. 29(2), 525–544.
- Paweenawat, S. W., and Liao, L. 2024. "Who Suffers the Most during the COVID-19 Pandemic? Evidence from Thailand", *The Developing Economies*, 62(3): 238-268 (September 2024) [ISI/Scopus]
- Paweenawat, S.W., and McNown, R. 2018. "A Synthetic Cohort Analysis of Female Labour Supply: The Case of Thailand," *Applied Economics*, 50 (5): 527–544.
- Paweenawat, S.W., and Vechbanyongratana, J. 2015. "Transfer Payments and Upper Secondary Outcomes: The Case of Low-income Female Students in Thailand," *Singapore Economic Review*, 60(5): 1550082 (19 pages).
- Smith, N. 2014. "Gender quotas on boards of directors," *IZA World of Labor*, 7(7): 408–425.
- Silber, J., Paweenawat, S. W., and Liao, L. 2022. "On the Measurement of Non-Random Mating and of its Change Over Time." *Review of Economics of the Household*, 20(1), 161–198.
- UNDP. 2019. Tolerance But Not Inclusion.
<https://www.undp.org/content/undp/en/home/librarypage/democratic-governance/tolerance-but-not-inclusion.html>.
- Warunsiri, S. and McNown, R. 2010. "The Returns to Education in Thailand: A Pseudo Panel Approach." *World Development*, 38 (11): 1616–1625.

Grading Criteria:

In-class Exercises/Participation	10%
Assignments/Quizzes	40%
Midterm Examination	20%
Final Examination	30%

Tentative Class Schedule:

Week	Date	Tentative Topic and Class Activity
1	Aug. 4	Evolution of male and female roles in the economic system.
2	Aug. 11	The role of Thai women in the economy in Thailand.
3	Aug. 18	Theories of family formation.
4	Aug. 25	Differences in gender-related time allocation for market and non-market activities.
5	Sep. 1	Differences in gender-related time allocation for market and non-market activities. (continued)

Week	Date	Tentative Topic and Class Activity
6	Sep. 8	Supply and demand factors determining gender-related differences in occupation and income, and gender roles switching in occupation.
7	Sep. 15	Supply and demand factors determining gender-related differences in occupation and income, and gender roles switching in occupation. (continued)
Midterm Exam		
8	Sep. 29	Roles of female in socio-economy and politics.
9	Oct. 6	Gender in the aging economy.
10	Oct. 13	Gender and informal economy.
11	Oct. 20	Roles of the LGBT in the economy.
12	Oct. 27	Effects of COVID-19 on family and gender in labor market.
13	Nov. 3	Different effects of policies/welfare programs on gender.
14	Nov. 10	Gender equality in international criteria.
15	Nov. 17	Research issues on gender roles in the economy.
Final Exam		



Course Syllabus

EE375 Applied Economics for Natural Resources and Environment Semester

Semester 1/2025

Number of Credit: 3

Prerequisite: EE210 or EE211 or EE213

(Credits will not be awarded to students who are taking or have completed any 400-level courses in this subfield.)

Course Description: The relationship between economic growth, natural resources allocation and environmental problems. Basic economic theories used for analysis and application in natural resources management and environmental problems. The roles of government, community, and business sectors to control and solve problems in natural resource and environmental exploitation at local, national, and global levels. Concept of sustainable development. Concept of environmental justice. Basic concepts and methodologies in economic valuation of natural resources and environment.

Course Objectives: The course aims to provide fundamental knowledge on what topics are discussed in the fields of natural resources and environment, how economic concepts are applied to analyze issues in these fields, and how to approach a range of natural resource management and environmental problems using economic instruments to inform private and public sector with policy considerations.

Textbooks:

[TL] – Tietenberg, T. and Lewis, L. Environmental Natural Resource Economics, 2018 (11th edition), Pearson.

[HSW] – Hanley, N., Shogren, J. and White, B., Introduction to Environmental Economics 2013 (2nd edition), Oxford University Press.

Textbooks are not required. In each class, I provide lecture notes for you to download from Google Classroom. Lecture notes summarize what you need to know from the textbooks.

Technical Requirements:

You may find a graphing calculator or financial calculator useful, but I am not going to require that you have one. You will want some form of calculator (NOT a mobile phone) for the exams.

Grading:

The grade for this class will be based on the curve system.

Evaluation:

Assignments	10%
Group Project	10%
Midterm Exam	40%
Final Exam	40%

Assignments

There will be approximately 7-8 assignments throughout this semester. Assignments can be either homework or in-class assignments. The main purpose of homework and in-class assignments is to provide you with practice. They will be very similar to problems you will see on both exams. There will be no makeup assignments given. Also, late assignments will not be accepted.

Group Project

Students will work in groups of 4-5 students. Each group will either identify problems of interests related to natural resources and environment, approach the problems using economic concepts and tools and propose policy considerations. Alternatively, I provide a list of interesting topics for you to select. The evaluation will be based on the quality of two deliverables i) A 15-minute group presentation ii) A 5page policy brief or an online article. More details are provided after the midterm examination.

Tentative Course Schedule and course topics:

This course schedule is subject to change if necessary. But I try to closely follow this table. Any change in class scheduling (class cancellation/ makeup classes/ switching to online learning mode due to my health condition) will be announced either in class or by the BE program staff.

Week	Topics
1	Introduction to Natural Resource Economics
2	Introduction to Environmental Economics
3	Welfare and Market Efficiency
4	Market Failure: Externalities
5	Market Failure: Public Goods
6	Economic Valuation: Concepts and methods Types of valuation methods (1)
7	Economic Valuation: Concepts and methods Types of valuation methods (2)

8	Midterm Exam
9	Economics of Pollution Control (1)
10	Economics of Pollution Control (2)
11	Fishery Economics (1)
12	Fishery Economics (2)
13	Economics of nonrenewable resources (1)
14	Economics of nonrenewable resources (2)
15	Group Project Presentations (1)
16	Group Project Presentations (2)
17	Final Exam

Additional Notes:

- The exams will be closed-book exams and based on the class lectures. The class lectures will roughly follow the textbook, but sometimes they will go beyond what is covered in the textbook. Therefore, although attending classes is not required, **attending classes regularly and taking good lecture notes are very important and good strategies to succeed in this course.**

- You are highly encouraged to work and study with your classmates. Study group is strongly recommended. Try to find your group members at the beginning of the semester.
- Lastly, if you are having problems with lessons, I am more than willing to help you. You just need to approach me either after the lecture class time or during our class break.

Classroom behavior and other Class Distractions:

Please turn off all mobile phones and other electronic devices that may disrupt the class. Disruptive electronics and behavior will not be tolerated. Disruptive behavior includes, but is not limited to, reading the newspaper or magazine, working on your laptop, working on homework or reading for other classes, coming to the class late, talking to classmates, listening to headphones, text messaging, playing with your pets, etc.

Expectations of Classroom Behavior:

Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to behavioral standards may be subject to discipline. Faculties have the professional responsibility to treat students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which students can express opinions.

Classroom Behavior (online learning):

- To learn smoothly, please ensure that your internet connection is stable during the whole class time.
- Rename your ZOOM name to your first name and last name.
- Please dress properly for online learning.
- Please keep your microphone muted unless you are answering the questions or participating in the discussions so that you will not disturb other classmates.
- Use a virtual classroom backdrop when appropriate. If this is not an option, ensure that there are limited distractions in your physical backdrop.
- When using the chat box, please type properly.

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Expected Learning Outcomes

To understand natural resource and environmental problems with the perspectives of an economist and be able to apply economic concepts and tools to analyze and solve the problems in the fields.

Expected learning outcomes	Evaluation Method
<p>1. Morality & ethics</p> <p>1.1 Students demonstrate integrity and ethics</p> <p>1.2 Students recognize social responsibility and accountability to the society and the environment</p> <p>1.3 Students recognize the importance of sustainable development and natural resource allocation</p>	<p>Assignment and discussions in class</p>
<p>2. Knowledge</p> <p>2.1 Students understand problems related to the fields</p> <p>2.2 Students can apply economic principles to understand the causes of the problems in the fields of natural resource and environmental economics</p> <p>2.3 Students understand various economic instruments that can be used to solve the problems in the fields</p>	<p>Assignment, quiz and exam</p>
<p>3. Intellectual development</p> <p>1 Students improve critical thinking in analyzing the problems</p> <p>2 Students are sufficiently trained in research skills</p> <p>3 Students demonstrate abilities to analyze and propose policy recommendations using economic concepts and tools</p>	<p>Group project's policy brief</p>
<p>4. Interpersonal skills & responsibilities</p> <p>1 Students are responsible for the assigned tasks</p> <p>2 Students work effectively as a team, demonstrating leadership and teamwork</p> <p>3 Students respect other opinions and provide constructive comments</p>	<p>Assignment and group presentation</p>
<p>Quantitative analysis, communication, and information technology skills</p> <p>5.1 Students can apply mathematical methods in solving the problems in the fields</p>	<p>Exam and group presentation</p>

<p>5.2 Students communicate effectively and select appropriate presentation approach to deliver discussion points and ideas to solve the problems</p> <p>5.3 Students use information and communication technologies appropriately to analyze the problems and propose policy recommendations.</p>	
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Course Syllabus

EE 376 Economics of Climate Change

Semester 1/2025

Number of credits: 3 credits
Prerequisites: EE 210 or EE 211 or EE 213

Course Description:

Basic concepts of climate change relating to environmental economics, efficiency, externalities, and policy instruments. The role of economics in the formation of climate policy. Economic problems of climate change, such as intertemporal decisions, impacts of climate change, cost of mitigation, and adaptation. Thailand and international cooperation and debate in climate policy.

Course Objectives:

Students will be equipped with the basic principle of climate change science and its linkages and impacts to the economy including the economic knowledge and analytical skills to assess the economic implications of climate change, evaluate policy options for climate mitigation and adaptation.

Expected Learning Outcomes

1. Morality and Ethics EE376

Applicability	Expected Learning Outcomes	Evaluation Method
●	16. Students demonstrate integrity.	Quizzes and assignments
●	17. Students prioritize social and public benefits over personal ones.	
●	18. Students are punctual and comply with the code of conduct of the institution and society at large.	
●	19. Students are responsible and accountable to society, the nation, and the subject of economics.	
●	20. Students realize the cultural and environmental value of a sustainable society.	

2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	16. Students know and understand modern economics principles and theories, and are up to date with new developments.	Quizzes, assignments, and exam
●	17. Students know and understand Thai and global economic structure and the importance of major international economic events.	
○	18. Students know and understand the instruments of economic analysis.	
●	19. 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.	
●	20. Students are informed about related fields including sociology, business administration, education, law policy, and science.	

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	10.Students have developed individual critical thinking.	Group project
●	11. Students are sufficiently trained in research skills.	
●	12.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
●	16.Students are responsible for assigned tasks and work in groups effectively.	Group project
●	17.Students have problem-solving skills.	
○	18.Students show leadership skills and team spirit.	
●	19.Students are always improving themselves.	
○	20. Students have good interpersonal skills, adapt, and work under different conditions.	

5. Quantitative Analysis, communication, and information technology

Applicability	Expected Learning Outcomes	Evaluation Method
○	10.Students select and apply appropriate statistical and mathematical methods for data processing, interpretation,	Assignments

	conclusions, and recommendations to resolve problems.	
○	11. Students communicate effectively and select appropriate presentation methods.	Group project
○	12. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	

Remark: ● Primary expected outcome ○ Secondary expected

Learning Management and Evaluation

CLO	Learning Management	Evaluation	PLOs
C1. Understand the basic principle of climate change science related to greenhouse gas emissions and their impacts on the environment and the economy	Lectures and readings from IPCC's documents	Excercises, homeworks, and exams	K1, K3, K4, E1-E3
C2. Apply the concepts of market failure to analyze how they lead to climate change	Lectures with economic graphs and calculations to demonstrate with examples	Excercises, homeworks, and exams	K1-K4, E1-E3
C3. Understand the concept of carbon pricing as a tool to mitigate greenhouse gas emissions and be able to compare its pros and cons as well as the impacts of differences in carbon pricing	Lectures with economic graphs and calculations to demonstrate with empirical studies	Excercises, homework, and exams	K1-K4, E1-E3

levels on international trade and investment issues			
C4. Understand the usage of carbon labeling and nudge to enhance sustainable consumption choices	Lectures with economic graphs and calculations to demonstrate with examples	Excercises, homeworks, and exams	K1-K4, E1-E3
C5. Analyze and evaluate varieties of mitigation measures to achieve global desirable temperature	Apply EN-ROADS Climate Solution Simulator	Assignments	S1, S2, E2
C6. Understand the role of global climate-change institutions and important regulations of climate agreements and their economic and social consequences	Lectures with examples and case studies	Exams	K1, K3, K4, E1-E3
C7. Understand the concept of adaptation economics and project evaluation tools	Lectures with examples and case studies		
C8. Construct an infographic poster to using data and information with proper visualization and citation, presenting sharp arguments linking the topic with the economics of climate change mitigation and/or adaptation, cost-effectiveness evaluation	Student group project with oral presentation to the class	Peers and instructor evaluations, and Facebook's likes and shares	K1-K4, S1, S2, E1-E3, C1, C2, C4

when applicable, attractive and reader-friendly poster design			
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Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
C1. Climate science	Excercise 1, exam	2nd	Midterm Exam 35% Final Examination 35% Exercises&Assignments 15% Poster 15%
C2 Market failure	Excercise 2, exam	4th	
C3 Carbon pricing	Excercise 3, exams	6th	
C4 EN-ROADS Simulator	Assignment 1, exam	8th	
C5 Sustainable consumer choices	Assignment 2, exam	10th	
C6 Global Climate Institution	Final Exam		
C7 Economics of Adaptation	Final Exam		
C8 Infographic Poster and Presentation	Poster	14th and 15th	

Reading lists

- [T] Tantivasadakarn, Chayun (2019) *Economics of Climate Change* (in Thai), Thammasat University Press.
- [FF] Field, B., & Field, M. (2017). *Environmental economics: An introduction* (Seventh ed.). New York, NY: McGraw-Hill Education.
- Grubb, M. (2004). "Technology Innovation and Climate Change Policy: an overview of issues and options." *Keio Economic Studies*, 41(2): 103-132.
- Goulder, L.H., and S.H. Schneider (1999) 'Induced Technological Change and the Attractiveness of CO₂ Abatement Policies,' *Resource and Energy Economics*, Vol. 21, pp. 211-53.
- [HR] Harris, J. M., & Roach, B. (2017). *Environmental and natural resource economics: A contemporary approach*. Routledge.
- [H] Houghton, John (2004) *Global Warming: The Completer Briefing*, 3rd edition, Cambridge University Press.
- <http://www.gci.org.uk/Documents/Global-Warming-the-Complete-Briefing.pdf>
- [Incropera] Incropera, F. P. (2016). *Climate change: a wicked problem: complexity and uncertainty at the intersection of science, economics, politics, and human behavior*. Cambridge University Press. (ห้องสมุดปริทัศน์)
- IPCC (2013a) Summary for Policymakers. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)].
- Milton, E.J., and Euston Quah (2023) *Cost-Benefit Analysis*, Routledge.
- Nordhaus, W. D. (2007). A review of the Stern review on the economics of climate change. *Journal of economic literature*, 45(3), 686-702.
- [Nordhaus] Nordhaus, W. D. (2013). *The climate casino: Risk, uncertainty, and economics for a warming world*. Yale University Press.
- Pearce, David (1991), "The Role of Carbon Taxes in Adjusting to Global Warming," *The Economic Journal*, Vol. 101, No. 407, (Jul., 1991), pp. 938-948.

[Stern] Stern, N., & Stern, N. H. (2007). *The economics of climate change: the Stern review*. Cambridge University press.

[TT] Tietenberg, T. H., & Lewis, L. (2016). *Environmental and natural resource economics*. Routledge.

Additional links:

Glossary terms: https://archive.ipcc.ch/pdf/special-reports/srex/SREX-Annex_Glossary.pdf

Gas Emissions by Countries and Sectors: <https://www.wri.org/blog/2020/02/greenhouse-gas-emissions-by-country-sector>

Global emission: <https://www.c2es.org/content/international-emissions/>

NASA: <https://climate.nasa.gov/evidence/>

Lecture Schedule

Date	Topics
1	<p>1. Introduction to Climate Change Science</p> <ul style="list-style-type: none"> • The Earth’s climate system • Greenhouse gas (GHGs), global energy balance, and the greenhouse effect • Important GHGs: CO₂ and carbon cycles, other GHGs • Dissenting opinions: the great hoax? <p>Reading: H Ch. 1-4, T Ch. 1, Nordhaus Ch.5, 13-14, 24-25, Incropera Ch. 2-6, 9.</p>
2	<p>2. Anthropogenic global warming and consequences</p> <ul style="list-style-type: none"> • GHGs concentration and global temperature • Impacts, damages and losses of CC • GHGs data and information • GHGs emission by countries • Share of mitigation responsibility for climate stability <p>Reading: H Ch. 6-7, Incropera Ch. 5, T Ch. 2, IPCC (2013a), Stern Ch. 3-6</p> <p>Exercise 1: topic #1 and #2</p>

Date	Topics
3	<p>3. Climate Change and Market Failure</p> <ul style="list-style-type: none"> • Externalities and carbon pricing • Global commons and Tragedy of Commons • The under provisioning of Public Goods <p>Reading: HR Ch. 3-4, T Ch. 3</p>
4	<p>4. Carbon Taxes</p> <ul style="list-style-type: none"> • Optimum emission • Correction market failure with carbon <ul style="list-style-type: none"> ○ Single source ○ Multiple sources • Pros and cons of carbon taxes • Carbon tax research <p>Reading: HR Ch. 16, T Ch. 4, Pearce, David (1991) pp. 938-948. Exercise 2: topic #3</p>
5	<p>5. Carbon Market or Cap-and-Trade</p> <ul style="list-style-type: none"> • Definition and concept of Carbon market • Demand and supply of carbon credits <ul style="list-style-type: none"> ○ Deriving the demand and supply for carbon credits ○ Factors influencing the demand and supply ○ Carbon market equilibrium • Choices of carbon credits allocation and efficiency • Comparison of carbon market and carbon tax • Carbon market research <p>Reading: HR Ch. 16, T Ch. 5</p>
6	<p>6. Carbon pricing and international competitiveness</p> <ul style="list-style-type: none"> • Theoretical background • Economic impacts of ETS • Economic impacts of carbon tax • Competitiveness impacts <p>Reading: Tantivasadakarn, Chayun; “Carbon Pricing and International Competitiveness for Thailand and ASEAN,” Thammasat Review of Economic and Social Policy, Vol. 6, No. 2, July-December, 2020.</p> <p>Exercise 3: topic #5 - 6</p>

Date	Topics
	Midterm
7	7. Climate change, International Trade, and Investment
	<ul style="list-style-type: none"> • Carbon offshoring and Carbon leakages • Concepts about GHGs responsibility <ul style="list-style-type: none"> ◦ Production-based and consumption-based responsibility <p>Reading: Incropera Ch. 8, T Ch. 8-9</p>
8	8. Carbon Border Adjustment Mechanism
	<ul style="list-style-type: none"> • Border-Carbon Adjustment (BCAs) or Carbon-Border-Adjustment Measures (CBAM) • proponent and opponent views • EU's Carbon Border Adjustment Measure <p>Assignment 1: En-Roads model</p>
9	9. Sustainable consumer choices
	<p>9.1 Carbon Labeling</p> <ul style="list-style-type: none"> • Life cycle assessment (LCA) • What is carbon labelling? • Economics of carbon labelling • Types of carbon labelling • Carbon labelling situation in other countries and Thailand <p>9.2 Behavioral Economics and climate mitigation</p> <ul style="list-style-type: none"> • Concept of nudge • Applications
10	9. Global Institutions: Kyoto Protocol and Post-Kyoto
	<ul style="list-style-type: none"> • The Intergovernmental Panel on Climate Change (IPCC) • The United Nations Framework Convention on Climate Change (UNFCCC) • Kyoto Protocol • Paris Agreement <p>Reading: Incropera Ch. 8, T Ch. 5</p> <p>Assignment 2: topic# 9.1</p>

Date	Topics
11-12	10. Economics of Climate Change Adaptation <ul style="list-style-type: none"> • Climate risks • Climate change adaptation • Cost-Benefit Analysis (CBA) concept • Social discount rates
	Reading: FF Ch.6 Stern Ch. 5,6, 9, 12, 18-20, Nordhaus Ch.15-16, 18
13-14	11. Group project presentation
	Final exam

Evaluation

Midterm Examination	35%
Final Examination	35%
Exercises and Assignments	15%
Poster and presentation	15%

Infographic Poster and Presentation (15 points):

- Design and print **an A0-sized academic poster** linking climate change issue with a selected topic from the following list. A poster may have a free-style title, but must be informative and comprehensive in its content, and contain some constructive arguments in the analytical part.

Suggested topic lists:

EV battery technology	Mass transit system	Early Warning Systems and Climate Monitoring	Nature-based adaptation
Concentrating solar power	Climate-smart agriculture	Circular economy	Funding climate technology
Biomass energy	Green Hydrogen	Water management	Food waste management
Bio fuel	Plant-based meat	Flood management	Forest management
Small Modular Nuclear Reactor	Coral reef restoration technology	Solid waste management	Smart Grid and Electricity Management Systems
Small wind turbine energy	Urban Planning and Green Infrastructure	Waste water management	Climate Justice and Equity Issues
Carbon Capture and Storage (CCS)	Low carbon tourism	Climate-related health issues	Climate Data and AI Applications for climate change

Evaluation will be based on the ability to arrange data and information with proper visualization and citation, presenting sharp arguments (concise and interesting leading questions and the existing conflicts of viewpoint relevant to the chosen topic) linking the topic with **the economics of climate change mitigation and/or adaptation**, cost-effectiveness evaluation when applicable, and an attractive and reader-friendly poster design. The total mark will come from instructor evaluation (7 marks), peer evaluation (4 marks), and Facebook like and share (4 marks)

Your oral presentation would take 12 minutes (without any notes!) and 3 minutes of Q&A.

Submission date of selected topic: Oct 6, 2025

Submission date of the outline: Oct 20, 2025

Presentation dates: Nov 17 and Nov 24 , 2025

Note: Please be strictly aware of the '*plagiarism rule*' which could bring a zero score for violators.



Course Outline

EE382 Economics of Services Sector

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214

Course Description:

Organization and components of service sector in an economy. Importance of service sectors. Applying economic and management aspects to selected service sectors, for example telecommunication and broadcasting, tourism, transportation, health and wellness, wholesale and retail trades. Case studies in the service sector relating to development and inclusive growth.

Course Objectives:

Students can apply microeconomics and macroeconomic theories to analyze service sector in various aspects such as development in service sector, contribution of service sector to economy, trade and investment in service sector, measurement in service sector and the analysis of selected service sectors markets, etc.

Expected Learning Outcomes

1. Morality and Ethics

Applicability	Expected Learning Outcomes	Evaluation Method
●	21. Students demonstrate integrity.	
○	22. Students prioritize social and public benefits over personal ones.	
●	23. Students are punctual and comply with the code of conduct of the institution and society at large.	
○	24. Students are responsible and accountable to society, the nation, and the subject of economics.	
●	25. Students realize the cultural and environmental value of a sustainable society.	

2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	21. Students know and understand modern economics principles and theories, and are up to date with new developments.	
●	22. Students know and understand Thai and global economic structure and the importance of major international economic events.	
○	23. Students know and understand the instruments of economic analysis.	
●	24. 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.	

○	25. Students are informed about related fields including sociology, business administration, education, law policy, and science.	
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3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	13. Students have developed individual critical thinking.	
●	14. Students are sufficiently trained in research skills.	
●	15. 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
●	21. Students are responsible for assigned tasks and work in groups effectively.	
●	22. Students have problem-solving skills.	
○	23. Students show leadership skills and team spirit.	
●	24. Students are always improving themselves.	
○	25. Students have good interpersonal skills, adapt, and work under different conditions.	

5. Quantitative Analysis, communication, and information technology

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

Remark: ● Primary expected outcome ○ Secondary expected

Suggested Readings: To be announced

Grading Criteria:

Group project/group assignments	35%
Peer evaluation for group assignment contribution.	10%
Individual assignments/participation	15%
Final exam	40%

Tentative Class Schedule:

Topics	Tentative week
1. Introduction to service sectors	Week 1
2. Economic impact of service sector	Week 2
3. Development of service industry and service economy	Week 3
4. Service market analysis	Week 4

5. Service market analysis	Week 5
6. Group Project development	Week 6
7. Other Microeconomic issues in services	Week 7
8. Midterm week	Week 8
9. Group Project development	Week 9
10. Group project proposal presentation	Week 10
11. Service quality and measurement/and group project interview questions and/or survey questionnaires	Week 11
12. Service innovation and trade in service	Week 12
13. Government policy and service industries	Week 13
14. Selected service industry issues and case study	Week 14
15. Selected service industry issues and case study	Week 15
16. Final project presentation & course summary	Week 16

Scheduled might be subjected to change.



Course Outline

EE403 Law and Economics

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214

Course Description:

Thailand's Legal System. The relationship between law, economy, and politics. Applying economic theory to analyze reasons for the existence of property rights, civil, and commercial law. The effects of law on economic behavior and on economic outcomes.

Course Objectives:

This class aims to provide students with a deep understanding of how economic principles can be applied to analyze legal rules. The course explores the intersection of law and economics, focusing on how legal rules influence economic behavior and how economic theory can inform the design and interpretation of laws. Students will examine topics such as property rights, contracts, torts, and regulation through an economic lens.

Expected Learning Outcomes 1. Morality and Ethics EE403

Applicability	Expected Learning Outcomes	Evaluation Method
□	1. Students demonstrate integrity.	
□	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.	
□	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.	

□	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.	
□	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.	

□	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

6. Learning Management and Evaluation

CLO	Learning Management	Evaluation
1	Explain the economic rationale behind core areas of law, including property, contract, tort, crime, and legal procedures.	Exams and assignments
2	Apply microeconomic concepts (e.g., efficiency, externalities, marginal analysis) to analyze legal rules and institutions.	Exam and assignments
3	Evaluate legal rules based on efficiency, incentives, and social welfare implications.	Exam and assignments
5	Use economic models (such as the Coase Theorem, deterrence models, and bargaining theory) to analyze how laws influence behavior.	Exam and assignments
6	Critically assess the trade-offs between equity and efficiency in legal decisionmaking.	Exam, assignments and presentation.

Main Text:

1. Thomas J. Miceli. (2017) . *The Economic Approach to Law*. 3rd edition. Stanford Economics and Finance (TM)2.
2. Cooter, R., & Ulen, T. (2016). *Law & economics*. Pearson/Addison Wesley (CU)

Grading Criteria:

Mid-term examination	30%
Final examination	50%
Assignments & Presentations	20%

Letter grades are determined based on your relative performance in the class. However, any score below 45 out of 100 is assigned an F, and any score of 90 or above is assigned an A.

Tentative Class Schedule:

Topic 1. The Economics of Property Law: Fundamentals

[TM : Chapter 6 & 7, CU : Chapter 4]

- The nature and function of property right
- The definition of property rights
- Property rights and incentives
- Enforcement of property rights
- Fundamentals of the economics of property law
- The control of externalities
- Pigouvian taxes
- The Coase Theorem
- The choice between property rules and liability rules
- Trespass and Nuisance
- Limited and Divided Ownership
- Leasing
- Time-limited property rights: Intellectual Property
- Patents
- Trade secrets
- Copyrights
- Trademarks

Topic 2. An Economic Model of Tort Law

[TM : Chapter 2, CU : Chapter 5]

- What is Tort?
- Elements of Tort claim: cause-in-fact and proximate cause
- Economic model of accidents: The model of precaution
- Unilateral and bilateral care model
- Socially optimal level of care
- Comparison of strict liability and negligence
- Contributory negligence
- Negligence with contributory negligence
- Strict liability with contributory negligence
- The Hand Rule

Topic 3. Applying the Economic Model of Tort Law

[TM : Chapter 3, CU : Chapter 6]

- Products liability
- Liability for environmental accidents

- Medical Malpractice

Topic 4. The Economics of Contract Law I: The Elements of a Valid Contract

[TM : Chapter 4, CU : Chapter 7]

- Contracts and efficient exchange
- The elements of a valid contract
- Reasons for invalidating contracts

Topic 5. The Economics of Contract Law II: Remedies for Breach

[TM : Chapter 5, CU : Chapter 8]

- The efficient breach model
- Money damages and efficient breach
- Remedies
- expectation damages
- reliance damages
- zero damages
- Mitigation of damages
- Impossibility and Related Excuses
- Specific performance
- Self-enforcement of contracts
- Liquidated damage clause
- Product warranties

Topic 6. The Economics of Crime

[TM : Chapter 8, CU : Chapter 11]

- Distinguishing crimes and torts
- The Economic Model of Crime
- The offender's decision to commit a crime and the supply of offenses
- Optimal punishment
- The optimal fine
- Gain versus harm-based fines
- Fines and Imprisonment
- Repeat Offenders
- The death penalty
- Economics of the Death Penalty

Topic 7. The Economics of Legal Procedure

[TM : Chapter 9 , CU : Chapter

9] . The litigation process

- Why do trials occur?
- The differing perceptions, or optimism model
- The Asymmetric Information Model
- Procedural rules and litigation costs
- Contingent Fees
- The benefits of contingent fees

- Contingent fees and settlement
- Do contingent fees promote frivolous suits?

Topic 8. (if time allows) The Economics of Competition Law

[TM : Chapter 10]



Course Outline

EE 404 History of Economic Thought

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214

Course Content

Development of economic thought from the mercantilist period up to mid twentieth century,

emphasis on the influences of economic problems in each period on the development of economic thought.

Course Description

Development of economic thinking, from the pre-classical period up to the twentieth century.

Examples are agricultural doctrine, mercantilism, classical, neoclassical, Keynesian, socialism, post-Keynesian, and Institutional Economics. Emphasis is given to the underlying philosophies, essential concepts, and the influence of economic problems on formulating economic thought in every period.

Prerequisites:

a) EE210 or b) EE211 and EE212 or c) EE213 and EE214

Course Objectives:

This course is designed to expose the students to the history of economic thought. Students will learn about the intellectual thought patterns and assumptions of various periods of history, and how those patterns influenced, and were influenced by, economic thought. Numerous previous theories, some forerunners of modern theories, others dead-end theories that have since been abandoned, will be studied - including Mercantilism, the Physiocrats, Marxism, Marginalists, Neoclassical, Keynesians, Chicago, Institutionalists, Welfare Economics, Public Choice, the New Institutionalists, and Austrians. By the end of the semester students will know where the theories they are learning in other classes came from, and something about the many other approaches that have been tried throughout history. The course seeks to make sure students can:

- 1) Detect and identify the main differences between differing schools of thought.
- 2) Understand the historic debates that occurred throughout history, debates that shaped and were shaped by the theories.
- 3) Understand the historic periods that served as a background for the debates, often shaping the debates in ways outside of pure economic theory;
- 4) Use the knowledge gained to better understand contemporary debates and issues.

Text:

The History of Economic Thought (8th Edition), Stanley L. Brue and Randy R. Grant

Notes, Note taking, and Attendance

I DO NOT use power point, I lecture and use the board. I give each lecture off of prepared notes, which will be available the first day of class, via Microsoft Teams. I would recommend that you print out a copy of them for yourselves, many students find they help to follow the lecture. DO NOT assume that the notes are a substitute for the lecture, I use the notes to remind myself of what points I want to cover, in what order. But parts of the notes are not understandable without the lecture to explain them.

Moodle and Microsoft Teams:

I don't typically use moodle all that much, I use Microsoft Teams for the notes and to contact students, when there is a schedule change or an announcement...In the event that the Wuhan Flu returns, or a flood, or Coup, or whatnot, and the University shuts down again, class will then be maintained online.

Cheating:

Don't. If you do, and I catch you, you will be reported to the program director for the appropriate punishment. At a minimum, you will receive a zero on the assignment you are caught cheating on, other punishments include automatically failing the course, and being suspended for one (or more) semesters.

Evaluation:

The class evaluations will be based on two exams, a midterm and a final. The midterm will be 2 hours in length, the final will be 3 hours in length. Students will have a choice of what questions to answer. A sample exam will be passed out before the first exam. Each exam is worth a percentage of your grade as given below. The Midterm exam will cover material from the first half of class, the Final exam will be comprehensive, though it weighted towards materials studied in the second half of the semester.

Expected Learning Outcomes

1. Morality and Ethics EE404

Applicability	Expected Learning Outcomes	Evaluation Method
□	26. Students demonstrate integrity.	
□	27. Students prioritize social and public benefits over personal ones.	
□	28. Students are punctual and comply with the code of conduct of the institution and society at large.	
□	29. Students are responsible and accountable to society, the nation, and the subject of economics.	
□	30. Students realize the cultural and environmental value of a sustainable society.	

2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
□	26. Students know and understand modern economics principles and theories, and are up to date with new developments.	
□	27. Students know and understand Thai and global economic structure and the importance of major international economic events.	
□	28. Students know and understand the instruments of economic analysis.	
□	29. 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.	
□	30. Students are informed about related fields including sociology, business administration, education, law policy, and science.	

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
□	16. Students have developed individual critical thinking.	
□	17. Students are sufficiently trained in research skills.	
□	18. 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.	
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4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
□	26. Students are responsible for assigned tasks and work in groups effectively.	
□	27. Students have problem-solving skills.	
□	28. Students show leadership skills and team spirit.	
□	29. Students are always improving themselves.	
□	30. Students have good interpersonal skills, adapt, and work under different conditions.	

5. Quantitative Analysis, communication, and information technology

Applicability	Expected Learning Outcomes	Evaluation Method
□	16. Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	
□	17. Students communicate effectively and select appropriate presentation methods.	
□	18. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	

Remark: □ Primary expected outcome □ Secondary expected

Tentative Class Schedule:

Teaching Plan and Class Schedule

Date Topic Readings

Week 1

- Introduction
- The Greeks, Romans, the Middle Ages
- The Mercantilists

Online Readings (Not Required), Chapter 1, Chapter 2

Week 2

- The Physiocrats
- Special Topics:Economic History vs. History of Economic Thought
- The Classical School I - Adam Smith

Readings: Chapter 3, Chapter 4

Week 3

The Classical School II - Adam Smith
The Classical School III - Malthus, Say

Readings, Chapter 5, Chapter 6

Week 4

The Classical School IV - David Ricardo
The Classical School V - David Ricardo

Chapter 7, Chapter 8

Week 5

The Classical School VI – Bentham
The Classical School VII Senior, Mill

Chapter 7, Chapter 8

Week 6

The Socialists, The Marxists

Chapter 9, Chapter 10

Week 7 The Marxists I

The Marxists II

Chapter 10

Supplemental Handout

Also, Review for Midterm

Week 8 Midterm September 25

Week 9

German

Historical School

The Institutionalists, the

Austrians

Chapter 11, Chapter 19

Week 10

The Marginal Revolution

I The Marginal

Revolution II

Chapter 12 (optional)

Chapter 13

Chapter 14

Week 11

The Neoclassical

School I (Marshall)

The Neoclassical School

II (Monetary)

Chapter 15

Chapter 16

Week 12

The Neoclassical School III

(Imperfect

competition)

Class 22: Game Theory

Chapter 17
Supplemental Readings –
we may skip this
depending on time

Week 13

Welfare
Economics I
Welfare Economics II
(Public Choice)

Chapter 20
Supplemental Readings

Week 14

The Keynesian Revolution I
The Keynesian Revolution II

Chapter 21,22

Week 15 Class 28-30

Chicago I
Chicago II

Chapter 24

Week 16 TBA, Review for Final Exam



Course Outline

EE406 Contemporary Economic Issues

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: EE211 and EE212

Course Description:

This course is a general introduction to the subject matter and methods of economics, through the investigation of specific contemporary economic issues such as economic growth, inequality, poverty, and environmental deterioration. The focus also is on how economists address these issues.

Course Objectives:

This course aims to provide students with a general knowledge about “contemporary” economic issues such as that of inequality, poverty, labour market institutions, social welfare, and environmental deterioration.

To do so, the course will focus on two connected themes: trends of inequality and policies for inequality reduction. The study of inequality examines the current nature of the problems, and the future trends that will create profound impact. Two trends will be investigated to look at their impact on the changes in inequality. These trends include (1) technology change, (2) climate change. The course also looks at the connection between middle income trap and inequality, in order to examine how inequality is intertwined with the inability to achieve economic growth.

After the study of inequality, the course will focus on policies for reducing inequalities. The policies that will be covered include, for example, education policies, health policies, social protection policies, taxation and other aspects of public finance, and the political economy of inequality reduction. The aim of the course's study of these policies is to explore pathways that can address the challenges in reducing inequality.

The course is naturally quite a departure from orthodox economics – and offer a more interdisciplinary approach to economic analyses. By doing so, we aim to

1. Equip students with tools to understand economic issues using definitions, principles, measurement, and observation;
2. Make students acquainted with economic data such as poverty rate, inequality indicators, labor market statistics, and budgetary statistics, and other indicators concerning public health and education;
3. Train students on academic writing and presentation through class assignments and guide the development of research methods.

Evaluation:

- | | |
|---|-----|
| • Midterm examination | 30% |
| • Final examination | 40% |
| • Group assignment and presentations | 20% |
| • In class activities and participation | 10% |

Text and Readings:

- Class slides and references
- United Nations (2020). World Social Report 2020: Inequality in a Rapidly Changing World. United Nations Department of Economic and Social Affairs
- McKinsey Global Institute (2017). A Future that Works: Automation, Employment, and Productivity. McKinsey&Company
- World Bank (2024). World Development Report 2024: The Middle Income Trap. World Bank Group
- International Labour Organization (2022). World Social Protection Report 2020-2022. Social Protection at Crossroads – in Pursuit of a Better Future.
- Pitidol Thorn (2014). Communitarianism and the Expansion of Freedom, Book for V-Reform. Thai Health Foundaion. (in Thai: ธร ปีติดล (2557) แนวคิดเรื่องชุมชนนิยมกับการสร้างเสริมสุขภาพ. ชุดหนังสือสำรวจองค์ความรู้เพื่อการปฏิรูปประเทศไทย มูลนิธิสาธารณสุขแห่งชาติ)
- Pitidol Thorn (2021). The History of Thailand's Welfare System: A Comparative Study of Factors and Paths of Welfare State Development. Faculty of Economics, Thammasat University (in Thai: ธร ปีติดล (2564) ประวัติศาสตร์ระบบสวัสดิการในประเทศไทย: การศึกษาเปรียบเทียบปัจจัยและเส้นทางพัฒนาการของระบบสวัสดิการไทยกับสากล คณะเศรษฐศาสตร์ มหาวิทยาลัยธรรมศาสตร์)

- Pitidol, Thorn (2024). *Building Thailand's Welfare System*. FES-Thailand Publication. (in Thai: ธร ปีติดล. การผลักดันระบบสวัสดิการในประเทศไทย. มูลนิธิฟรีดริชเอแบร์ท ประเทศไทย)
- Pitidol, Thorn (2024). *Ideologies and Narratives in Thailand's Welfare System*. FES-Thailand Publication. (in Thai: ธร ปีติดล. แนวคิดและอุดมการณ์ในระบบสวัสดิการไทย. มูลนิธิฟรีดริชเอแบร์ท ประเทศไทย)

Lecture notes

- EE406 Contemporary Economic Issues Lecture Notes, January 2024, Thorn Pitidol, Faculty of Economics, Thammasat University.

*Additional mandatory and suggested reading lists under each chapter will be provided via google classroom. Please regularly check for the readings to be assigned for each topic in Google Classroom.

Class Policies:

The classes will consist of (1) lecture (2) class activities, and (3) group works preparation. Attendance is strongly encouraged. It is the responsibility of the students to obtain any information announced in the class. Ignorance of such information due to absence of class is not a valid defense.

Make-up examinations are not permitted unless; (i) in case of illness – you need to provide the faculty with the doctor's medical note; (ii) family emergency – case-by-case basis.

Students are encouraged to work together and exchange ideas outside of class. However, plagiarism and cheating will be treated seriously with disciplinary actions. Thammasat University and our faculty take academic integrity extremely seriously, and there will be academic consequences if you are found possibly guilty of misconducts. Please refer to the university guidelines if you have any questions.

Any changes to the course outline (if any) will be announced in the class or uploaded on Google Classroom.

In-class Activities and participation score:

For each topic, there will be in-class activities to assist students reviewing key contents, and checking their understanding. The activities consist of, for example, discussions, debates, a quick exchanges, and short presentations.

These activities will be recorded and submitted to the lecturer, with the students' participation checked to be their participation score.

Students are expected to do the preparation readings before joining the activities. The content of the activities will be related to group works and final exams.

Group Works:

There will be two group works, one to be submit before mid-term, and another to be submit before final exam.

Students will be divided into groups. The total number of groups shall not exceed 7 groups. Each group work comprises of a report and a presentation. 4-5 topics will be provided for selection.

To aid the preparation, after the topic is selected, there will be 2 time slots for students to meet with the lecturer to help them go through their preparation of the report and the presentation.

In the final week before mid-term and final exam, student will need to submit their report and do the presentation. Students are expected to take their presentation in a similar way to their participation in the case-competition.

Topics

Theme 1: Trends in inequality

1. Inequality: overview (Week 1-3)

- Economic inequality: global perspectives
 - Income inequality across countries
 - Trend within countries
 - Inequality of opportunity
 - The price of inequality
- Inequality: the case of Thailand
 - Important trends
 - Vulnerable groups

- **Week3 - Inequality: the case of ASEAN (guest lecture)**

2. Technology and inequality (Week 4-5)

- The technological revolution: winners and losers
 - Technology, employment, and inequality
 - The case of platform economy
 - The case of automation
 - Technological divide and opportunity for inclusion
- The case of Thailand
 - Ensuring fair competition
 - Quality work

3. Climate change and inequality (Week 6-7)

- Channels and determinants
- Unequal exposure and impacts across countries
- Unequal exposure and impacts within countries
- Distribution effects of climate action

[week 8- mid-term exam]

Theme 2 Policies for inequality reduction

4. Middle income trap and inequality (Week 9-10)

- Middle income trap: meaning and situation
- Why middle-income trap happened? The connection between middle income trap and inequality
- Successful transition away from middle-income trap: what are needed
- **Week 10 - Innovation policies (guest lecture)**

5. Social protection (Week 11-14)

- From Covid 19 pandemic to the need to focus on social protection
 - Covid-19, vulnerability, and inequality
 - Covid-19 and the policy gaps
- Social protection
 - Meanings and rationale
 - Global challenges
 - Current gaps
- Financing social protection
 - Types of social protection policies and financing options
 - Different combinations of policies and implications

- Diagnosing social protection gaps in Thailand
 - Context and challenges
 - Current landscape
 - Diagnosing gaps

7. Education and health (Week 15&16)

- Education, health, and inequality
- Understanding educational and health inequality
- The case of Thailand

Class Schedule

Week	Topics (Tentative)	
1	Introduction	Inequality: global perspective
2	Inequality: case of Thailand	In-class activities and group work preparation
3	Inequality: the case of ASEAN (Guest Lecture)	
4	Technology and inequality	In-class activities
5	Technology and inequality	In-class activities
6	Climate change and inequality	In-class activities and group work preparation
7	Climate change and inequality	Group work 1 presentation
8	Mid-term exam week	
9	Middle-income trap	In-class activities
10	Innovation policies (guest lecture)	

11	Social protection: introduction	In-class activities and group work preparation
12	Social protection and inequality reduction	In-class activities
13	Diagnosing social protection gaps in Thailand	In-class activities
14	Education and health	In-class activities
15	Education and health	In-class activities and group work preparation
16	Group work 2 presentation	Closing of the course

Expected Learning Outcomes

1. Morality and Ethics EE406

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students demonstrate integrity.	In-class activities
●	2. Students prioritize social and public benefits over personal ones.	In-class activities
●	3. Students are punctual and comply with the code of conduct of the institution and society at large.	In-class activities
○	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.	Group works and exams
●	2. Students know and understand Thai and global economic structure and the importance of major international economic events.	Group works and exams
○	3. Students know and understand the instruments of economic analysis.	Group works and exams
●	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.	Group works and exams
●	5. Students are informed about related fields including sociology, business administration, education, law policy, and science.	Group works and exams

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students have developed individual critical thinking.	Group works and exams
●	2. Students are sufficiently trained in research skills.	Group works and exams
●	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,	Group works and exams

	students demonstrate an ability to propose policy guidelines to resolve problems.	
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4. Interpersonal Skills and Responsibilities

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

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.	Exams
○	2. Students communicate effectively and select appropriate presentation methods.	Group works and in-class activities
○	3. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	Group works and in-class activities

Remark: ● Primary expected outcome ○ Secondary expected

Learning Management and Evaluation

CLO	Learning Management	Evaluation
CLO1.1 Describe and explain key contemporary economic issues including inequality, poverty, and climate change.	Lectures; guided discussions; weekly readings from global and Thai sources.	Midterm and final exams; class participation.
CLO1.2 Analyze the impacts of technological and environmental changes on economic inequality.	Case studies and debates; in-class exercises on automation, climate impact, platform economy.	In-class debates; final exam essays.
CLO2.1 Evaluate inequality reduction policies such as education, health, and social protection using interdisciplinary reasoning.	Lectures and student-led discussions on policy effectiveness; group research and peer feedback.	Group assignments; presentations; final exam policy analysis.
CLO3.1 Collaborate effectively on group assignments and presentations.	Group project assignments; instructor consultations; peer support sessions.	Group project submission and teamwork quality.
CLO3.2 Communicate ideas clearly in academic discussions and group presentations.	Weekly in-class activities; report rehearsals and structured presentations.	Group presentations and class communication tasks.
CLO4.1 Demonstrate academic integrity and responsibility in in-class activities.	Participation tracking; in-class engagement and reflection exercises.	Participation score based on classroom presence and collaboration.

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
CLO1.1 Describe and explain key contemporary economic issues including inequality, poverty, and climate change.	Midterm and final exams; class discussion performance	Weeks 8, 16	30%
CLO1.2 Analyze the impacts of technological and environmental changes on economic inequality.	In-class discussions; final exam analytical essays	Weeks 4–6, 16	10%
CLO2.1 Evaluate inequality reduction policies such as education, health, and social protection using interdisciplinary reasoning.	Group assignments and policy evaluation in final exam	Weeks 9–15	20%
CLO3.1 Collaborate effectively on group assignments and presentations.	Group project submission; peer review and feedback	Weeks 7, 16	10%
CLO3.2 Communicate ideas clearly in academic discussions and group presentations.	Group presentations and instructor evaluations	Weeks 7, 16	10%
CLO4.1 Demonstrate academic integrity and responsibility in in-class activities.	Participation logs; in-class activity tracking and feedback	Throughout semester	20%



Course Outline

EE425 Econometrics I

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: EE211 (or EE213), EE212 (or EE214), MA216 (or MA211) and ST216 (or ST211)

Course Description:

Applying statistical methods and economic theories to analyze economic data, including simple and multiple regressions; estimation using the ordinary least squares (OLS) hypothesis testing; and dummy variable. This course also examines various problems in regression models, including Multicollinearity, Heteroscedasticity, Autocorrelation, Specification Error, Stochastic Regressors; and some advanced topics in regression method such as Generalized Least Squares (GLS) estimation, System of regressions and Seemingly Unrelated Regression (SUR), Simultaneous Equation System and solving Endogeneity problem with instrumental variables. Trainings in econometrics software.

Course Objectives:

In this course, we will study applications of statistical and economic theories in analyzing economic data. This includes parameter estimation using the ordinary least squares (OLS) technique and hypothesis testing. The course covers single and multiple regressions. It also discusses problems encountered by OLS, including autocorrelation, heteroscedasticity, multicollinearity, and specification error. The course will also cover other estimation techniques, including generalized least squares (GLS), the system equations estimation method, nonlinear estimation methods such as NLS, MLE, and GMM, as well as the use of computer applications in practice.

Course Learning Outcomes: CLOs

After completing this course, students are expected to achieve the following Course Learning Outcomes (CLOs):

PLOs	CLOs	Learning Management	Evaluation
<u>Knowledge</u> K1: Acquiring knowledge and understanding of economic theories, fundamental economic tools, theory development, and applied economics. K2: Ability to apply theoretical knowledge to analyze and provide practical suggestions for economic and social issues. K4: Ability to attain lifelong learning and thoroughly understand world economic and societal changes and impacts	Know how to (i) properly establish econometric models based on economic theories, (ii) accurately interpret the results of econometric estimates, and (iii) demonstrating eagerness and readiness to acquire new knowledge related to econometric methodology.	Attend the in-class lectures. Engage in discussions and participate in group-workshops that focus on the topic of each session. Self-study by reviewing the recorded lecture clips for each session after attending class. Selfpractice by completing the assignments for each session and collaborating on two group projects.	<ul style="list-style-type: none"> - Group Projects - Assignments - Midterm Exam - Final Exam
<u>Skills</u> S1: Acquiring intellectual skill and ability to think systematically to identify research topics, perform research, process data, and evaluate findings.	Be able to (i) comprehend prior academic papers that utilize econometric methods to address their research questions, (ii) effectively	Participate in the in-person lectures. Engage in discussions and group workshops that focus on the topic of each session. After attending class, conduct	<ul style="list-style-type: none"> - In-class groupworkshop - Group Projects - Assignments - Midterm Exam

S2: Acquire analytical and communication skills and ability to interpret data from different sources, analyze, and integrate knowledge to propose appropriate problem-solving guidelines for economic and social issues.	apply econometric methods for data analysis in their own studies, and (iii) utilize econometric methodology in the execution of their own academic research.	selfdirected study by reviewing the recorded lecture segments for each session. Complete the homework assigned for each session and take part in two collaborative group projects as part of your self-directed practice.	- Final Exam
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PLOs	CLOs	Learning Management	Evaluation
S3: Acquire quantitative and technological skills for research studies.			
<u>Ethics</u> E1: Acknowledge moral values and exhibit ethical traits, including decency, selflessness, and integrity. E3: Respect rights, opinions, values, and dignity of others. Obey organizational and societal rules and regulations.	Know how to (i) ethically and unbiasedly employ and implement econometric methodology, (ii) appropriately apply generative AI to help make interpretations of the estimated econometric results, and (iii) practically apply and provide unbiased policy recommendations based on the empirically estimated results.	Attend the in-class lectures on the moral and ethical implementation of econometrics. Develop teamwork skills by participating in group discussions and engaging in workshops related to each session's topic. Additionally, enhance collaboration outside of class by completing two group projects.	Group Projects Assignments Midterm Exam Final Exam

<u>Character</u>			
C1: Ability to effectively complete assigned tasks and responsibilities.	Be proficient in (i)	Participate in group discussions	In-class
C2: Ability to initiate problem analysis independently and/or in teamwork.	independently completing assigned tasks and taking responsibility for his/her own work, (ii) effectively collaborating in group settings, and (iii)	and workshops focused on each session's topics. After attending class, review the recorded lecture segments and complete the corresponding homework assignments. Collaborate	groupworkshop
C4: Show active learning characteristics and aspire to personal development.	demonstrating a willingness and readiness to learn new concepts related to econometric methodology.	effectively to accomplish two group projects efficiently.	Group Projects Assignments

Texts Books and Course Materials:

Required Texts:

Gujarati, D. (2009). Basic Econometrics. 5th ed. Singapore: McGraw-Hill.

Heij, C., de Boer, P., Franses, H.P., Kloek, T., & van Dijk, K.H. (2004). Econometric Methods with Applications in Business and Economics. New York, NY: Oxford University Press.

Additional Texts:

Baltagi, B.H. (2008). Econometrics. 4th ed. New York, NY: Springer-Verlag.

Greene, W.H. (2012). Econometric Analysis. 7th ed. Upper Saddle River, NJ: Prentice Hall.

Johnston, J., & DiNardo, J. (1997). Econometric Methods. 4th ed. Singapore: McGraw-Hill.

Ruud, P.A. (2000). An Introduction to Classical Econometric Theory. New York, NY: Oxford University Press.

Wooldridge, J.M. (2016). Introductory Econometrics: A Modern Approach. 6th ed. Singapore: Cengage.

Teaching Materials:

PPT, Lecture Clips, and In-class Workshop.

Course Evaluation

Methods/Activities	Weights Assigned
In-class Group Workshops	13%
Group Projects	12%
Assignments	25%
Mid-term Exam	25%
Final Exam	25%

Grading criteria

Score	Grade
86-100	A
81-85	B+
76-80	B
71-75	C+
61-70	C
56-60	D+
50-55	D
Less than 50	F

Grading system

Details of the grading system will be in accordance with Thammasat University's regulation for graduate studies.

Grade	A	B+	B	C+	C	D+	D	F
Points	4.00	3.5	3.00	2.5	2.00	1.50	1.00	0.00

Class Schedule:

Week	Date	Content	Chapter	Due
1		Introduction & Review of Statistical Concepts What is econometrics?	G. 1	
2		Econometric Process Methodology of econometrics Types of economic data Simple Regression (Two Variables) Model Multiple Regression Model	G. 1-3	GWS1
3		Classical Normal Linear Regression Model Ordinary Least Squares (OLS) Estimation Method Assumptions Properties of Estimators	G. 4-6	Assign 1 GWS2
4		Econometric Methodology Evaluating Estimated Results	G. 7	Assign 2 GWS3
5		Econometric Methodology (Cont.) Hypothesis Testing and Specific Test	G. 8	Assign 3 GWS4
6		Dummy Variable Regression Models ANOVA Model ANCOVA Model	G. 9	Assign 4 GWS5
7		Estimation Methods Least Squares Estimation Method Least Squares Estimation – Matrix Approach	H. 1-3 Handout	Assign 5 GWS6

8		Midterm Exam		
9		Violations of OLS Assumptions <u>Multicollinearity Problem</u> Nature of Multicollinearity Detection of Multicollinearity Remedial Measures <u>Model Specification</u> Specification Errors Errors of Measurement Nested versus Non-nested Models Model Selection Criteria	G.10, 13 H. 5	Project 1 GWS7
Week	Date	Content	Chapter	Due
10		Violations of OLS Assumptions (Cont.) <u>Autocorrelation Problem</u> Nature of Autocorrelation Detection of Autocorrelation Remedial Measures <u>Heteroscedasticity Problem</u> Nature of Heteroscedasticity Detection of Heteroscedasticity Remedial Measures	G.11, 12 H. 5	Assign 6 GWS8
11		System Estimation Methods Seemingly Unrelated Models Simultaneous Equation Model Simultaneous Biased Indirect Least Squares (ILS) Two Stage Least Squares (2SLS) Three Stage Least Squares (3SLS)	G. 18-20	Assign 7 GWS9
12		Nonlinear Estimation Methods <u>Asymptotic Analysis</u> Finite Sample Properties vs Asymptotic Properties <u>Nonlinear Least Squares (NLS) Method</u> Concept Computation Inferential Statistics	Heij 4	Assign 8 GWS10

13		Nonlinear Estimation Methods <u>Maximum Likelihood Estimation (MLE)</u> <u>Method</u> Concept Computation Inferential Statistics Application – Logit Probit Models	Heij 4	Assign 9 GWS11
14		Nonlinear Estimation Methods <u>Generalized Method of Moment (GMM)</u> <u>Method</u> Concept Computation Inferential Statistics	Heij 4	Assign10 GWS12
15		Review Session		Project 2 GWS13
16		Final Exam		

Classroom Rules and Regulations

Attendance and Absences

This course assumes an interactive approach, which requires engaged participation from all members of the class. Your presence is essential to the requirements of this course and concurrently to your individual contribution to the group's workshop. Therefore, regular attendance is expected and considered mandatory. Each student is required to attend at least 70% of the total classes. Students with less than 70% attendance would be considered unqualified for the exam. Finally, students are responsible for fulfilling the essential requirements of the course for both individual and group work.

AI Policy

Use Prohibited

Students may not use AI tools (e.g., ChatGPT, DALL-E 2) for assignments. All work must be completed without external or automated assistance.

Use Only with Prior Permission and Acknowledgement

Students may use AI tools only with prior instructor approval. If permitted, use must be cited (e.g., ChatGPT. (YYYY, Month, DD). "Your prompt." Generated using OpenAI.

<https://chat.openai.com/>) and include a 2–3 sentence description of how the tool was used (e.g., tool name, prompt, and how it contributed to the work). Also include a brief (2–3 sentence) explanation of tool usage.

Course Syllabus

EE431 Economics of Financial Markets and Institutions

Semester 1/2025

Course description:

Money and capital markets at a micro-level; Financial assets, risks, and risk-bearing; The theory of equilibrium pricing of financial assets; Interest rate determination and structure of interest rates; Asymmetric information in financial markets; The study of financial institutions; Risk management of financial institutions; Behavior of financial institutions; Regulating financial institutions.

Prerequisite: EE311

The objective of the course (CLOs):

- CLO1: Understand and explain the characteristics of financial assets, the concepts of risk and return at the microeconomic level, and the investment decision-making process in which investors aim to maximize expected utility. Analyze the importance of diversification and the role of financial institutions in mitigating asymmetric information in financial markets.
- CLO2: Identify and interpret the key determinants of financial asset prices, and assess the role and functions of financial intermediaries within the financial system.
- CLO3: Apply asset pricing models and financial economic theories to interpret asset prices and analyze real-world developments in financial markets, including the challenges and potential failures of financial intermediaries.
- CLO4: Effectively construct and communicate economic and financial analyses in both written and oral formats, adhering to academic standards of clarity, structure, and reasoning.
- CLO5: Demonstrate responsibility and accountability by completing individual and group assignments on time.

Evaluation

Homework*	5%
Quiz/In-class assignments**	10%
Mid-term exam	30% (Topic 1 – Topic 3)
Final exam	55% (Topic 3 – Topic 8)

*There will be a total of 12 homework assignments, approximately. For each student, we will drop the two assignments with the lowest scores. **LATE submission is not counted.**

**There will typically be around two quizzes or in-class assignments per class, although this may vary. ** In some classes, there may be only one quiz. For each student, the SIX lowest quiz scores will be dropped, and the remaining scores will be counted toward the final grade. LATE submission is not counted. You must submit in-class assignment before I leave the room.

*, ** The idea behind dropping some quizzes/homework with the lowest scores is to accommodate students who may miss assignments for various reasons. Therefore, if a student happens to miss a quiz or a homework assignment, there won't be a makeup opportunity, as we've already factored this into the grading system.

Please inform me at the beginning of the semester or as soon as possible if you have any medical condition or necessity that may prevent you from attending class for more than three weeks. In such cases, the quiz score will be proportionally transferred to the midterm and final exams, or, if necessary, the entire quiz score will be transferred to the final exam. In any case, there will be no makeup quiz. Please also treat the instructor with respect.

Remarks:

1. Evaluation methods are subject to change.
2. More information will be announced in the Class, Google Classroom or Line Official.
3. When doing any essay exam or assignments, use graphs, mathematical expressions, or else to support your answer where appropriate. Marks depend on the quality of the explanation.

Video Recording Policy

Make-up classes may be recorded for the convenience and review of students who are unable to attend in person. However, regular classes will not be recorded. If you

cannot attend a make-up class, please inform the instructor in advance so arrangements can be made for the recording.

Please note that recorded classes are for personal use only and may not be shared or distributed.

Grading Criteria:

To figure out your final letter grade, I use **a mixed procedure** that combines both criteria-based and distribution-based methods. While the university provides the following general guidelines:

A = 4.0 (85-100)	B+ = 3.5 (75-84)
B = 3.0 (70-74)	C + = 2.5 (65-69)
C = 2.0 (60-64)	D+ = 1.5 (50-59)
D = 1.0 (40-49)	F = 0 (0-39)

Please understand that these are general guidelines only. **The final grading criteria are not fixed** at the outset. This means the minimum score required for each letter grade (e.g., the 85 for an A, or 75 for a B+) may be adjusted based on the overall performance and distribution of scores within the class. The aim is to ensure a fair and accurate evaluation for everyone, reflecting your learning accurately while also upholding the academic standards of the entire BE program.

Teaching Materials and Resources

Required Text:

Frederic Mishkin, The Economics of Money, Banking and Financial Markets 9th Edition (Pearson, 2009)

Peter D Spencer, The Structure and Regulation of Financial Market (Oxford University Press, 2000)

Copeland, Thomas E. and J. Fred Weston, Financial Theory and Corporate Policy, 4th edition, (AddisonWesley, 2005)

Diamond (2007), Bank and Liquidity Creation: A Simple Exposition of the Diamond-Dybvig Model, Federal Reserve Bank of Richmond Economic Quarterly.

Diamond (1996) Financial Intermediation and Delegated Monitoring: A Simple Example, Federal Reserve Bank of Richmond Economic Quarterly.

Kent Mathews and John Thompson, The Economics of Banking 2nd Edition (John Wiley & Son, 2008)

Bailey R.E., The Economics of Financial Markets, Cambridge University Press (2005)

Remarks: Supplement handouts or reading will be posted on *Google Classroom*.

The lecturer will provide a lecture presentation.

- The lecture presentation is designed to support learning in the class. Therefore, it is not sufficient for the exam.

Lecture/Schedule

Topics	Reading
Part I : Economic Analysis of Asset Prices	
Topic 1. Financial assets and the overview of financial market (1 time)	FM2009 Ch. 1-3
1.1 Money and Functions of Money	
1.2 Money, Wealth, and Income	
1.3 Financial Market and Financial Assets	
1.4 Financial Assets Classified by Information Theory	
1.5 Flows of Funds in The Financial Market	
1.6 Structure of Financial Market	

Topic 2. Debt Market and Structure of interest rates (7 times)	FM2009
2.1 Measuring Interest Rates	Ch.4-6
2.2 Nominal Interest Rates and Real Interest Rates	
2.3 The Behavior of Interest Rates	
2.4 Risk and Term Structure of Interest Rates	
Topic 3. Mean-Variance Analysis (3 times)	Copeland2005 Ch.5
3.1 Measuring Risk and Returns for a Single Asset	
3.2 Measuring Portfolio Risk and Returns	
3.3 Efficient Frontier with Two Risky Assets	
3.4 Efficient Frontier with One Risky and One Risk Free Asset	
3.5 Optimal Portfolio Choice N Risky asset	
3.6 Optimal Portfolio Choice N Risky asset and One Risk Free Asset	
Topic 4: Capital asset pricing model (CAPM) and Arbitrage Pricing Theory (APT) (4 times)	Copeland2005 Ch.6
4.1 Capital Asset Pricing Model	
<ul style="list-style-type: none"> • Portfolio Diversification and Individual Asset Risk • Assumptions • The Efficiency of Market Portfolio • Derivation of CAPM • Properties of CAPM 	
4.2 Arbitrage Pricing Theory	

Topics	Reading
Part II : Financial Institution, Financial Market and Asymmetric Information	
Topic 5. Financial institutions (2 times)	FM2009
5.1 Introduction	Ch.9 -11
5.2 Major risks faced by banks	KM 2008
5.3 Liquidity Management and The Role of Reserve	Ch.7
5.4 Interest Rate Risk Management	
5.5 Credit Risk Management	
5.6 Capital Adequacy Management	
Topic 6. Theory of financial intermediation (5 times)	PS2000
6.1 Introduction	Ch.8
6.2 Shortcomings of direct finance	
6.3 How banks help to resolve the problem?	Diamond (1996)
(a) Confidentiality and The Banking Relationship	
(b) Economies of Scale and Role of Diversification in Banking:	
Financial Intermediation as Delegated Monitoring	
Topic 7. Convexity, excessive risk, and bank regulation (5 times)	PS2000
	Ch.9
7.1 Decision Under Uncertainty	KM 2008
7.2 Agency Cost of Debt Finance: Conflict between a firm's bondholders and stockholders	Ch.8
7.3 Asset Substitutions Problem	
7.4 How to solve asset substitution problem?	
7.5 Adverse Selection and Credit Rationing	
Topic 8. Bank runs, systemic risk and deposit insurance (4 times)	Diamond (2007)
8.1 Introduction	
8.2 Demand for Liquidity	
8.3 Bank Liquidity Creation	
8.4 Bank Runs	
8.5 Suspension of Convertibility and Deposit Insurance	
8.6. Note on the optimal level of liquidity	

Class Online Material

Google Classroom

Stream

Classwork

People

Grades

A teal-colored header banner for a Google Classroom. On the left, the text "EE431 2 2023" is displayed in large white font, with "A.Sicha" below it in a smaller white font. On the right, there is a "Customize" button with a pencil icon. The background features a smartphone displaying a list of user avatars, a sticky note with a person icon, and a piece of paper with handwritten text. A small information icon (i) is in the bottom right corner.

Customize




EE431 2 2023

A.Sicha

Example a Display in the Google Classroom from the Past Semester

Important Announcement



-
-  Tentative Final Exam Cover Page and ... Posted Dec 12
 -  Material Permission Form - Final Posted Dec 2
 -  Make-up class: The class on Nov 28 wi... Posted Nov 23




Course Outline



-
-  Course Outline Posted Aug 3





Score Announcement



-
-  Midterm Exam Score Posted Oct 13
 -  Quiz Score 10% Posted Sep 2
 -  Homework Score 5% Edited Sep 2



Homework



 Homework 12 : Due 5 December	Posted Nov 29
 Homework 11: Due 5 December 2023	Posted Nov 22
 Homework 10 : Deadline - November 21	Posted Nov 15
 Homework 9: Deadline 7 Nov	Posted Nov 2









Topic 1. Overview of Financial Markets



 Class Note - 15 Aug	Posted Aug 16
 Lecture Presentation: Chapter 1. Over...	Posted Aug 14

Topic 2. Debt Market and Structure of Interest Rates



 Correction Page 38	Posted Oct 2
 Class note: 19 Sept (Correction - Page...	Edited Oct 2
 Class Note : Sept 12	Posted Sep 13
 Class Note: Sept 5	Posted Sep 6
 Class note: Aug 29 - Please see page 1...	Edited Aug 30
 Class note: Aug 22	Posted Aug 23
 Present Value Tables	Edited Oct 1
 Lecture Presentation: Topic 2. Debt M...	Posted Aug 14

Topic 3. Mean-Variance Analysis



- Class note: October 10, part 1 Posted Oct 17
- Class note: September 26 Posted Sep 26
- Lecture presentation Posted Sep 26

Topic 4. Capital Asset Pricing Model



- Class note : 24 October Posted Oct 24
- Class note: Oct 17 Edited Oct 18
- Class note : October 10 , part 2 Edited Oct 17
- Lecture Presentation Topic 4 Posted Oct 10

Topic 5. Bank Management



- Class note : October 31 Posted Oct 31
- Commercial Bank's Income Statement Posted Oct 24
- Commercial Bank's Balance Sheet Posted Oct 24
- Lecture Presentation: Topic 5 Edited Oct 24

Topic 6. Theory of Financial Intermediation



- Class note: November 14 Posted Nov 14
- Class note : November 7 Posted Nov 7
- Lecture Presentation Topic 6 Posted Oct 17
- Main Reading Material - Journal Article... Posted Aug 14

Topic 7. Convexity, Excessive Risk and Bank Regulatio... :



Class note: November 21, Ch7

Posted Nov 22



Lecture Presentation : Topic 7

Posted Oct 17

Topic 8. Bank Run, Systemic Risk and Deposit Insuran... :



Class note : Nov 28

Posted Nov 28



Lecture Presentation - Topic 8

Posted Oct 17



Main Reading Material: Banks and Liqu...

Posted Aug 17

Definitions

- A lecture Presentation is a PowerPoint presentation used in the class. It will be uploaded to the GG classroom before the date of each class. A student should prepare it before attending the class.
- A class note is the lecture presentation with the lecturer's writing in the class. It will be uploaded to the GG classroom within 7 days after the class.
- Quiz and Homework Scores will be uploaded in a shared GG sheet. The score for each homework/quiz will be announced within 7 days after the deadline of each homework or after the date of the quiz.

How to find a Solution for Homework: An Example of a Solution for Each Homework from the Past Semester

EE431 12023

Important Announcement

- There is no homework this week (10 October). Homework 7 will be availabl...
Posted 10 Oct
- Tentative Midterm Exam Cover Page
Posted 1 Oct
- Midterm Exam Preparation
Posted 26 Sept
- Class policy for 5% homework score
Posted 29 Aug
- Policy for 10% Quizzes and In-class Activities
Posted 29 Aug

Google Sheet Link
for Homework Score

Course Outline

- Course Outline
Posted 3 Aug

Score Announcement

- Midterm Exam Score
Posted 13 Oct
- Quiz Score 10%
Posted 2 Sept
- Homework Score 5%
Posted 2 Sept

Solution to Quiz

Stream

Classwork

People

Homework_score_1_2023 ☆ 📁 🌐

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C10 | Solution in the sheet "HW1_ans"

1 Homework is counted for 5% of total score

2 For every student, ONE homework with the lowest score will be dropped.

3 If you would like to see your homework (he questions and their alternatives),

4 a copy of your homework is sent to your @st.econ.tu.ac.th at the time you submit each homework.

5 You may search your mail box using the key word "EE431" or "Google forms"

		HW1 (100)	HW2(100)	HW3(100)	HW4(100)	HW5(100)	HW6(100)	HW7(100)	HW8(100)	HW9(100)	HW10(100)
		Solution is in the sheet "HW1_ans"	Solution is in the sheet "HW2_ans"	Solution is in the sheet "HW3_ans"	Please check your email@st.econ.tu.ac.th for the solution ; You may search "EE431" in your inbox.	Please check your email@st.econ.tu.ac.th for the solution ; You may search "EE431" in your inbox.	Please check your email@st.econ.tu.ac.th for the solution ; You may search "EE431" in your inbox.	Solution is in the sheet "HW7_ans_Q2_Q13 and HW7_ans_Q14_Q24"	Solution is in the sheet "HW8_ans"		
13	3	6304600090	75	42	76	85	17	49	80		
14	4	6304600092	52	78	68	84	0	67	90		
15	5	6404640007	100	80	100	95	58	58	76	90	
16	6	6404640007	90	80	100	100	58	58	100	70	
17	7	6404640007	95	80	88	100	50	58	100	75	
18	8	6404640006	79	90	94	100	92	60	66	67	
19	9	6404641000	95	70	82	100	66	90	76	57	
20	10	6404641000	80	60	94	90	92	60	86	75	
21	11	6404641003	100	60	100	90	57	71	65		

HW SCORE | HW1 | HW2 | HW1_ans | HW2_ans | HW3 | HW3_ans | HW4 | HW5 | HW6 | HW7 | HW7_ans_Q2 |

information on where you can find the solution for each homework, either (1) in your @st.econ.tu.ac.th mailbox or (2) sheet HW#_ans in the google sheet

Example of a homework

EE431 Homework 1: Due 23 January

11.59 pm

1. Please be careful when you answer the 1st and the 2nd question. If your answer to the 1st or the 2nd question is wrong, your homework may not be graded. You will receive 0 marks.
2. You can submit only one time. Please make sure everything is OK before you submit your homework.
3. Late submission is not counted. Please spare some time for the system to operate.
4. After you submit, you will receive a confirmation email. You may check your@st.econ.tu.ac.th to see whether you have successfully submitted the homework or not.
5. If there is any mistake, I do apologize. Please notify me if there are any by emailing me - at sicha@econ.tu.ac.th.
6. **This homework** is multiple choices or short answers. The advantage of these types of questions is that students can quickly respond. The test **grades on only the final answer. Exams will be essay questions.** Please make sure you can deliver the process that led to the solution. **Exam grading depends on both the final answer and the quality of your explanation.**
7. There will be 12 homework. **TWO** homework with the lowest score will be dropped.
8. Homework is 5% of the grade.

demostudent1@st.econ.tu.ac.th [Switch account](#)



* Indicates required question

Email *

Record demostudent1@st.econ.tu.ac.th as the email to be included with my response

1. Student ID [*** If you give a wrong answer for this question, your homework will not be graded***] *

Your answer

2. Let Z be the last digit of your student ID. If the last digit of your student ID = 0, use Z = 5. For example, if your student ID is 6404640356, your Z = 6. If your student ID is 6404642120, your Z = 5. What is your Z? [*** If you give a wrong answer for this question, your homework will not be graded***] [***Note that this value "Z" will be used in the other questions throughout this homework***] *

Your answer

3. What is Z +1 * 5 points

Your answer

A copy of your responses will be emailed to demostudent1@st.econ.tu.ac.th.

Submit

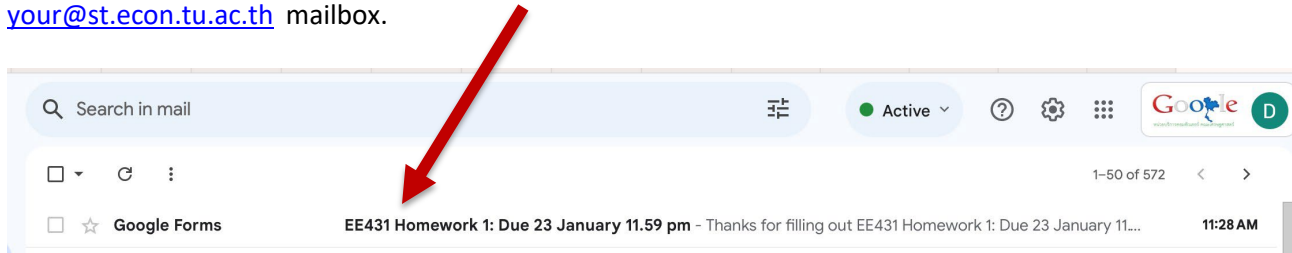
Clear form

Check the box

For some Questions the answer depends on your "Z" value. Therefore, you must provide a correct value of "Z"

After you click “submit”, a confirmation email with a copy of your homework will be sent to

your@st.econ.tu.ac.th mailbox.



In the email, it will appear a copy of your response. This email can be used as evidence of your successful submission of homework.

Example of a Solution to homework, on the Google Sheet

Question :	solution depends on last digit ID	Solution does not depend on last digit ID								
1. Student ID [*** If you give a wrong answer for this question, your homework will not be graded***]	last digit ID is 0	last digit ID is 1	last digit ID is 2	last digit ID is 3	last digit ID is 4	last digit ID is 5	last digit ID is 6	last digit ID is 7	last digit ID is 8	last digit ID is 9
2. Let Z be the last digit of your student ID. If the last digit of your student ID = 0, use Z = 5. For example, if your student ID is 5804640356, your Z = 6. If you student ID is 5904642120, your Z = 5. What is your Z? [*** If you give a wrong answer for this question, your homework will not be graded***] [***Note that this value "Z" will be used in the other questions throughout this homework***]	5	1	2	3	4	5	6	7	8	9
3. Calculate the value of 1 + Z	6.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00

Example of the homework solution sent to your@st.econ.tu.ac.th email.



***** Please note that if you have not submitted your assignment, neither a copy of the homework nor the solution will be sent to you email.**

Alternatively, you can find your homework in the HW# sheet in the Google Sheet for Homework score. Scroll downward to find your HW, searching for your student ID. Scroll to the right to see more questions. The picture below shows an example from previous semester.

Google Sheet interface showing a table of homework scores and questions. The table has columns for Timestamp, ID, Score, and multiple question columns. Annotations include a red box around the header row, a red arrow pointing right with the text "scroll to the right for more questions", a blue box around a cell in row 3 with the text "Click on the Homework# Sheet you want to see the questions", and a red arrow pointing to the HW6 tab at the bottom.

1	Timestamp	ID	Score	3. Which of the following statement is correct?	4. Given the information in Table 1. According to the Expectation Theory, what is the expected YTM on a government bonds with a 1-year time to maturity in 2025 (t+1)?	5. Given the information in Table 1. According to the Expectation Theory, what is the expected YTM on a government bond with 1 year time to maturity in 2026 (t+2)? Please calculate to FIVE decimal places.	6. Given the information in Table 1. According to the Expectation Theory, what is the expected YTM on a government bond with 1-year time to maturity in 2027 (t+3)? Please calculate to FIVE decimal places.	7. Given the information in Table 1. According to the Expectation Theory, how does the market expect interest rates to change?
2	3/6/2025 14:54:02	6504640621	87 / 100	Expectation theory assumes that bonds of different maturities are perfect substitutes (with the same level of risk, liquidity, taxation)	1.78 %	1.80%	2.00%	Market expects interest rate to increase.
3	3/6/2025 15:30:43	6604641370	100 / 100	Expectation theory assumes that bonds of different maturities are perfect substitutes (with the same level of risk, liquidity, taxation)	1.78 %	1.80%	2.00%	Market expects interest rate to increase.

HW_SCORE | HW1 | HW_EX1_ANS | HW2 | HW2_ans | HW3 | HW4 | HW4_ans | HW5 | HW6

Other Policies:

Any changes to the course outline (if any) **will be announced in the on-site class, the Zoom Class, Google Classroom, or Line Official.** It is the responsibility of the students to obtain any information announced in the class. Ignorance of such information due to the absence of class is not a valid defense. If a student has any questions about the lecture, please do not hesitate to consult the lecturer during office hours. The lecturer would be pleased to assist. Please make an appointment in advance via email. Please allow enough time (at least 2 working days) for the lecturer to confirm the appointment. I will be available for you only if you confirm such an appointment by emailing back.

Attendance is highly encouraged

Proper manner and courtesy are expected

A student may contact me by sending an email.

On the night before a test/an exam, the cut-off for any question is 4.00 pm. via email, I can provide only short answers. If you prefer a long answer, please come to visit me by making an appointment.

Expected Learning Outcomes

1. Morality and Ethics

Applicability	Expected Learning Outcomes	Evaluation Method
□	1. Students demonstrate integrity.	Quizzes & HW / Exams
□	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.	Observed class attendance / Quizzes & HW / Exams
□	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.	In-class participations / Quizzes & HW / Exams
□	2. Students know and understand Thai and global economic structure and the importance of major international economic events.	In-class participations / Quizzes & HW / Exams
□	3. Students know and understand the instruments of economic analysis.	In-class participations / Quizzes & HW / Exams
□	4. Students know and understand applied fields in economics, including monetary, public, international, business, natural resource, and environmental, industrial, agricultural, cooperative, political, developmental, and	In-class participations / Quizzes & HW / Exams

	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.	In-class participations / Quizzes & HW / Exams
□	2. Students are sufficiently trained in research skills.	In-class participations / Quizzes & HW / Exams
□	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.	In-class participations / Quizzes & HW / Exams

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
□	1. Students are responsible for assigned tasks and work in groups effectively.	In-class participations / Quizzes & HW / Exams
□	2. Students have problem-solving skills.	In-class participations / Quizzes & HW / Exams
□	3. Students show leadership skills and team spirit.	

□	4. Students are always improving themselves.	In-class participations / Quizzes & HW / Exams
□	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.	
□	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

Expected learning outcomes for EE431 (Applicable)

Catergories	Expected Learning Outcome (Applicable)	CLOs	Teaching Methods	Assesment methods
Knowledge	K1. Demonstrate the ability to analyze and solve problems using economic theories and tools, and apply this knowledge effectively in practical work.	CLO 1/ CLO2 / CLO3	Lecture/ Discussion in class,	In-class participations / Quizzes & HW / Exams

Skills	S1. Select and apply economic principles, tools, and methods appropriately to solve economic and social challenges.	CLO 1/ CLO2/ CLO3	Lecture/ Discussion in class,	In-class participations / Quizzes & HW / Exams
Ethics	E1. Uphold academic integrity and respect academic freedom	CLO3	Lecture/ Discussion in class,	In-class participations / Quizzes & HW / Exams
	E3. Recognize the ethical dimensions of economic decision-making and policy design, particularly in relation to social impacts, resource distribution, and sustainability, with a focus on social responsibility.	CLO3	Lecture/ Discussion in class,	In-class participations / Quizzes & HW / Exams
Character	C2. Demonstrate a commitment to lifelong learning, creative thinking, openness to diverse perspectives, systematic planning, and continuous selfimprovement.	CLO 3 / CLO4 / CLO5	Lecture/ Discussion in class,	In-class participations / Quizzes & HW / Exams



Course Outline

EE432 Monetary Theory and Policy

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: EE312

Course Description:

The role of money in the economy; studying monetary policy's goals, tools, policy implementations, Transmission mechanisms of Monetary policy; Monetary policy and business cycles; monetary policy framework, exchange rate targeting and inflation targeting; The role of the Central Bank; The interaction between monetary and fiscal policies; The role of monetary policy in the open economy.

Course Objectives:

1. To develop knowledge and analytic skills to anticipate the central bank's monetary policy reaction on different economic situations.
2. To enhance capability to make a preliminary analysis of novel monetary policy execution together with its associated impacts and determine the appropriate choice of monetary stance.
3. To encourage students to take an active learning approach by reading lecture notes and

Expected Learning Outcomes

1. Morality and Ethics

Applicability	Expected Learning Outcomes	Evaluation Method
●	31. Students demonstrate integrity.	Participation, Classwork
●	32. Students prioritize social and public benefits over personal ones.	Participation, Classwork
●	33. Students are punctual and comply with the code of conduct of the institution and society at large.	Participation, Classwork
●	34. Students are responsible and accountable to society, the nation, and the subject of economics.	Participation, Classwork
○	35. Students realize the cultural and environmental value of a sustainable society.	Participation, Classwork

2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	31. Students know and understand modern economics principles and theories and are up to date with new developments.	Exercise, Essay Assignment
●	32. Students know and understand Thai and global economic structure and the importance of major international economic events.	Exercise, Essay Assignment
○	33. Students know and understand the instruments of economic analysis.	Exercise, Essay Assignment
●	34. 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.	Exercise, Essay Assignment

○	35. Students are informed about related fields including sociology, business administration, education, law policy, and science.	Exercise, Essay Assignment
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3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	19. Students have developed individual critical thinking.	Mid-term & Final Exam
●	20. Students are sufficiently trained in research skills.	Mid-term & Final Exam
●	21. 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.	Mid-term & Final Exam

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
●	31. Students are responsible for assigned tasks and work in groups effectively.	Participation, Classwork
●	32. Students have problem-solving skills.	Participation, Classwork
○	33. Students show leadership skills and team spirit.	Participation, Classwork
●	34. Students are always improving themselves.	Participation, Classwork
○	35. Students have good interpersonal skills, adapt, and work under different conditions.	Participation, Classwork

5. Quantitative Analysis, communication, and information technology

Applicability	Expected Learning Outcomes	Evaluation Method
○	19. Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	Exercise, Essay Assignment
○	20. Students communicate effectively and select appropriate presentation methods.	Exercise, Essay Assignment
○	21. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	Exercise, Essay Assignment

Remark: ● Primary expected outcome ○ Secondary expected

Learning Management and Evaluation

CLO	Learning Management	Evaluation
K1	Acquiring and understanding monetary economics and fundamental financial theories economic tools	Mid-term & Final Exam
K2	Applying monetary policy and related-theoretical concepts to evaluate appropriate financial and economic measures and provide practical suggestions	Mid-term & Final Exam
K4	Utilizing real world economic and financial situations as case studies for students to enhance their analytical thinking skills	Participation, Mid-term & Final Exam
S1	Performing individual exercises using financial and economic data within defined problem-solving conditions	Classwork, Exercise

S2	Engaging in discussion and composing individual reports on financial and monetary economic issues to demonstrate critical thinking and communication skills	Participation, Essay Assignment
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Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
K4	Attendance and in-class participation	Week 1-15	10%
S1	Individual exercise	Week 10-12	10%
S2	Individual essay assignment	Week 13-15	10%
K1, K2	Mid-term examination	After Week 7	30%
K1, K2	Final examination	After Week 15	40%

Grading Criteria:

A	=	85 and above
B+	=	75 – 84.9
B	=	70 – 74.9
C+	=	65 - 69.9
C	=	60 - 64.9
D+	=	55 - 59.9
D	=	50 - 54.9
F	=	49.9 and below

Main Text:

Students are required to read all lecture notes and should have access to this online textbook. The primary textbook will be:

Cecchetti, Stephen and Schoenholtz, Kermit. (2024) **Money, Banking, and Financial markets**. McGraw-Hill.

The electronic version of textbook is available via <https://connect.mheducation.com>

Recommended Texts & Materials

Students are required to read all lecture notes presented in class.

Suggested Readings:

Students should also study other related teaching materials, including case-based and topic-based articles, together with news clips and central banks' publications, posted on this subject's google classroom platform. These following articles are suggested.

Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. **The Quarterly Journal of Economics**, 84(3), 488-500

Bernanke, B. S. (1983). Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression. **The American Economic Review**, 73(3), 257-276.

Bernanke, B. S., & Gertler, M. (2001). Should Central Banks Respond to Movements in Asset Prices? **The American Economic Review**, 91(2), 253-257.

Bernanke, B. S., & Mishkin, F. S. (1997). Inflation Targeting: A New Framework for Monetary Policy? **Journal of Economic Perspectives**, 11(2), 97-116.

Calvo, G. A., Leiderman, L., & Reinhart, C. M. (1996). Inflows of Capital to Developing Countries in the 1990s. **Journal of Economic Perspectives**, 10(2), 123-139.

Campbell, J. Y. (1995). Some Lessons from the Yield Curve. **Journal of Economic Perspectives**, 9(3), 129-152.

Christiano, L. J., Eichenbaum, M., & Evans, C. L. (2005). Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy. **Journal of Political Economy**, 113(1), 1-45.

Diamond, D. W., & Dybvig, P. H. (1983). Bank Runs, Deposit Insurance, and Liquidity. **Journal of Political Economy**, 91(3), 401-419.

Estrella, A., & Mishkin, F. S. (1996). The Yield Curve as a Predictor of US Recessions. **Current Issues in Economics and Finance**, 2(7).

Hanson, S. G., Kashyap, A. K., & Stein, J. C. (2011). A Macroprudential Approach to Financial Regulation. **Journal of Economic Perspectives**, 25(1), 3-28.

Kiyotaki, N., & Wright, R. (1993). A search-theoretic Approach to Monetary Economics. **The American Economic Review**, 63-77.

Kydland, F. E., & Prescott, E. C. (1990). Business cycles: Real facts and a monetary myth. **Federal Reserve Bank of Minneapolis Quarterly Review**, 14(2), 3-18.

Lucas Jr, R. E. (1976). Econometric Policy Evaluation: A Critique. In **Carnegie-Rochester Conference Series on Public Policy** (Vol. 1, pp. 19-46). North-Holland.

Obstfeld, M., & Rogoff, K. (1995). The Mirage of Fixed Exchange Rates. **Journal of Economic Perspectives**, 9(4), 73-96.

Rogoff, K. (2017). Dealing with Monetary Paralysis at the Zero Bound. **Journal of Economic Perspectives**, 31(3), 47-66.

Taylor, J. B. (1993). Discretion versus Policy Rules in Practice. In **Carnegie-Rochester Conference Series on Public Policy** (Vol. 39, pp. 195-214). North-Holland.

Tentative Class Schedule:

Week	Topic	Date
1.	Financial instruments, financial markets, and financial institutions (Cecchetti & Schoenholtz Textbook Chapter 3)	
2.	Understanding risk (Cecchetti & Schoenholtz Textbook Chapter 5)	
3.	The risk and term structure of interest rates (Cecchetti & Schoenholtz Textbook Chapter 7)	
4.	The economics of financial intermediation (Cecchetti & Schoenholtz Textbook Chapter 11)	

Week	Topic	Date
5.	Depository institutions: banks and bank management (Cecchetti & Schoenholtz Textbook Chapter 12)	
6.	Regulating the financial system (Cecchetti & Schoenholtz Textbook Chapter 14)	
7.	Central banks in the world today (Cecchetti & Schoenholtz Textbook Chapter 15) & Mid-term exam revision	
	Mid-term examination	
8.	The central bank balance sheet and the money supply process (Cecchetti & Schoenholtz Textbook Chapter 17)	
9.	Monetary policy: stabilizing the domestic economy (Cecchetti & Schoenholtz Textbook Chapter 18)	
10.	Exchange rate policy (Cecchetti & Schoenholtz Textbook Chapter 19)	
11.	Money growth and money demand (Cecchetti & Schoenholtz Textbook Chapter 20)	
12.	Output, inflation, and monetary policy (Cecchetti & Schoenholtz Textbook Chapter 21)	
13.	Understanding business cycle fluctuations (Cecchetti & Schoenholtz Textbook Chapter 22)	
14.	Modern monetary policy and the challenges (Cecchetti & Schoenholtz Textbook Chapter 23)	
15.	Special topic: New Keynesian monetary economics & Final exam revision	
	Final examination	

Course Outline
EE434 Behavioral Finance
Semester 1/2025

Course description:

Study concepts and frameworks of behavioral economics that are used to explain observations in the financial sector. Topics of the subject include the Prospect Theory and its implications for investment behaviors, empirical evidences in the financial sector that support the idea of behavioral economics, models that incorporate psychological and sociological factors in explaining asset returns, or other related topics that the lecturer finds suitable.

Prerequisites: EE311

Course Objective:

1. To provide students with concepts in the field of behavioral finance, oriented towards Behavioral Finance Microeconomics (BFMI), such as Prospect theory, heuristics, biases, and emotion.
3. To learn how behavioral finance can help promote the understanding of how financial decision-makings are made, and how it can help us to understand financial phenomena like the equity premium puzzle, overreaction and underreaction better.

Teaching Materials and Resources:

Main textbook:

[A&D] Ackert, L. F. and R. Deaves (2010). ***Behavioral Finance: Psychology, Decision-***

Making, and Markets. Mason, OH: South-Western Cengage Learning.

Puey Ungphakorn Library, Tha Phra Chan Campus HG4515.15 .A25 2010

[Thaler] Thaler, Richard H., ed. (2005). ***Advances in Behavioral Finance, Volume II***. Student edition. Princeton University Press.

[Dhami] Dhami, S. (2016). ***The Foundations of Behavioral Economic Analysis***. Oxford University Press.
Part 7

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[Baker] Baker, H. K., Nofsinger, J. R., & Ricciardi, V. (2023). *Advanced introduction to behavioral finance*. Edward Elgar.
Puey Ungphakorn Library, Tha Phra Chan Campus HG4515.15 .B354 2023

Cartwright, E. (2024). ***Behavioral Economics, Fourth Edition***. Routledge.
<https://doi.org/10.4324/9781003357971>
Statman, M. (2019). *Behavioral Finance: The Second Generation*. CFA Institute Research Foundation.

Baddeley, Michelle. (2019). ***Behavioural Economics and Finance***.
Abingdon, Oxon ; New York, NY : Routledge, an imprint of the Taylor & Francis Group.
Chapter 13, 14, 15

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Supplementary textbooks:

Baker, H. Kent and Nofsinger, John R. and Ricciardi, Victor. (2024) *Advanced Introduction to Behavioral Finance*. Elgar Advanced Introductions Series, pp. 144-155, Northampton, MA: Edward Elgar Publishing.

Venezia, I. (2018). *Lecture Notes in Behavioral Finance* (Tel Aviv-Yaffo Academic College, Israel/The Hebrew University of Jerusalem, Israel). World Scientific Lecture Notes in Finance.
<https://doi.org/10.1142/10751>

Recommended book (for fun and for knowledge):

Baker, H. Kent, Filbeck, Greg, Nofsinger, John R. (2019). **Behavioral Finance What Everyone Needs to Know**. New York: Oxford University Press.

Housel, M. (2020). **The Psychology of Money: Timeless lessons on wealth, greed, and happiness**. Harriman House Limited.

Kahneman, D. (2011). **Thinking, Fast and Slow**. Farrar, Straus and Giroux.

Montier, J. (2010). **The little book of behavioral investing: How not to be your own worst enemy**. John Wiley & Sons, Inc..

Statman, M. (2017). **Finance for normal people: How investors and markets behave**. Oxford University Press.

Thaler, R. H., & Ganser, L. J. (2015). **Misbehaving: The Making of Behavioral Economics**.

Academic Journal:

Papers discussed/mentioned in class will be cited in the slides and/or provided on Google classroom. Suggested readings include, but not limited to:

Barberis, Nicholas & Thaler, Richard (2003). *A survey of behavioral finance*. Handbook of the Economics of Finance, in: G.M. Constantinides & M. Harris & R. M. Stulz (ed.), Handbook of the Economics of Finance, edition 1, volume 1, chapter 18, pages 1053-1128 Elsevier.

Barberis, N. (2018). **Psychology-based models of asset prices and trading volume**.

In Handbook of Behavioral Economics: Applications and Foundations 1 (Vol. 1, pp. 79-175). North-Holland.

Assessments:

Individual Learning Journal(ILJ)

10%

Individual

What? Click2Win journal, SET's 21 Days Challenge journal or Favorite-book-chapter or Favorite-movie journal, or

Reflections on special events of the class

Deadline: 3-pages essay, Times New Roman 12, Spacing 1.0, will be due on
8 December 2025

BeFi Ted Talk 10%

Individual or in a group of no more than 7 group members

What? Pick a behavioral-finance paper and present in TED-Talk style

When? After the midterm exam, with the submission of the presentation slide

Capstone Project – Venti 25%

Individual or in a group of no more than 7 group members

What? Research route or Product/Service/Solution design
route, with a lightning presentation

When?: Lightning presentation on 20 November 2025 (TBC)

Deadline: Paper with approximately 15 pages A4, Times New Roman 12, Spacing 1.0
Poster and presentation slide will be due on
8 December 2025

Midterm Exam 25%

Final Exam 30%

Covered all content from the whole semester, 1 A4 (2 pages) Note is allowed.

Note: There can be additional “Marginal points” for participations. If there are such points, an advanced announcement will be made, and everyone in class will have the opportunity to earn them fairly.

Grading Criteria:

Grading on a curve.

In the past, students who earned at least 86 points received a grade of A, those who earned at least 80 points received a grade of B+, and the score of 39 is a benchmark for a grade of F.

Expected Learning Outcomes

1. Morality and Ethics

Applicability	Learning Goals
□	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	Learning Goals
□	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	Learning Goals
□	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. Based on analysis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.

4. Interpersonal Skills and Responsibilities

Applicability	Learning Goals
□	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	Learning Goals
□	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.

Learning Management and Evaluation

CLOs	PLOs	Learning Management	Evaluation
<p>CLO 1 Understand and analyze financial behaviors, acknowledging the complexity of financial decisionmaking processes with both psychological factors and economics factors.</p> <p>Able to differentiate between different types of factors in behavioral finance such as nonstandard preferences,</p>	K1, K3, K4	<p>Lectures</p> <p>Problem-based lectures</p> <p>Experiential Behavioral Finance through Market simulation and Financial board game</p> <p>Learning from experiences of the experts in the field</p> <p>Flipped classroom through BeFi TED Talk</p>	<p>Midterm and Final exam (55%)</p> <p>BeFi TED Talk (10%)</p>

nonstandard beliefs and nonstandard decision making			
<p>CLO 2</p> <p>Apply behavioral finance concepts to existing economics and finance problems.</p> <p>Evaluate, criticize, and develop policy suggestions or business solutions to behavioral-finance related problems such as the problem of household debt, retirement saving, low stock market participation, etc.</p>	K1, K2, K3, K4 S1, S2	<p>Lectures</p> <p>Problem-based lectures</p> <p>Experiential Behavioral Finance through Market simulation and Financial board game</p> <p>Learning from experiences of the experts in the field</p> <p>Flipped classroom through BeFi TED Talk</p> <p>The development of Capstone Project – Venti</p>	<p>Midterm and Final exam (55%)</p> <p>BeFi TED Talk (10%)</p> <p>Capstone Project – Venti (25%)</p>
<p>CLO 3</p> <p>Create a highquality analysis through conducting research project that offers new knowledge, policy suggestions or business solutions to behavioral-finance</p>	K1, K2, K3 S1, S2, S3 E1, E3 C1, C2, C3, C4, C5	The development of Capstone Project – Venti	Capstone Project – Venti (25%)

CLOs	PLOs	Learning Management	Evaluation
related problems such as the problem of household debt, retirement saving, low stock market participation, etc.			
CLO 4 Able to communicate complex knowledge in an accessible and engaging way,	S2 C2	BeFi TED Talk Lightning presentation of the Capstone Project – Venti The making of poster for the Capstone Project – Venti	BeFi TED Talk (10%) Capstone Project – Venti (25%)
CLO 5 Have academic integrity	E1	Properly cites research studies in both the BeFi TED Talk and Capstone Project – Venti, with no plagiarism or uncredited use of content from AI platforms.	Google Originality report and Turnitin Originality and AI detection for Capstone Project – Venti (25%)
CLO 6 Able to do independent study that is customized to students' own curiosity, creativity, and passion Be a team player	K4 C4, C5	The development of BeFi Ted talk and Capstone Project – Venti Independent study for ILJ	BeFi TED Talk (10%) Capstone Project – Venti (25%) Individual Learning Journal(10%)

Course Outline is in the NEXT page.

Course Outline

Here are the topics, along with **some**, but not all, key ideas for each.

The topics are subject to change as the instructor sees fit when the course proceeds.

Related research papers for each topic will be cited in the slides, and some will be posted on Google Classroom.

Topics	Main Textbook
Part I: Foundations	
Introduction <ul style="list-style-type: none">To understand financial decision-making, financial behavior, financial phenomena such as: the equity premium puzzle, the disposition effect, the ostrich effect, insurance, settlement	Cartwright, Ch 3.6
Foundations of Finance: Expected Utility Theory (?) <ul style="list-style-type: none">Allais Paradox, Reflection effect, etc.	A&D, Ch.1
Part II: Behavioral Finance Micro	
Models of investor behaviors under risk and uncertainty: <ul style="list-style-type: none">Prospect Theory, FramingLoss aversion, Probability WeightingFourfold pattern of risk attitudesMyopic Loss AversionDisposition effectOstrich effectMental AccountingHouse money Effect, Snakebit Effect, Breakeven effectAmbiguity aversionPreference reversal (Regret theory, etc.)	A&D, Ch.3, Ch. 14 Thaler, Part 2, 5 Dhmi, Ch. 20 Cartwright, Ch.3

Heuristics and Biases and their implications for financial decision-making

- The Representativeness Heuristics
- The Availability Heuristics
- The Anchoring&Adjustment Heuristics
- Familiarity Heuristics
- Debt-repayment heuristics
- Home bias, Extrapolation bias, etc.

A&D, Ch.5, 8
Dhami, Ch. 19

Topics	Main Textbook
Overconfidence and their implications for financial decision-making, and factors that impede learning <ul style="list-style-type: none"> • Self-attribution bias, Confirmation bias, Hindsight bias • Survivalship bias 	A&D, Ch.6, 9
Individual Investors and the Force of Emotion <ul style="list-style-type: none"> • Anxiety under uncertainty • Fear and Greed, Fear and Greed Index • Weather • Sleep • Regret 	A&D, Ch.7, 10
Social forces <ul style="list-style-type: none"> • Herd Behavior • Social finance: Contagion through a Ponzi game 	A&D, Ch.11, 14
Neurofinance <ul style="list-style-type: none"> • Loss aversion and the brain: Why do losses feel more painful than gains? • Stress hormones and decision-making during market volatility • Experience effects in finance 	A&D, Ch. 20
Part III: Limits to arbitrage	A&D, Ch. 2, 4 Thaler, Part 1 Dhami, Ch. 21
Part IV: Overreaction and Underreaction	A&D, Ch. 14 Thaler, Part 3&4 Dhami, Ch. 21





Course Outline: EE435 Financial Econometrics
Semester 1/2025

Course Overview

Course Description:

This course provides a comprehensive introduction to the econometric techniques used to model and analyze financial data. We will bridge the gap between economic theory and empirical practice, focusing on the unique properties of financial time series. The course emphasizes a hands-on approach, blending rigorous theoretical foundations with practical application. Students will learn to implement, interpret, and critically evaluate econometric models for forecasting, volatility analysis, asset pricing, and risk management. A significant portion of the course is dedicated to building practical skills using Python in the Google Colab environment, with comparative exercises in Stata to ensure a broad understanding of modern econometric software. The ultimate goal is to equip students with the quantitative tools necessary for careers in finance, asset management, and economic research.

Teaching Philosophy:

This course synthesizes two pedagogical approaches:

1. **The Wooldridge Approach:** We will build a strong, intuitive understanding of the theoretical underpinnings of each model, focusing on assumptions, mathematical properties, and proper interpretation.
2. **The Practical Application Approach:** We will immediately apply theory to real-world financial data (e.g., stock returns, interest rates, exchange rates). Every major topic will be accompanied by detailed, step-by-step implementation in Python, emphasizing reproducible research and critical analysis of results.

Course Learning Outcomes (CLOs):

Upon successful completion of this course, students will be able to:

CLO	Aligned PLO(s)	Learning Outcome	Domain
CLO 1	K1, S1, S3	Analyze the statistical properties of financial time series, including stationarity, autocorrelation, and heteroskedasticity, using formal statistical tests.	Knowledge, Skill
CLO 2	K2, S2, S3	Apply univariate and multivariate time series models (ARIMA, VAR) to forecast key financial variables and interpret the economic significance of the results.	Knowledge, Skill
CLO 3	K2, S1, S3	Implement and evaluate various volatility models (ARCH, GARCH family) to measure and forecast market	Knowledge, Skill

CLO	Aligned PLO(s)	Learning Outcome	Domain
		risk, using both Python and Stata.	
CLO 4	K2, S1, S2	Formulate and test foundational asset pricing models (CAPM, Fama-French) to explain the cross-section of stock returns.	Knowledge, Skill
CLO 5	C1, C2, C4	Develop and backtest a complete, data-driven financial analysis project, from hypothesis formulation to presenting reproducible results in a professional format.	Character
CLO 6	E1, E4	Critically assess the limitations and ethical implications of econometric models in financial decision-making and research.	Ethics

3. Technical Environment & Resources

Required Texts:

- Brooks, Chris. (2019). *Introductory Econometrics for Finance*. 4th Edition. Cambridge University Press. [Brooks]
- Wooldridge, Jeffrey M. (2020). *Introductory Econometrics: A Modern Approach*. 7th Edition. Cengage Learning. [Wooldridge]
- Hilpisch, Yves. (2018). *Python for Finance: Mastering Data-Driven Finance*. 2nd Edition. O'Reilly Media. [Hilpisch]

Recommended Resources:

- Tsay, Ruey S. (2010). *Analysis of Financial Time Series*. 3rd Edition. Wiley.
- Campbell, J. Y., Lo, A. W., & MacKinlay, A. C. (1997). *The Econometrics of Financial Markets*. Princeton University Press.
- Python library documentation (pandas, statsmodels, arch, scikit-learn).

Software & Data:

- **Primary: Python 3** via **Google Colab**. No local installation is required. We will primarily use the following libraries: Pandas, NumPy, Matplotlib, yfinance, StatsModels, ARCH, and scikit-learn.
- **Secondary: Stata**. Used for comparison and to expose students to the primary tool used in academic economic research.
- **Data Sources:** We will use publicly available data from Yahoo Finance, the Federal Reserve Economic Data (FRED), the Stock Exchange of Thailand (SET), and Kenneth French's online data library.

4. Weekly Schedule

Note: The schedule is subject to minor adjustments. All readings should be completed before the lecture of the week.

Part 1: Foundations of Financial Time Series

- **Week 1 (Aug 5): Introduction to Financial Econometrics & The Tools of the Trade**
 - **Topics:** What makes financial data special? (Stylized facts: non-normality, volatility clustering). Introduction to reproducible research.
 - **Theory:** Review of OLS, hypothesis testing, and statistical properties of estimators.
 - **Python/Stata:** Google Colab setup. Introduction to pandas for data manipulation and yfinance for data acquisition. Basic plotting with matplotlib. Corresponding import, summarize, and twoway commands in Stata.
 - **Readings:** Brooks, Ch. 1; Wooldridge, Appendix C; Hilpisch, Ch. 1-2.
- **Week 2 (Aug 12 - Holiday): Asynchronous Session & Python/Stata Bootcamp**
 - *No live lecture due to H.M. Queen Sirikit The Queen Mother's Birthday.*

- **Activity:** A pre-recorded lecture and a detailed Colab notebook will be provided, covering essential data handling and visualization techniques for financial data.
- **Dataset:** Daily prices of the SET50 index and a selected stock (e.g., PTT).
- **Week 3 (Aug 19): Univariate Time Series Models: AR, MA, and ARMA**
 - **Topics:** Stationarity, autocorrelation (ACF), and partial autocorrelation (PACF).
 - **Theory:** The Autoregressive (AR), Moving Average (MA), and ARMA models. The Box-Jenkins methodology for model selection.
 - **Python/Stata:** Estimating ACF/PACF plots using statsmodels. Fitting ARIMA models and using information criteria (AIC, BIC) for model selection. Stata: corrgram, pac, arima.
 - **Readings:** Brooks, Ch. 5.
- **Week 4 (Aug 26): Forecasting in Finance**
 - **Topics:** In-sample vs. out-of-sample forecasting. Forecast evaluation metrics (RMSE, MAE). Stationarity tests.
 - **Theory:** Dickey-Fuller and Augmented Dickey-Fuller (ADF) tests for unit roots.
 - **Python/Stata:** Generating and evaluating forecasts. Implementing the ADF test.
 - **Dataset:** Monthly USD/THB exchange rates.
 - **Readings:** Brooks, Ch. 5 & 6.

Part 2: Modeling Volatility and Risk

- **Week 5 (Sep 2): The Problem of Heteroskedasticity & Introduction to ARCH**
 - **Topics:** Volatility clustering revisited. The limitations of constant variance models.
 - **Theory:** The Autoregressive Conditional Heteroskedasticity (ARCH) model. Testing for ARCH effects.
 - **Python/Stata:** Implementing the ARCH LM test. Estimating an ARCH(q) model in Python with the arch library and in Stata with the arch command.
 - **Readings:** Brooks, Ch. 8; Wooldridge, Ch. 12.
- **Week 6 (Sep 9): Generalized ARCH (GARCH) Models**
 - **Topics:** The GARCH model and its extensions (GJR-GARCH, EGARCH).
 - **Theory:** Derivation and interpretation of GARCH(1,1). Asymmetric volatility (the leverage effect).
 - **Python/Stata:** Fitting GARCH, GJR-GARCH, and EGARCH models. Comparing models based on information criteria and diagnostics.
 - **Dataset:** Daily returns of a tech stock (e.g., AAPL) and a financial stock (e.g., JPM).
 - **Readings:** Brooks, Ch. 8.
 - **Deliverable: Term Project Proposal Due**
- **Week 7 (Sep 16): Volatility Forecasting & Course Review**
 - **Topics:** Forecasting conditional variance. Application in risk management.

- **Activity:** Review session for the midterm exam, covering all topics from Weeks 1-6. Q&A.
- **Python/Stata:** Generating multi-step-ahead volatility forecasts from a GARCH model.
- **Readings:** Review all previous chapters.
- **Midterm Exam Period (Sep 22-27): Take-Home Midterm Exam Issued**

Part 3: Multivariate Models and Asset Pricing

- **Week 8,9,10 (Sep 30): Vector Autoregressive (VAR) Models**
 - **Topics:** Moving beyond single-equation models. Modeling systemic relationships.
 - **Theory:** The VAR model. Impulse Response Functions (IRFs) and Forecast Error Variance Decomposition (FEVD).
 - **Python/Stata:** Estimating a VAR model. Generating and interpreting IRFs and FEVDs.
 - **Dataset:** Quarterly data on Thai GDP growth, inflation, and the policy interest rate.
 - **Readings:** Brooks, Ch. 7.
- **Week 11,12,13 (Oct 21): Cointegration and Error Correction Models (VECM)**
 - **Topics:** Spurious regression. Long-run equilibrium relationships.
 - **Theory:** Cointegration. The Engle-Granger two-step method. The Vector Error Correction Model (VECM).
 - **Python/Stata:** Testing for cointegration using the Engle-Granger and Johansen tests. Estimating a VECM.
 - **Dataset:** Spot and futures prices of a commodity (e.g., crude oil).
 - **Readings:** Brooks, Ch. 7.
- **Week 14,15 (Nov 11): Asynchronous Session on Asset Pricing**
 - *No live lecture due to King Bhumibol Adulyadej Memorial Day (Oct 13 observed).*
 - **Activity:** Pre-recorded lecture and Colab notebook on the Capital Asset Pricing Model (CAPM).
 - **Topics:** The theory behind CAPM and the Security Market Line (SML).
 - **Python/Stata:** Estimating beta for individual stocks against a market index (e.g., S&P 500).
 - **Readings:** Brooks, Ch. 4.
- **Final Exam Period (Nov 24 - Dec 9): Take-Home Final Exam Issued**

5. Assessment Framework

Assessment Components and Weighting

Component	Weight	Description
Take-Home Midterm Exam	30%	Covers topics from Weeks 1-7. Includes theoretical questions and a data analysis component in Python.
Take-Home Final Exam	35%	Comprehensive, with an emphasis on topics from Weeks 8-14. Includes theoretical questions and a data analysis component in Python.
Term Project	30%	A research project requiring students to apply econometric methods to a topic of their choice. See details below.
Lab Exercises & Participation	5%	Based on the completion of coding exercises and active participation in class discussions.
Total	100%	

Term Project (30%):

The term project is your opportunity to conduct an independent study in financial econometrics. You can choose to either replicate and extend an existing academic paper or investigate an original research question.

- **Deliverables:**

1. **Proposal (Due Week 6):** A 1-page summary of your research question, data sources, and proposed methodology.
2. **Final Paper (Due during Finals Week):** A 10-15 page paper structured like a research article (Introduction, Literature Review, Data, Methodology, Results, Conclusion).
3. **Reproducible Code:** A fully commented Google Colab notebook that allows for a complete replication of your results.
4. **Presentation (Week 15):** A 5-7 minute presentation summarizing your project's key findings.

- **Grading Rubric for Term Project:**

Criterion	Weight
Research Question & Motivation	15%
Data & Methodology	30%
Code Quality & Reproducibility	25%
Results & Interpretation	20%
Paper Clarity & Presentation	10%

6. Course Policies

- **Academic Integrity:** All work submitted must be the student's own. For the term project, collaboration on high-level concepts is permitted; however, submitted code and written answers must be the group's work. For take-home exams, all work must be strictly individual. Plagiarism or any other form of academic dishonesty will result in a failing grade for the course. It will be reported to the B.E. Program Office, in accordance with university policy.
- **Late Submissions:** Late submissions will be penalized at a rate of 10% per day unless a valid reason with official documentation is provided in advance.
- **Accommodations:** Students with different programming skill levels are encouraged to attend office hours for additional support. The course is designed to be self-contained, but proactive engagement is key to success.

- **Submission Guidelines**

To ensure that all assignments are submitted correctly and efficiently, please follow these instructions carefully for every submission.

Part 1: Preparing Your Submission on Google Drive

All work (both group projects and individual exams) must be submitted via a shared Google Drive folder. Each group/individual only needs to set this up once for the entire semester.

- **Step 1: Create Your Folder**

- One member of the group (or the individual student) should create a main folder in their Google Drive.
- Name the folder using this format: EE435_GroupName or EE435_YourName_StudentID (e.g., EE435_GroupAlpha, EE435_JaneDoe_6501234567).

- **Step 2: Share the Folder with the Lecturer**

- Right-click on your newly created folder.
- Click on "Share".
- In the "Add people and groups" field, enter the lecturer's email: monthien@econ.tu.ac.th
- Ensure the permission level is set to **"Editor"**. This is crucial so I can leave comments and feedback directly on your documents.
- Click "Send".

- **Step 3: Organize Your Files**

- For each assignment, place all relevant files (documents, spreadsheets, Python notebooks, etc.) inside your shared folder.
- Use a clear and consistent naming convention for your files: GroupName_AssignmentName or YourName_AssignmentName (e.g., GroupAlpha_TermProject.docx, JaneDoe_MidtermExam.ipynb).

Part 2: Sending the Email Submission Reminder. After you have placed the final version of your assignment in the shared Google Drive folder, you must send an email notification to the lecturer.

- **Step 1: Compose a New Email**

- **To:** monthien@econ.tu.ac.th
- **Subject:** EE435 Submission: [Your Group Name / Your Name] - [Assignment Name]
- *Example Subject:* EE435 Submission: Group Alpha - Term Project Proposal
- *Example Subject:* EE435 Submission: Jane Doe - Midterm Exam

- **Step 2: Write the Email Body**

- The body of the email should be brief and professional. It must include your group/individual name, the assignment name, and a direct link to your shared Google Drive folder.

- **Email Template:**

Dear Dr. Monthien,

This confirms that [Your Group Name / Your Name] has submitted the [Assignment Name].

All relevant files are located in our shared Google Drive folder.

Link to our folder: [Paste the Google Drive Folder Link Here]

Thank you.

Sincerely,

[Your Group Name / Your Name(s)]

Part 3: How to Get the Correct Google Drive Link. To get the shareable link for your folder, right-click the folder, click "Share", and then click "Copy link". This is the link you will paste into your email to capture the send-mail picture and send to instructors, with a copy (cc). yourself.



Course Outline

EE451 INTERNATIONAL TRADE THEORY AND POLICY

Semester 1/2025

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

Prerequisites: EE311

Course description:

This course aims to lay down foundation of basic international trade theories and its applications. In the theoretical part, international trade theory is emphasized. It aims to gain better understanding on the following questions; (1) When two countries trade with each other, what products should be exported and what to be imported?; (2) What is the gain from trade countries benefit and share?; and (3) Can a government play a role in nurturing certain products/industries?

In the application part, many current issues will be brought to the class. It includes trade protection, economic integration and global production sharing (alternatively known as global value chains), and foreign direct investment. In this part, issues relevant to developing countries are emphasized, using Thailand and other East Asian countries as the case study.

Course Objectives:

- To lay down analytical framework on international trade to students so that they can understand contemporary debates on international trade locally and worldwide.
- To enable students to properly apply the knowledge to current situations.
- To help students to formulate empirical questions to do research in international economics especially those who will enroll in international economic seminar (EE 459).
- To give better prospects to students especially those who want to pursue economics in graduate level on research areas.

Method of Instruction:

Class activities include lectures, discussions and homework. Students are expected to read before the class, and participate in class discussions.

Reading List and Textbooks:

The textbook is optional but strongly recommended.

Main textbooks:

Krugman, P., Obstfeld, M., and Melitz, M. (2018), *International Economics: Theory and Policy, (11th Global ed)*, Pearson Education Ltd: Harlow UK.

Kohpaiboon, A. (2024), *International Economics for Development*, Thammasat University Press (in Thai)

The following is entirely optional but would be useful...

- 1 Feenstra, R.C. and A.M. Taylor (2012), *International Economics*, Worth Publishers, New York.(2nd edition), Palgrave-Macmillan (Alternative Textbook)
- 2 Krugman, P. (1997), 'What Should Trade Negotiators Negotiate About?', *Journal of Economic Literature*, 35(1): 113-120
- 3 Corden, M. (1986), 'Why Trade is not Free: Is There a Clash between Theory and Practice?', in H. Giersch (ed.) *Free Trade in the World Economy: Towards an Opening of Markets*, Kiel, J.C.B. Mohr Tübingen.
- 4 Corden, M. (1997), *Trade Policy and Economic Welfare* (2nd edition), Oxford University Press, New York.
- 5 Jongwanich, J. and A. Kohpaiboon (2007), 'Determinants of Protection in Thai Manufacturing', *Economic Papers*, 26(3), 276-94.
- 6 Kohpaiboon, A. (2006), *Multinational Enterprises and Industrial Transformation*, Edward Elgar, Cheltenham.
- 7 Baldwin, R. (2008), *The Development and Testing of Heckscher-Ohlin Trade Models: A Review: the Ohlin Lectures No.11*, MIT Press, Cambridge.
- 8 Jongwanich, J., & Kohpaiboon, A. (2017). Exporter Responses to FTA Tariff Preferences: Evidence from Thailand. *Asia Pacific Economic Literature*, 55 (2), 130-157
- 9 Kohpaiboon, A., & Jongwanich, J. (2019). The Use of FTAs: the Thai Experience. In L. Ing, M. Richardson, & S. Urata (Eds.), *East Asian Integration: Goods, Services and Investment*. New York: Routledge
- 10 Krugman, P. (1996), 'Making Sense of the Competitiveness Debate', *Oxford Review of Economic Policy*, 12(3): 17-25.

- 11 Kohpaiboon, A. and J. Jongwanich (2013), 'International Production Network, Clusters and Industrial Upgrading: Evidence from Automotive and Hard Disk Drive Industries', *Review of Policy Research* 30(2): 211-239
- 12 Corden, W. M. (1966), 'The Structure of a Tariff System and the Effective Protective Rate', *Journal of Political Economy*, Vol.74, No.3, pp.221-37.
- 13 Krueger, A. (2020). *International Trade: what everyone needs to know*. Oxford: Oxford University Press.
- 14 Levinson, M. (2016), *The Box: How the shipping container made the world smaller and the world economy bigger*, Princeton, Princeton University Press.
- 15 Rodrik, D. (2018), 'What do trade agreements really do?', *Journal of Economic Perspectives* (2): 73-90.
- 16 Pham, T., & Riedel, J. (2013). An empirical analysis of comparative advantage dynamics. FREIT Working Paper. California.
- 17 Grossman, G.M. (1981), 'The theory of domestic content protection and content preference', *Quarterly Journal of Economics*, 96(4): 586-603.
- 18 Kohpaiboon, A. and J. Jongwanich (2021), 'The Effect of the COVID-19 Pandemic on Global Production Sharing in East Asia', ERIA Discussion Paper
- 19 Rajanakanoksak, K. (2014), 'Revisit of determinant of antidumping: Exporters' viewpoint', MA Thesis, Faculty of Economics, Thammasat University
- 20 Kohpaiboon, A. and J. Jongwanich (2013), 'Vertical and horizontal FDI technology spillovers: evidence from Thai Manufacturing', *Thailand and the World Economy*, 31(1): 60-108.
- 21 Navaretti, G. and A. Venables (2004), *Multinational Firms in the World Economy*, Princeton University Press, Princeton and Oxford.

Assessment:

Assessment task	Value	Due date
Mid-term exam	30%	
Final exam	50%	
HW/ Quiz I	10%	
HW/ Quiz II	10%	
Total	100%	

Grading Criteria:

Grading will be based on each student's total scores and relative scores within the class. The minimum score to pass the course is 45 (out of 100) whereas grade A will be given to students who obtain a score of at least 85 (out of 100).

Score	Grade
A	85 and over
B+	Based on the distribution of students' scores
B	
C+	
C	
D+	Less than 45
D	
F	

Tentative Class Schedule:

Lecture	Topics	Readings/materials
1	1. Importance of international economics	<i>Lecture Note based on Kohpaiboon (2024: Ch 1).</i>
1-4	2. INTERNATIONAL TRADE THEORY 2.1 Classical Trade Theory (Market-driven) 2.1.1 Mercantilism 2.1.2 Comparative Advantage 2.1.3 Specific factor model 2.1.4 The Heckscher-Ohlin trade model	Krugman et al. (2015: Ch.3)

5-7	<p>2.2 Role of government in trade patterns;</p> <p>2.2.1 New Trade Theory</p> <p>2.2.2 Competitive Advantage concept (M. Porter's concept)</p> <p>2.2.3 Latent Comparative Advantage (J. Lin's concept)</p> <p>2.2.4 Flying geese hypothesis</p> <p>2.3 Firm Heterogeneity</p> <p>2.4 Empirical evidence of international trade theory</p>	<p>Krugman et al. (2015: Ch.4);</p> <p><i>Lecture Note based on Kohpaiboon (2024: Ch 2);</i></p> <p><i>Pham, T., & Riedel, J. (2013)</i></p>
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Midterm exam

(9-12)	<p>3. Trade Policy</p> <p>3.1. Tariffs</p> <p>3.2. Non-tariffs</p> <p>3.2.1. Import quota</p> <p>3.2.2. Export subsidy</p> <p>3.2.3. Dumping</p> <p>3.2.4. Local content requirements</p> <p>3.3. Effective rate of protection:</p> <p>3.4. Political economy in protection</p>	<p>Krugman (1997); Corden (1986); Krugman et al. (2015: Ch.9); <i>Lecture Note based on Kohpaiboon (2024: Ch 3);</i> Corden (1966); Grossman (1981); Jongwanich and Kohpaiboon (2007); Rajanakanoksak, K. (2014)</p>
(13-14)	<p>4. Economic Integration</p> <p>4.1 Type of economic integration</p> <p>4.2 Free trade agreement (FTA): Impact and debate</p> <p>4.3 Empirical issues on FTAs in East Asia</p>	<p><i>Kohpaiboon (2024: Ch 4); Kohpaiboon and Jongwanich, 2015); Kohpaiboon and Jongwanich, 2017);</i> Rodrik (2018)</p>

(15)	5. Global Production Sharing	<i>Kohpaiboon (2024: Ch 6);</i>
	5.1 Intra-industry vs intra-product trade	<i>Kohpaiboon and Jongwanich (2013);</i>
	5.2 Motivation of sharing (Costs and benefits	<i>Kohpaiboon, and Jongwanich (2021)</i>
	5.3 Debate on developmental implications	
	5.3.1 Footloose development	
	5.3.2 Trapped into the low-end segments	
	5.3.3 FTAs and GPS participation	
	5.3.4 Supply chain resilience	
(16)	6. Foreign Direct Investment (FDI)	<i>Kohpaiboon (2024: Ch 5);</i>
	6.1 Pre-requisite for investing abroad	<i>Kohpaiboon (2006);</i>
	6.2 Motivation to invest abroad	<i>Kohpaiboon and Jongwanich (2013),</i>
	6.3 Host country effect	<i>Navaretti and Venables</i>
	6.4 Home country effect	<i>(2004: Ch 6-9)</i>

Final exam

Expected Learning Outcomes:

1. Students understand and can contribute to debates of international trade
2. Students can formulate relevant empirical questions related to international trade.
3. Students gain more understanding about tools in international trade.



Course Outline

EE452 International Monetary and Financial Economics

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: EE312

Course Description:

The balance of payments adjustment mechanism. Foreign exchange markets. International capital flows. The evolution of an international monetary system. International monetary problems encountered by developing countries, including Thailand. Financial crises as experienced by Thailand and the rest of the world.

Course Objectives:

The course aims at laying down the basic concepts of international monetary economics so that students can understand and analyze the complexities of worldwide international finance and economic issues. It first portrays the components of the balance of payments and then goes on to explain the exchange rate system, foreign exchange market, capital markets, and how it is interconnected with the rest of the economy. There will be theoretical applications to the real-world scenarios for all topics.

Expected Learning Outcomes

1. Morality and Ethics **EE452**

Applicability	Expected Learning Outcomes	Evaluation Method
☐	1. Students demonstrate integrity.	Be evaluated by class attendant and class participation.
☐	2. Students prioritize social and public benefits over personal ones.	Be evaluated by group assignments
☐	3. Students are punctual and comply with the code of conduct of the institution and society at large.	Be evaluated by class attendant and class participation.
☐	4. Students are responsible and accountable to society, the nation, and the subject of economics.	Be evaluated by class attendant and class participation.
☐	5. Students realize the cultural and environmental value of a sustainable society.	Be evaluated by group assignments

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.	Be evaluated by class participation, quiz, midterm and final exams
☐	2. Students know and understand Thai and global economic structure and the importance of major international economic events.	Be evaluated by class participation, quiz, term paper(s), mid-term and final exams
☐	3. Students know and understand the instruments of economic analysis.	Be evaluated by class participation, quiz, term paper(s), mid-term and final exams
☐	4. Students know and understand applied fields in economics, including monetary, public, international, business, natural resource, and environmental, industrial, agricultural, cooperative, political,	Be evaluated by class participation, quiz, term paper(s), mid-term and final exams

	developmental, and entrepreneurial economics as well as agribusiness.	
□	5. Students are informed about related fields including sociology, business administration, education, law policy, and science.	Class participation and term paper(s)

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
□	1. Students have developed individual critical thinking.	Be evaluated by class participation and term paper(s).
□	2. Students are sufficiently trained in research skills.	Be evaluated by class participation and term paper(s).
□	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.	Be evaluated by class participation and term paper(s).

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
□	1. Students are responsible for assigned tasks and work in groups effectively.	Be evaluated by class participation and term paper(s).
□	2. Students have problem-solving skills.	Be evaluated by class participation and term paper(s).

□	3. Students show leadership skills and team spirit.	
□	4. Students are always improving themselves.	Be evaluated by two term papers/class participation/mid-term and final exam.
□	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.	Be evaluated by two term papers/class participation
□	2. Students communicate effectively and select appropriate presentation methods.	Be evaluated by two term papers/class participation
□	3. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	Be evaluated by two term papers/class participation

Remark: □ Primary expected outcome □ Secondary expected

Main Text:

Krugman, P.R., M. Obstfeld., M. J. Melitz (2015), *International Economics: Theory and Policy*: tenth edition, Pearson

Recommended Texts & Materials

Sodersten, B. and G. Reed (1994), *International Economics: Third edition*, Macmillan, p. 512-24

Montiel, P.J. (2009), *International Macroeconomics*, Wiley-Blackwell, Sussex

Suggested Readings:

Ito, H. and M. Kawai (2024), 'Monetary and Fiscal Policies in Emerging Markets amid Heightened Uncertainty, 20-21 May 2024, Bangkok, Thailand.

Forbes, K.J and F.E. Warnock (2021), 'Capital Flow Waves – or Ripple? Extremem Capital Flow Movements since the Crisis', *Journal of International Money and Finance*, 116 (2021): 102394.

Jongwanich, J. (2019), 'Capital Controls in Emerging East Asia: How do they affect investment flows?: How do they affect investment inflows?

Jongwanich, J. (2017), *Capital Mobility in Asia, Causes and Consequences*, ISEAS Publisher

Jongwanich, J. (2013), Capital Flows and Real Exchange Rates in Emerging Asian Countries, *Journal of Asian Economics*, 24: 138 - 146 (with A. Kohpaiboon)

Jongwanich, J. (2012), Effectiveness of Capital Account Policies: Evidence from Thailand, *Asian Development Review*, 29 (2): 50-93 (with A. Kohpaiboon)

Jongwanich, J. (2010), Determinants of Export Performance in East and Southeast Asia', *World Economy* 33 (1): 20-41.

James, W., etc. (2008) The US Financial Crisis, Global Financial Turmoil, and Developing Asia: Is the Era of High Growth at an End?, *ERD Working Paper* No. 139, Economics and Research Department, Asian Development Bank.

Grading Criteria:

Grading will be based on each student's total scores as well as relative scores within the class. The minimum score to pass the course is 40 (out of 100) whereas grade A will be given to students who obtain a score of at least 85 (out of 100).

A = 4.0 (85-100)	B+ = 3.5 (75-84)
B = 3.0 (70-74)	C + = 2.5 (65-69)
C = 2.0 (60-64)	D+ = 1.5 (50-59)
D = 1.0 (40-49)	F = 0 (0-39)

Tentative Class Schedule:

No.	Topic/Activities	Documents	Note
1	1.1 Balance of Payments and its components 1.1.1 Current account 1.1.2 Capital/Financial account 1.1.3 Implications drawn from balance of payments 1.1.4 Implication of trade-tech war / geopolitical tensions/ Carry Trade	Montiel (2009): Ch 2; Krugman et.al (2015) Ch.13	Some parts are only in the lecture note
2	2. Exchange rate 2.1.1 Exchange rate system	Annual report on exchange arrangements and exchange restrictions, IMF (2021): p. 1-17	Some parts are only in the lecture note
3	2.1.2 Exchange rate measurements Nominal effective exchange rate Real effective exchange rate	Montiel (2009): Ch 3; Krugman et.al (2015) Ch.14: 374-84	Some parts are only in the lecture note

4	2.1.3 Models: exchange rate determination 2.1.3.1 Foreign exchange market	Krugman et.al (2015) Ch.14: 374-84	Some parts are only in the lecture note
5	2.1.3.2 Demand and Supply approach - Marshall-learner condition	Sodersten and Reed (1994): p. 512-24	

No.	Topic/Activities	Documents	Note
Mid-Term Examination			
6	2.1.3.3 Financial Asset Approach Uncovered/Covered Interest Parity Money/Interest Rate/Exchange Rate (short-run/long-run)	Krugman et.al (2015) Ch.14,15	
7	2.1.3.4 Output and Exchange Rate Model	Krugman et.al (2015) Ch.17	
8	Law of One Price and Purchasing Power Parity-PPP) Concepts Problems relating to PPP Determinants of Long-run (real) exchange rate	Krugman et.al (2015) Ch.16; Jongwanich (2008)	Some parts are only in the lecture note
9	4. Determinants of real exchange rate	Jongwanich (2013)	Some parts are only in the lecture note
10	5. Exchange Rates vs Key Economic Variables 5.1 Exchange rate and trade 5.2 Exchange rate pass-through	Jongwanich (2010)	Some parts are only in the lecture note
11	6. Macroeconomic Model 6.1 Macroeconomic Model Setting	Montiel, 2009: Ch 4	

12	6.2 Fixed Exchange Rate and Perfect Capital Mobility	Montiel, 2009: Ch 6: p.130-145	
13	6.3 Fixed but Adjustable Exchange Rate and Imperfect Capital Mobility 6.4 Floating Exchange Rate and Perfect Capital Mobility	Montiel, 2009: Ch.7, and Ch. 8: p.177-187	
14	7. Crises Asian financial crisis Global financial 2008-09 and impacts on Asian countries Trade-Tech war /After Covid-19	Krugman, 2015: Ch.22 and James, W., etc. 2008	Some parts are only in the lecture note
Final Exam			

Method of Instruction: There are a total of 45 class-hours for this course or 3 hours per week. Class activities include lectures, discussions, and presentations. Students are expected to work on group presentations and participate in class discussions.



Course Outline

EE459 Seminar in International Trade Theory and Policy Semester

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: Having completed at least two 400-level (or the above level) courses in field of International Economics

Course Description: Seminar and research on topics in International Economics under the supervision of the lecturer.

Course Objectives: In this course, students will learn to conduct a systematic research on their topic of interest. Since this course focuses on international economic issues, your topic should be related to international economics and/or international economic policies. What the course will do is to stimulate an active-learning environment. Unlike most of the classes you have attended, there won't be that many lectures. My role in this class will be a facilitator and an advisor, rather than a lecturer.

This course is split into two big parts. In the first part, I hope to introduce you to important elements of good research. To do this, we will discuss how to come up with meaningful research questions. We will then, discuss different components of a standard research report (your seminar paper). This includes introduction, literature review, theoretical framework, methodology and findings. You will be assigned to read journal papers discussions about these papers in class.

In the second part, students will take turn to present your research progress. Occasionally, we will turn the class into individual meetings. This is where you discuss specific questions regarding your research and methodology with the instructor.

Main Text: There is no specific textbook for this course. However, I will post journal papers and some good readings on "how to write" on Google Classroom.

Grading Criteria:

1. Paper summary assignments	15%
2. Progress Presentation	10%
3. Class participation and comments	25%
4. Final paper presentation	10%
5. Final paper (report)	40%

About the assignments:

- 1. Group assignments** – Each student is expected to lead at least 1 paper discussion.
- 2. Paper summary** – Students are required to submit a 1-page summary of each paper that will be discussed in class. The summaries are due on the Sunday before class.
- 3. Final research report (your seminar paper)** - The paper should be between 8,000-12,000 words, **excluding** graphs, tables, figures bibliography and appendices. The paper should be well-organized in different parts. For example, 1) introduction 2) literature review 3) theoretical framework and methodology and 4) findings 5) conclusion. We will discuss about each part in more details in class.

- **AI (such as chatGPT) is only allowed for you to proofread your grammar. However, you are not allowed to use AI to write the report (or any part of the report). Doing so will result in an F for this class.**

Tentative Class Schedule (Tentative):

Week	Agenda	Assignment/Reading
1	Introduction - Review of Course and Research Resources. Identification of Topics.	Read the suggested readings and start thinking about your topic.
2	Individual Meetings to identify research topics, relevant literature	
3	Guest Speaker #1 Then, individual group meeting on topic & methodology	
4	Guest Speaker #2 Then, Lecture 1 – writing &	Paper1, 2
5	Paper discussion	Paper3, 4

6	Paper discussion Lecture 2 – writing	Paper5, 6
7	Workshop1 – Topic/Literature Review/Methodology	Yes A rough draft of your introduction, literature review, methodology (* At least 5 pages long in total -- 1.5 page intro,1.5 pages literature review, 1 page methodology) 5-minute Powerpoint presentation
8	Midterm Week, No Class.	Work on your paper
9	Paper discussion Meetings & Improve your papers	Paper 7, 8
10	Paper discussion Lecture 3 - writing	Paper 9, 10
11	Paper discussion Meetings & Improve your papers	Paper 11, 12
12	Present your research progress	
13	Individual meetings.	Max. 10 minutes long.
14	Online individual meetings (optional) * Public holiday (no class)	
15	Individual meetings	
16	Final Presentation	Max. 15 minutes

Expected Learning Outcomes

1. Morality and Ethics **EE459**

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

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.	Class participation/presentation and report
□	2. Students know and understand Thai and global economic structure and the importance of major international economic events.	Class participation/presentation and report
□	3. Students know and understand the instruments of economic analysis.	Class participation/presentation and report
□	4. Students know and understand applied fields in economics, including monetary, public, international, business, natural resource, and environmental, industrial, agricultural, cooperative, political, developmental, and	Class participation/presentation and report

	entrepreneurial economics as well as agribusiness.	
□	5. Students are informed about related fields including sociology, business administration, education, law policy, and science.	Class participation/presentation and report

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
□	1. Students have developed individual critical thinking.	Class participation/presentation and report
□	2. Students are sufficiently trained in research skills.	Class participation/presentation and report
□	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.	Class participation/presentation and report

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
□	1. Students are responsible for assigned tasks and work in groups effectively.	Class participation/presentation and report
□	2. Students have problem-solving skills.	Class participation/presentation and report

□	3. Students show leadership skills and team spirit.	Class participation/presentation and report
□	4. Students are always improving themselves.	Class participation/presentation and report
□	5. Students have good interpersonal skills, adapt, and work under different conditions.	Class participation/presentation and report

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

Remark: □ Primary expected outcome □ Secondary expected

Learning Management and Evaluation

CLO	Learning Management	Evaluation
CLO1.1 Identify meaningful research questions	Class discussions; individual meetings; review of past research topics.	Participation; early-stage written submissions.
CLO1.2 Critically review and summarize academic literature.	Assigned journal readings; student-led paper discussions.	Paper summary assignments; in-class discussions.
CLO1.3 Design appropriate methodology for empirical or theoretical analysis.	Lectures on research methods; proposal writing workshops; group consultations.	Midterm draft submissions; individual feedback meetings.

CLO2.1 Present research progress clearly and constructively engage with feedback.	Progress presentations; peer comments; individual meeting sessions.	Progress presentation; final presentation.
CLO2.2 Produce a wellstructured research report with academic integrity.	Step-by-step writing support; outline reviews; feedback on structure and argumentation.	Final seminar paper (8,000– 12,000 words).

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
CLO1.1 Identify meaningful research questions	Class participation; initial topic proposals.	Weeks 1–3	10%
CLO1.2 Critically review and summarize academic literature.	Paper summary assignments; leading paper discussions.	Weeks 4–6, 9–11	15%
CLO1.3 Design appropriate methodology for empirical or theoretical analysis.	Rough draft submissions; methodology feedback sessions.	Weeks 6–7, 13	10%
CLO2.1 Present research progress clearly and constructively engage with feedback.	Progress presentation; peer feedback during class.	Week 12, 16	20%
CLO2.2 Produce a wellstructured research report with academic integrity.	Final presentation and final report .	Week 16 (presentation), Week 17 (report)	45%



Course Outline

EE 462 Development Macroeconomics

Semester 1/2025

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

Course Description:

The analysis of development economics issues that are important and related to the macro economy of developing countries, such as concepts explaining economic growth, development policies of various countries, the analysis of monetary policies, exchange rates, balance of payments, flow of capital, financial crisis, international aids affecting economic growth, the effects of international trade and foreign direct investments on economic development, the relationship between economic growth and the level of poverty and income distribution, etc.

Course Objectives:

- (a) Students will learn about macroeconomic development concepts and theories.
- (b) Students will be able to apply the theoretical concepts to understand the process of economic growth and the developmental policies of developing countries.

Prerequisites: EE312

Required Textbooks and Readings:

- Perkins, D. H., Radelet, S., Lindauer, D. L., & Block, S. A. (2013). *Economics of Development*. Seventh Edition. W.W. Norton & Company.
- Jones, C. I. (2002). *Introduction to Economic Growth*. Second Edition. W. W. Norton & Company.
- Todaro, M., & Smith, S. (2011). *Economic Development*. Eleventh Edition. Prentice Hall.
- Journal articles as specified in the lecture schedule.

Complementary Textbooks:

- de Janvry, A., & Sadoulet, E. (2016). *Development Economics: Theory and Practice*. Routledge.
- Van den Berg, H. (2001). *Economic Growth and Development: An Analysis of Our Greatest Economic Achievements and Our Most Exciting Challenges*. Boston: McGraw-Hill.
- Ray, Debraj. (1998). *Development Economics*. Princeton University Press.
- Agenor, Pierre-Richard and Montiel, Perter J. (2012). *Development Macroeconomics*. Second Edition. Princeton University Press.

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

Applicability	Learning Goals	Expected Learning Outcomes
●	1.1 Students demonstrate integrity.	Students do not cheat on exams or engage in plagiarism.
●	1.2 Students prioritize social and public benefits over personal ones.	Students study hard and seek good jobs.
●	1.3 Students are punctual and comply with the code of conduct of the institution and society at large.	Students come to class on time.
●	1.4 Students are responsible and accountable to society, the nation, and the subject of economics.	Students study hard and know that they should be responsible.
○	1.5 Students realize the cultural and environmental value of the sustainable society.	

2. Knowledge

Applicability	Learning Goals	Expected Learning Outcomes
●	2.1 Students know and understand modern economics principles and theories, and are up to date with new developments.	Students know about the process of economic development.
●	2.2 Students know and understand Thai and global economic structure, and the importance of major international economic events.	Students know about macroeconomic development processes in Thailand and its relation to the global environment.
●	2.3 Students know and understand instruments of economic analysis.	Students learn about important economic tools from reading journal articles.
●	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.	Students know about applied macroeconomics related to developing countries such as Thailand.
●	2.5 Students are informed about related fields including sociology, business administration, education, law policy, and science.	Students learn about other related field from reading journal articles.

3. Intellectual Development

Applicability	Learning Goals	Expected Learning Outcomes
●	3.1 Students have developed individual critical thinking.	Student can think critically as developed through their course work.
●	3.2 Students are sufficiently trained in research skills.	Students research their research papers.
●	3.3 Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate	Through their essay assignment and exams students know how to

	<p>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.</p>	<p>analyze data and apply concepts of macroeconomics.</p>
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4. Interpersonal Skills and Responsibilities

Applicability	Learning Goals	Expected Learning Outcomes
●	3.1 Students are responsible for assigned tasks and work in groups effectively.	Students work in groups each week and undertake a joint essay project.
●	3.2 Students have problem-solving skills.	Students do problem solving in the course.
○	3.3 Students show leadership skills and team spirit.	
●	3.4 Students are always improving themselves.	Students are evaluated based on their course work and can use that as a benchmark to improve themselves.
○	3.5 Students have good interpersonal skills, adapting and working under different conditions.	

5. Quantitative Analysis, Communication and Information Technology

Applicability	Learning Goals	Expected Learning Outcomes
●	5.1 Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	Students can gather data from available data source and analyze them well.
●	5.2 Students communicate effectively and select appropriate presentation methods.	Students effectively participate in class discussion and present their work.
●	5.3 Students use information and communication technologies appropriately to	Students are able to gather data, , understand, analyze, write a

	gather data as well as process, interpret, and present results.	synthesis, and present the report in class.
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Note: ● Primary expected outcome ○ Secondary expected outcome

Course Learning Outcomes: CLOs

CLO	Program Learning Outcomes (PLOs)	Learning Process	Assessment Method
Knowledge			
K1	Acquiring knowledge and understanding of economic theories, fundamental economic tools, theory development, and applied economics	1. Lecture on theoretical knowledge 2. Problem-based learning by emphasizing problem analysis/problem-solving 3. Independent study by assigned research papers and academic projects 4. Training sessions on quantitative analysis and using technology for processing, analysis, interpretation, and effective presentation 5. Demonstrating knowledge integration in related study fields 6. Brainstorming to encourage active learning and applied knowledge	1. From assigned homework 2. From quizzes and exams 3. From case study analysis/displaying knowledge and conceptual understanding
K2	Ability to apply theoretical knowledge to analyze and provide practical suggestions for economic and social issues		
K3	Ability to appropriately integrate economic knowledge with other study fields		
K4	Ability to attain lifelong learning and thoroughly understand world economic and societal changes and impacts		
Skills			
S1	Acquiring intellectual skill and ability to think systematically to identify research topics, perform research, process data, and evaluate findings	1. Problem-based learning by emphasizing analysis of problems/problem-solving sources 2. Brainstorming to encourage class discussion and applied knowledge	5. Quizzes and examinations 6. Observation of participation in analytical thinking and proposing problem-solving guidelines 7. From the ability to use mathematical
S2	Acquiring analytical and communication skills and		

CLO	Program Learning Outcomes (PLOs)	Learning Process	Assessment Method
	ability to interpret data from different sources, analyze, and integrate knowledge to propose appropriate problem-solving guidelines for economic and social issues	activities 3. Preparing research papers/projects 4. Written and oral presentations using technology 5. Soft skills and extracurricular learning activities	and statistical techniques to process data, analyze, interpret, and propose suggestions as shown in a report/assignment 8. From extracurricular activity participation
S3	Acquiring quantitative and technological skills for research studies		9. From self-and peer-evaluated participation and personal development
Ethics			
E1	Acknowledge moral values and exhibit ethical traits, including decency, selflessness, and integrity	1. Learn from case studies covering ethics-related topics 2. Incorporating moral value instruction in lectures and class discussions	1. From punctuality, class participation, and meeting deadlines 2. Observation
E3	Respect rights, opinions, values, and dignity of others. Obey organizational and societal rules and regulations	3. Assigning independent research projects 4. Assigning group research projects 5. Participating in analysis and providing ethical insights in case studies	3. Peer- and self-reflections
E4	Developing professional ethics	6. Developing social responsibility activities	
Skills			

CLO	Program Learning Outcomes (PLOs)	Learning Process	Assessment Method
C1	Ability to effectively complete assigned tasks and responsibilities	1. Individual/group assignments 2. Lecture/debate/brainstorming/class discussion/knowledge sharing 3. Encourage asking questions in class to promote student engagement 4. Activities to encourage problem-based learning by emphasizing analysis of problem /problem-solving sources 5. Involvement in problem-solving processes by projects/research papers 6. Oral presentation	1. Assignment quality 2. From problem-solving Processes 3. From observations of behavior/research presentations/projects/ assignments 4. From teamwork skills and problem/case study analysis 5. Examine thought processes, connected thinking, and reasoning
C2	Ability to initiate problem analysis independently and/or in teamwork		
C3	Acquire leadership and collaborative skills and respect different viewpoints		
C4	Show active learning characteristics and aspire to personal development		
C5	Acquire interpersonal skills and ability to collaborate and adapt to changing circumstances		

Data/Information Sources:

Websites

- World Bank <http://www.worldbank.org/>
- World Bank Blogs <https://blogs.worldbank.org/en/home>
- International Monetary Fund <http://www.imf.org/>
- Center for Global Development <http://www.cgdev.org/>
- Center for Economic Policy Research <http://www.cepr.net/>
- Peterson Institute for International Economics <http://www.iie.com/>
- Asian Development Bank www.adb.org
- World Trade Organization www.wto.org
- National Bureau of Economic Research <http://www.nber.org/>

Data and Reports

- World Development Indicators <http://data.worldbank.org/data-catalog/world-development-indicators>
- [World Development Reports](#)
- World Factbook <https://www.cia.gov/library/publications/the-world-factbook/>
- International Financial Statistics <http://elibrary-data.imf.org/finddatareports.aspx?d=33061&e=169393>
- Penn World Tables <http://www.ggd.cnet/pwt>

Assessment

Class participation and attendance	10%
Leading class discussion	15 %
Group project	20 %
Mid-term exam	25 %
Final exam	30 %

Class Attendance

Students are encouraged to actively participate in the discussion by contributing answers, comments and questions. Attendance will be taken regularly. No marks are given for attendance if a student is absent for more than 10% of the total times that attendances are observed.

Class Discussion

Each lecture will be divided into two parts. The first part (~ 2 hours) is the lecture based on textbook reading and lecture notes. The second part (~1 hour) will be discussion based on assigned readings, which are selected journal articles. Each group of 2-3 students will be assigned to lead class discussion based on a selected paper. A powerpoint presentation is recommended. Other students should read before class, and actively participate in the discussion. The materials from class discussion will also be covered in the midterm and final examinations. The assignment of journal articles will be announced after the add/drop period.

Group Project

Each group of 3-4 students will be randomly assigned a news article/blog related to class materials. The group will collaboratively analyze the article and develop five high-quality research questions that should be investigated further in the topic. Then, each student will individually expand on one of those questions by doing some preliminary research. This preliminary research includes conducting literature review, providing relevant descriptive statistics, and suggesting how to answer the chosen research question. The topics for group projects will be announced after mid-term.

Lecture Schedule - 2025

Week	Topics and Readings
<p>1 (Aug 5)</p>	<p>Introduction to Economic Development</p> <p>*Perkins et al., chapters 1-2</p> <p>*Gill, I., & Kose, M. A. (2025, June 10). Most of the developing world is turning into a development-free zone. <i>World Bank Blogs (Voices)</i>.</p>
<p>2 (Aug 19)</p>	<p>Patterns and Concepts of Growth and Development</p> <p>*Perkins et al., chapter 3</p> <p>*Angrist, N., Goldberg, P. K., & Jolliffe, D. (2021). Why is growth in developing countries so hard to measure? <i>Journal of Economic Perspectives</i>, 35(3), 215–242</p> <p>Kose, M. A., & Ohnsorge, F. (2023). <i>Falling long-term growth prospects: Trends, expectations, and policies</i>. Washington, DC: World Bank</p>
<p>3 (Aug 26)</p>	<p>Growth Theory: Basic Growth Model and Neoclassical (Solow) Growth Model</p> <p>*Perkins et al., ch. 4</p> <p>Jones, chapter 2</p> <p>*Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. <i>The Quarterly Journal of Economics</i>, 107(2), 407-437.</p> <p>*Carmona, J., & León, Á. M. (2023). Pandemic effects in the Solow growth model. <i>Bulletin of Economic Research</i>, 75(3), 671–687.</p>
<p>4, 5 (Sept 2, 9)</p>	<p>Endogenous Growth Models – Role of Technology</p> <p>*Jones, chapter 5, 8</p> <p>WDR (2024), Chapter 2, 4</p> <p>Herzer, D. (2022). The impact of domestic and foreign R&D on TFP in developing countries. <i>World Development</i>, 151, 105754.</p> <p>*Peña, J., Cusolito, A. P., & Lederman, D. (2020). The effects of digital-technology adoption on productivity and factor demand: Firm-</p>

	level evidence from developing countries. <i>World Bank Policy Research Working Paper No. 9333</i> .
6 (Sept 16)	<p>Human Capital and Growth</p> <p>*Perkins et al, chapters 7, 8, 9</p> <p>Cruz, M. and S.A. Ahmed. 2018. On the impact of demographic change on economic growth and poverty. <i>World Development</i>, 105. Pp. 95-106.*</p> <p>*Hanushek, E. A., & Woessmann, L. (2020). The economic impacts of learning losses. <i>OECD Education Working Paper No. 225</i>. Paris: OECD Publishing.</p>
7	MIDTERM:
8 (Sept 30)	<p>Investment and Savings</p> <p>*Perkins et al., ch. 10</p> <p>*Aiyar, S., Malacrino, D., & Presbitero, A. F. (2024). Investing in friends: The role of geopolitical alignment in FDI flows. <i>European Journal of Political Economy</i>, 83, 102508.</p> <p>UNCTAD. (2023). <i>World Investment Report 2023: Investing in Sustainable Energy for All</i>. Geneva: United Nations</p>
9 (Oct 7)	<p>Foreign Debt and Financial Crises</p> <p>*Perkins et al., ch.13</p> <p>UNCTAD. (2023). <i>Trade and Development Report 2023: Growth, Debt, and Climate</i>. (Read Overview for analysis of the post-pandemic debt challenges and links to sustainable development.)</p> <p>*Mekasha, T. J., & Tarp, F. (2019). A meta-analysis of aid effectiveness: Revisiting the evidence. <i>Politics and Governance</i>, 7(2), 5–28.</p>
10, 11 (Oct 14, 21)	<p>Managing Short-Run Crisis in an Open Economy</p> <p>*Perkins et al. ch. 15</p> <p>*Davies, M. H., & Schröder, M. (2022). A Simple Model of Internal and External Balance for Resource-Rich Developing Countries.</p>

	<i>Asian Development Bank Economics Working Paper Series</i> , (660).
12, 13 (Oct 28, Nov 4)	Trade and Development *Perkins et al., chapter 18 *Jones, B., Nguyen-Tien, V., & Elliott, R. J. (2023). The electric vehicle revolution: Critical material supply chains, trade and development. <i>The World Economy</i> , 46(1), 2-26. Santos-Paulino, A. U. (2005). Trade liberalisation and economic performance: theory and evidence for developing countries. <i>World Economy</i> , 28(6), 783-821.
14, 15 (Nov 11, 18)	Student Presentations
	FINAL EXAM:

* Required readings

Remark: Class schedule and required readings may be adjusted during the course as needed.



Course Outline

EE463 Globalization and International Development

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: a) EE211 and EE212; or b) EE213 and EE214

Course Description:

Concept and development of globalization in the context of after the World War II. Formation of the New International Economic Order (NIEO). Global organizations. Multinational corporations. International cooperation. Political economy of dependency. Debates on contribution and impacts of globalization on the local economy. Contemporary transnational development issues. Roles of international development organizations e.g. the United Nations, World Bank, International Monetary Fund (IMF), etc., in bridging the global north and the global south or within the south countries through the official development assistance (ODA), development loan, or development projects. Analysis of patterns, factors of success and failures of past international development projects. Basic techniques for development project evaluation.

Course Objectives:

The primary objective is to stimulate students' utilization of economic theories in comprehending the behavioral patterns and decision-making procedures inherent to nations, both at domestic and international levels, alongside diverse interest groups and international organizations. Additionally, the intent is to furnish students with a foundational understanding of the impacts stemming from interactions among nations, interest groups, and international organizations, using basic statistical and econometric tools for analytical assessment.

Grading Criteria:

Midterm Exam	30 %
Final exam	30 %
Term project	20 %
Participation, discussion, and classroom activities	20 %
Total	100 %

Term Project (20%): Learning Correlation and Causation from Data

The objective of this project is to encourage students to identify a topic of personal interest in international development, explore publicly available online databases related to that topic, examine data correlations, connect these correlations to economic theories, and assess the plausibility of a causal relationship.

Project Outputs

1. A printed submission containing graph(s) only—no written descriptions are required.
2. Two one-on-one conversations with me: one before the midterm exam and another before the final exam.

Each conversation will last approximately 20 minutes and serves as the primary form of evaluation. The purpose of using one-on-one discussions, instead of public presentations, is to reduce anxiety and allow for a deeper exploration of the student's engagement and insights gained through the project.

Work Schedule:

Task	Content	Deadline	Grade
Progress 1	Group members of two	Thu, 21 st Aug, 17.00	1%
Progress 2	Topic and time reservation	Thu, 4 th Sep, 17.00	2%
Progress 3	1 st conversation w/ me	Thu, 18 th Sep 9.00-12.00	7%
Progress 4	Last conversation w/ me	TBA	10%

Participation and Classroom Activities (20%):

Students are encouraged to actively participate in class, as engagement and contributions will be recognized periodically. Pop-up quizzes will be conducted to assess understanding and provide feedback to help students prepare for exams. **If the participation rate falls below 40% of the total enrollment, roll call will be implemented.**

TA Responsibilities

We are delighted to have a TA supporting this course. The TA is responsible for the academic aspects outlined in the course syllabus. Specifically, the TA will help answer your questions related to the topics covered in the course outline.

The best way to contact the TA is via email. Please cc me in your message and include “[EE463 TA]” at the beginning of your email subject line.

Please note:

- The TA may not be able to answer every question. In such cases, I will follow up as needed.
- The TA is not responsible for questions related to the term project. For any project-related inquiries, please contact me directly.

Materials:

CORE Econ, The Economy, <https://core-econ.org/the-economy/> [CORE]

Tentative Class Schedule and Suggested Readings:

<i>Topic and suggested material</i>	<i>Date</i>
1. <u>Introduction to international development: The coalition of economic theories, econometric, and empirical data</u>	7 Aug
2. <u>Colonization, globalization, and, basically, how we got here</u> - CORE, UNIT 18: THE NATION AND THE WORLD ECONOMY - Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. <i>American economic review</i> , 91(5), 1369-1401.	14, 21 Aug

Topic and suggested material	Date
<ul style="list-style-type: none"> - Michalopoulos, S., & Papaioannou, E. (2016). The long-run effects of the scramble for Africa. <i>American Economic Review</i>, 106(7), 1802-1848. - Reinhart, C. M., & Trebesch, C. (2016). The international monetary fund: 70 years of reinvention. <i>Journal of Economic Perspectives</i>, 30(1), 3-28. - Alvaredo, F., Chancel, L., Piketty, T., Saez, E., & Zucman, G. (2017). Global inequality dynamics: New findings from WID.world. <i>American Economic Review</i>, 107(5), 404-409. 	
<p><u>3. Foreign aid</u></p> <ul style="list-style-type: none"> - Aidt, T. S., Albornoz, F., & Hauk, E. (2021). Foreign influence and domestic policy. <i>Journal of Economic Literature</i>, 59(2), 426-487. - Kuziemko, I., & Werker, E. (2006). How much is a seat on the Security Council worth? Foreign aid and bribery at the United Nations. <i>Journal of political economy</i>, 114(5), 905-930. - Crost, B., Felter, J., & Johnston, P. (2014). Aid under fire: Development projects and civil conflict. <i>American Economic Review</i>, 104(6), 1833-1856. 	28 Aug
<p><u>4. International trade and FDI</u></p> <ul style="list-style-type: none"> - CORE, UNIT 18: THE NATION AND THE WORLD ECONOMY - Milner, H. V. (1999). The political economy of international trade. <i>Annual review of political science</i>, 2(1), 91-114. - Berger, D., Easterly, W., Nunn, N., & Satyanath, S. (2013). Commercial imperialism? Political influence and trade during the Cold War. <i>American Economic Review</i>, 103(2), 863-896. - Banerjee, Abhijit V. and Esther Duflo. 2019. Good Economics for Hard Times. "The Pains from Trade". - Fajgelbaum, P. D., & Khandelwal, A. K. (2022). The economic impacts of the US-China trade war. <i>Annual Review of Economics</i>, 14, 205-228. 	4 Sep
<p><u>5. Immigration</u></p> <ul style="list-style-type: none"> - CORE, UNIT 18: THE NATION AND THE WORLD ECONOMY - Card, D. (1990). The impact of the Mariel boatlift on the Miami labor market. <i>Industrial and Labor Relations Review</i>, 43(2), 245-257. - Baker, S. R. (2015). Effects of immigrant legalization on crime. <i>American Economic Review</i>, 105(5), 210-213. - Djourelouva, M. (2023). Persuasion through Slanted Language: Evidence from the Media Coverage of Immigration. <i>American Economic Review</i>, 113(3), 800-835. 	11 Sep
Progress 3: Conversation Session 1	18 Sep

Topic and suggested material	Date
Midterm Exam: Thursday, September 25th, 9:00 AM - 11:00 AM	
<p><u>6. Resource curse</u></p> <ul style="list-style-type: none"> - Colgan, J. D. (2010). Oil and revolutionary governments: Fuel for international conflict. <i>International organization</i>, 64(4), 661-694. - Dube, O., & Vargas, J. F. (2013). Commodity price shocks and civil conflict: Evidence from Colombia. <i>Review of Economic studies</i>, 80(4), 1384-1421. - Berman, N., Couttenier, M., Rohner, D., & Thoenig, M. (2017). This mine is mine! How minerals fuel conflicts in Africa. <i>American Economic Review</i>, 107(6), 1564-1610. 	2 Oct
<p><u>7. Conflict and wars</u></p> <p>Ray, D., & Esteban, J. (2017). Conflict and development. <i>Annual Review of Economics</i>, 9(1), 263-293.</p> <p>Besley, T., & Persson, T. (2011). The logic of political violence. <i>The quarterly journal of economics</i>, 126(3), 1411-1445.</p> <ul style="list-style-type: none"> - Movie: All Quiet on the Western Front (2022) - Movie: Hotel Rwanda (2004) 	9 Oct
<p><u>8. Climate change</u></p> <ul style="list-style-type: none"> - CORE Unit 20: ECONOMICS OF THE ENVIRONMENT - Nordhaus, W. (2019). Climate change: The ultimate challenge for economics. <i>American Economic Review</i>, 109(6), 1991-2014. - Tol, R. S. J. (2009). The economic effects of climate change. <i>Journal of economic perspectives</i>, 23(2), 29-51. 	16 Oct
<p><u>9. Sovereign debt crises</u></p> <ul style="list-style-type: none"> - CORE: UNIT 14: UNEMPLOYMENT AND FISCAL POLICY - Lane, P. R. (2012). The European sovereign debt crisis. <i>Journal of economic perspectives</i>, 26(3), 49-68. - Acemoglu, D., Johnson, S., Robinson, J., & Thaicharoen, Y. (2003). Institutional causes, macroeconomic symptoms: volatility, crises and growth. <i>Journal of monetary economics</i>, 50(1), 49-123. 	30 Oct
<p><u>10. The pandemic</u></p> <ul style="list-style-type: none"> - Antràs, P., Redding, S. J., & Rossi-Hansberg, E. (2023). Globalization and pandemics. <i>American Economic Review</i>, 113(4), 939-981. - Blundell, R., Costa Dias, M., Cribb, J., Joyce, R., Waters, T., Wernham, T., & Xu, X. (2022). Inequality and the COVID-19 Crisis in the United Kingdom. <i>Annual Review of Economics</i>, 14, 607-636. 	6 Nov
<p><u>11. China</u></p> <ul style="list-style-type: none"> - Cheng, H., Jia, R., Li, D., & Li, H. (2019). The rise of robots in China. <i>Journal of Economic Perspectives</i>, 33(2), 71-88. 	13 Nov

<i>Topic and suggested material</i>	<i>Date</i>
<p>- Dreher, A., Fuchs, A., Hodler, R., Parks, B. C., Raschky, P. A., & Tierney, M. J. (2019). African leaders and the geography of China's foreign assistance. <i>Journal of Development Economics</i>, 140, 44-71.</p> <p>- Bai, Y., Jia, R., & Yang, J. (2023). Web of power: How elite networks shaped war and politics in China. <i>The Quarterly Journal of Economics</i>, 138(2), 1067-1108.</p>	
<p><u>12. AI</u></p> <p>Acemoglu, D., & Restrepo, P. (2020). The wrong kind of AI? Artificial intelligence and the future of labour demand. <i>Cambridge Journal of Regions, Economy and Society</i>, 13(1), 25-35.</p> <p>Acemoglu, D., Autor, D., Hazell, J., & Restrepo, P. (2022). Artificial intelligence and jobs: Evidence from online vacancies. <i>Journal of Labor Economics</i>, 40(S1), S293-S340.</p> <p>- Movie: Ex Machina (2014)</p>	20 Nov
Progress 4: Conversation Session 2	TBA
Final Exam: Thursday, October 27th, 9:00 AM - 12:00 PM	

Expected Learning Outcomes

1. Morality and Ethics **EE463**

Applicability	Expected Learning Outcomes	Evaluation Method
●	36. Students demonstrate integrity.	Term project and two exams
●	37. Students prioritize social and public benefits over personal ones.	All evaluation items
●	38. Students are punctual and comply with the code of conduct of the institution and society at large.	Term project
●	39. Students are responsible and accountable to society, the nation, and the subject of economics.	All evaluation items
○	40. Students realize the cultural and environmental value of a sustainable society.	Topic 8

2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	36. Students know and understand modern economics principles and theories, and are up to date with new developments.	Discussions in the class, two exams and all assignments
●	37. Students know and understand Thai and global economic structure and the importance of major international economic events.	Discussions in the class, two exams and all assignments
○	38. Students know and understand the instruments of economic analysis.	Discussion in Topic 1 and all suggested papers
●	39. 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.	All activities
○	40. Students are informed about related fields including sociology, business administration, education, law policy, and science.	Topics 1, 6, 7, and 12

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	22. Students have developed individual critical thinking.	Class discussion and term project
●	23. Students are sufficiently trained in research skills.	Term project
●	24. Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand the causes of current	Term project

	economic problems in Thailand. Based on analysis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.	
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4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
●	36. Students are responsible for assigned tasks and work in groups effectively.	Term project
●	37. Students have problem-solving skills.	Two exams and term project
○	38. Students show leadership skills and team spirit.	Term project
●	39. Students are always improving themselves.	Term project
○	40. Students have good interpersonal skills, adapt, and work under different conditions.	Discussions in the class and term project

5. Quantitative Analysis, communication, and information technology

Applicability	Expected Learning Outcomes	Evaluation Method
○	22. Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	Topic 1 and term project
○	23. Students communicate effectively and select appropriate presentation methods.	Discussions in the class and term project
○	24. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	Discussions in the class and all assignments

Remark: ● Primary expected outcome ○ Secondary expected

Learning Management and Evaluation

CLO	PLOs	Learning Management	Evaluation
1. Apply economic theories to understand behavioral patterns and decision-making processes of states and international organizations.	K1, K2, K4, S1, S2, E1, E2, E3	In this course, we begin by previewing core microeconomic theories and then explore their real-world applications. Students are encouraged to actively discuss and investigate how these theories relate to topics of their own interest. This approach is designed to foster deeper understanding and critical thinking. Exercises of this kind will appear regularly in both the term project and examinations.	All discussion in the classes Midterm exam Final exam Term project
2. Analyze roles and behaviors of various interest groups and international organizations.	K1, K2, K4, S1, S2, E1, E2, E3	After achieving CLO1, students are encouraged to identify the utility functions of various interest groups related to their chosen topics. This exercise helps students apply microeconomic reasoning to real-world contexts and analyze strategic interactions. Such exercises are a recurring feature in both the term project and examinations.	All discussion in the classes Midterm exam Final exam Term project
3. Understand effects resulting from interactions among nations, interest groups, and	K1, K2, K4, S1, S2, E1, E2, E3, C1,	We will review the basic concepts of game theory to illustrate how economic agents interact and how one agent's decisions can influence the outcomes of others. Students will then be invited to apply these concepts to	All discussion in the classes

international organizations.	C2, C4	their chosen topics, analyzing strategic behavior and interdependence. Both the examinations and term project are designed to evaluate students' ability to apply these ideas in context.	Midterm exam Final exam Term project
4. Apply basic statistical and econometric tools for analytical assessment of these interactions.	K1, K2, S1, S3, C1, C2	We will review basic econometric concepts and the foundations of causal inference. Students will then be encouraged to critically evaluate empirical settings encountered in class, identifying potential limitations and proposing alternative interpretations. The term project serves as the primary platform for students to develop and present these ideas, while examinations will play a minimal role—used only to assess understanding of key foundational concepts.	All discussion in the classes Midterm exam Final exam Term project

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
1	All discussion in the classes	1-15	20%
	Midterm exam	8	30%
	Final exam	16	30%
	Term project	7, 15	20%
2	All discussion in the classes	1-15	20%

	Midterm exam	8	30%
	Final exam	16	30%
	Term project	7, 15	20%
3	All discussion in the classes	1-15	20%
	Midterm exam	8	30%
	Final exam	16	30%
	Term project	7, 15	20%
4	All discussion in the classes	1-15	20%
	Midterm exam	8	30%
	Final exam	16	30%
	Term project	7, 15	20%



Course Outline

EE471 Labor Economics

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: EE311

Course Description:

Studying the supply and demand of labor in the short-term and long-term, wage determinations as well as improving labor quality through education and human capital training. Labor migration, wage structure, wage differentials in the labor market, job search, unemployment, and the role of labor unions will be covered. The role of government in the labor market as employer or regulator. Social security, discrimination in the labor market will be discussed.

Course Objectives:

To provide students with basic theories and empirical studies related to topics in labor economics and to prepare students to further their research in the future.

Expected Learning Outcomes

1. Morality and Ethics - EE471

Applicability	Expected Learning Outcomes	Evaluation Method
●	41. Students demonstrate integrity.	Assignments/Quizzes/ Final & Midterm Exams
●	42. Students prioritize social and public benefits over personal ones.	Participation/ In-class behavioral observation
●	43. Students are punctual and comply with the code of conduct of the institution and society at large.	Assignments/In-class Exercises/Participation In-class behavioral observation
○	44. Students are responsible and accountable to society, the nation, and the subject of economics.	Participation/ In-class behavioral observation
○	45. Students realize the cultural and environmental value of a sustainable society.	Participation/ In-class behavioral observation

2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	41. Students know and understand modern economics principles and theories, and are up to date with new developments.	Assignments/Quizzes/ Final & Midterm Exams
●	42. Students know and understand Thai and global economic structure and the importance of major international economic events.	Assignments/Quizzes/ In-class Exercises
○	43. Students know and understand the instruments of economic analysis.	Assignments/Quizzes/ In-class Exercises
●	44. Students know and understand applied fields in economics, including monetary, public, international, business, natural resource, and environmental, industrial, agricultural, cooperative, political,	Assignments/Quizzes/ Final & Midterm Exams

	developmental, and entrepreneurial economics as well as agribusiness.	
○	45. Students are informed about related fields including sociology, business administration, education, law policy, and science.	Assignments/Quizzes/ In-class Exercises

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	25. Students have developed individual critical thinking.	Assignments/Final & Midterm Exams
●	26. Students are sufficiently trained in research skills.	Assignments/Final & Midterm Exams
●	27. 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.	Assignments/Final & Midterm Exams

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
●	41. Students are responsible for assigned tasks and work in groups effectively.	Assignments/In-class Exercises/Participation
●	42. Students have problem-solving skills.	Assignments/In-class Exercises/Participation
○	43. Students show leadership skills and team spirit.	Assignments/In-class Exercises/Participation
●	44. Students are always improving themselves.	Assignments/In-class Exercises/Participation
○	45. Students have good interpersonal skills, adapt, and work under different conditions.	Assignments/In-class Exercises/Participation

5. Quantitative Analysis, communication, and information technology

Applicability	Expected Learning Outcomes	Evaluation Method
○	25. Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	Assignments/In-class Exercises/Participation
○	26. Students communicate effectively and select appropriate presentation methods.	Assignments/In-class Exercises/Participation
○	27. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	Assignments/In-class Exercises/Participation

Remark: ● Primary expected outcome ○ Secondary expected

Learning Management and Evaluation

CLO	Learning Management	Evaluation
CLO K1: Acquiring knowledge and understanding of economic theories, fundamental economic tools, theory	1. Lecture on theoretical knowledge 2. Problem-based learning by emphasizing problem analysis/problem solving 3. Independent study by assigned research papers and academic projects 4. Training sessions on quantitative analysis and using technology for	1. From assigned homework/projects/reports/quizzes/research papers (50%) 2. From midterm/final exams (50%)

CLO	Learning Management	Evaluation
development, and applied economics	processing, analysis, interpretation, and effective presentation 5. Demonstrating knowledge integration in related study fields	
CLO K2: Ability to apply theoretical knowledge to analyze and provide practical suggestions for economic and social issues	6. Brainstorming to encourage active learning and applied knowledge	
CLO K4: Ability to attain lifelong learning and thoroughly understand world economic and societal		

CLO	Learning Management	Evaluation
changes and impacts		
<p>CLO S1:</p> <p>Acquiring intellectual skill and ability to think systematically to identify research topics, perform research, process data, and evaluate findings</p>	<ol style="list-style-type: none"> 1. Problem-based learning by emphasizing analysis of problems/problem solving sources 2. Brainstorming to encourage class discussion and applied knowledge 3. Preparing research papers/projects 4. Training sessions on essential technology for education, work, and lifelong learning 5. Written and oral presentations using technology 6. Soft skills and extracurricular learning activities 	<ol style="list-style-type: none"> 1. From assigned homework/projects/reports/quizzes/research papers (50%) 2. From midterm/final exams (50%)
<p>CLO S2:</p> <p>Acquire analytical and communication skills and ability to interpret data from different sources, analyze, and integrate knowledge to</p>		

CLO	Learning Management	Evaluation
propose appropriate problem solving guidelines for economic and social issues		
CLO E1: Acknowledge moral values and exhibit ethical traits, including decency, selflessness, and integrity	1. Learn from case studies covering ethics-related topics 2. Incorporating moral value instruction in lectures and class discussions 3. Assigning independent research projects	1. From punctuality, class participation, and meeting deadlines 2. Observation 3. Peer- and self-reflections 4. From assigned homework/projects/reports/quizzes/research papers (50%)
CLO E2: Showing self-discipline, social responsibility, and good citizenship	4. Assigning group research projects 5. Participating in analysis and providing ethical insights in case studies 6. Experiencing real-life situations	5. From midterm/final exams (50%)
CLO E3: Respect rights, opinions, values, and dignity of	7. Developing social responsibility activities	

CLO	Learning Management	Evaluation
others. Obey organizational and societal rules and regulations		
CLO C1: Ability to effectively complete assigned tasks and responsibilities	1. Individual/group assignments 2. Lecture/debate/brainstorming/class discussion/knowledge sharing 3. Encourage asking questions in class to promote student engagement 4. Activities to encourage problem based learning by emphasizing analysis of problem /problem solving sources	1. Assignment quality 2. From problem-solving processes 3. From observations of behavior/research presentations/projects/ assignments 4. From ability to convey leadership and teamwork in different situations
CLO C2: Ability to initiate problem analysis independently and/or in teamwork	5. Involvement in problem-solving processes by projects/research papers 6. Oral presentation 7. Extracurricular learning experiences	5. From teamwork skills and problem/case study analysis 6. Examine thought processes, connected thinking, and reasoning 7. From assigned
CLO C4: Show active learning		homework/projects/reports/ quizzes/research papers (50%) 8. From midterm/final exams (50%)

CLO	Learning Management	Evaluation
characteristics and aspire to personal development		

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
K1, K2, K4	1. From assigned homework/projects/reports/quizzes/research papers (50%) 2. From midterm/final exams (50%)	1-15	100%
S1, S2	1. From assigned homework/projects/reports/quizzes/research papers (50%) 2. From midterm/final exams (50%)	1-15	100%
E1, E2, E3	1. From punctuality, class participation, and meeting deadlines 2. Observation 3. Peer- and self-reflections 4. From assigned homework/projects/reports/quizzes/research papers (50%)	1-15	100%

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
	5. From midterm/final exams (50%)		
C1, C2, C4	1. Assignment quality 2. From problem-solving processes 3. From observations of behavior/research presentations/projects/ assignments 4. From ability to convey leadership and teamwork in different situations 5. From teamwork skills and problem/case study analysis 6. Examine thought processes, connected thinking, and reasoning 7. From assigned homework/projects/ reports/ quizzes/research papers (50%) 8. From midterm/final exams (50%)	1-15	100%

Main Text:

Bojas, G. 2008. Labor Economics (Fourth edition), McGraw-Hill, USA.
 Ehrenberg, R. and Smith, R. 2012. Modern Labor Economics: Theory and Public Policy (13th edition), Pearson-Addison Wesley.

Recommended Texts & Materials:

Boeri, T. and Ours, J. 2013. The Economics of Imperfect Labor Markets. Second Edition. Princeton University Press.

- Bosworth, D., Dawkins, P. and Stromback, T. 1996. *The Economics of the Labour Market*. Addison Wesley, USA.
- Hartog, J. and Maassen van den Brink, H. 2007. *Human Capital: Advances in Theory and Evidence*. Universiteit van Amsterdam.
- McConnel, C., Brue, S. and Macpherson, D. 1999. *Contemporary Labor Economics*, McGraw-Hill, USA
- Wooldridge, J. 2003. *Introductory Econometrics*. Thomson Learning. *Handbook of Labor Economics (All Volumes)*

Suggested Readings:

- Liao, L. and Paweenawat, S.W. 2021. The inversion of married women's labour supply and wage: Evidence from Thailand. *Asian-Pacific Economic Literature*, 35 (1): 82-98.
- Liao, L. and Paweenawat, S.W. 2022. Alternative boomerang kids, intergenerational co-residence, and maternal labor supply. *Review of Economics of the Household*, 20 (2): 609-634.
- Paweenawat, S. W., 2022. The Impact of Global Value Chain Integration on Wages Evidence from Matched Worker-Industry Data in Thailand. *Journal of the Asia Pacific Economy*, 27(4): 757-780.
- Paweenawat, S. W., 2022. Household Economic Prudence in Thailand. *Singapore Economic Review*, 67(06): 1905-1923.
- Paweenawat, S. W., 2024. The Effect of Parental Education on Children's Education and Skills in Thailand. *Singapore Economic Review*, 69(3): 1231-1263.
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Grading Criteria:

In-class Exercises/Participation	10%
Assignments/Quizzes	40%
Midterm Examination	20%
Final Examination	30%

Tentative Class Schedule:

Week	Date	Tentative Topic and Class Activity
1	Aug. 8	Introduction to Labor Economics
2	Aug. 15	The Demand for Labor
3	Aug. 22	Labor Demand Elasticities
4	Aug. 29	Supply of Labor to the Economy
5	Sep. 5	Labor Supply and Household Production

Week	Date	Tentative Topic and Class Activity
6	Sep. 12	Frictions in the Labor Market/Job Search
7	Sep. 19	Wage/Compensating Wage Differentials
Midterm Exam		
8	Oct. 3	Investment in Human Capital (Education/Training)
9	Oct. 10	Human Capital Theory and Empirical Research
10	Oct. 17	Gender and Education
11	Oct. 24	Labor Migration
12	Oct. 31	Discrimination in Labor Market
13	Nov. 7	The Role of Government in Labor Market/Social Security
14	Nov. 14	Labor Union
15	Nov. 21	Research in Labor Economics
Final Exam		



Course Syllabus

EE472 Economics of Population and Family

Semester 1/2025

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

Prerequisites: Curriculum 61: EE311 or EE312
Curriculum 66: EE311

Course Description:

Processes generating change in size and structure of population and family through reproduction, death and migration. Factors causing these changes. The impact of demographics and family variables on the economy at the micro and macro levels. Economic of marriage and Economic of household or family will be included.

Course Objectives:

The objectives of this course are to:

1. Introduce fundamental demographic and economic concepts related to population and family, including fertility, mortality, migration, marriage, and aging.
2. Develop students' ability to apply microeconomic and macroeconomic theories to analyze population dynamics and their impacts on households, labor markets, and national economies.
3. Enhance students' quantitative and analytical skills in processing demographic and economic data using appropriate statistical and econometric methods.
4. Foster critical thinking and problem-solving abilities in evaluating the economic consequences of demographic change and in formulating evidence-based policy recommendations.
5. Cultivate effective communication skills by training students to present demographic and economic analysis clearly in both written reports and oral presentations.
6. Encourage teamwork, ethical responsibility, and professional conduct through group projects, discussions, and reflection on issues related to population, family, and society.

Expected Learning Outcomes

1. Morality and Ethics EE472

Applicability	Expected Learning Outcomes	Evaluation Method
●	46. Students demonstrate integrity.	Quizzes and assignments
●	47. Students prioritize social and public benefits over personal ones.	
●	48. Students are punctual and comply with the code of conduct of the institution and society at large.	
●	49. Students are responsible and accountable to society, the nation, and the subject of economics.	
●	50. Students realize the cultural and environmental value of a sustainable society.	

2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	46. Students know and understand modern economics principles and theories, and are up to date with new developments.	Quizzes, assignments, and exam
●	47. Students know and understand Thai and global economic structure and the importance of major international economic events.	
○	48. Students know and understand the instruments of economic analysis.	
●	49. 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.	
●	50. Students are informed about related fields including sociology, business administration, education, law policy, and science.	

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	28. Students have developed individual critical thinking.	Group project
●	29. Students are sufficiently trained in research skills.	
●	30. 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
●	46. Students are responsible for assigned tasks and work in groups effectively.	Group project
●	47. Students have problem-solving skills.	
○	48. Students show leadership skills and team spirit.	
●	49. Students are always improving themselves.	
○	50. Students have good interpersonal skills, adapt, and work under different conditions.	

5. Quantitative Analysis, communication, and information technology

Applicability	Expected Learning Outcomes	Evaluation Method
○	28. Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	Assignments
○	29. Students communicate effectively and select appropriate presentation methods.	Group project
○	30. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	

Remark: ● Primary expected outcome ○ Secondary expected

Learning Management and Evaluation

CLO	Learning Management	Evaluation
CLO1: Define and explain fundamental demographic measures and concepts in population economics (CBR, CDR, TFR, dependency ratio, etc.).	<ul style="list-style-type: none"> - Interactive lectures with slides and examples - Guided readings (Weeks, Bloom & Canning) - Short quizzes to reinforce definitions 	<ul style="list-style-type: none"> - Quizzes (Weeks 1-3) - Midterm Exam (conceptual part)
CLO2: Apply microeconomic and macroeconomic theories to analyze fertility,	<ul style="list-style-type: none"> - Case-based lectures - Problem sets using demographic and economic datasets (STATA/R) 	<ul style="list-style-type: none"> - Assignments - Midterm & Final Exams (analytical questions)

CLO	Learning Management	Evaluation
mortality, migration, marriage, and aging.	<ul style="list-style-type: none"> - Group discussion on theoretical models 	
CLO3: Use quantitative methods (e.g., regression, life tables, Gini, Lorenz curve) to analyze population and economic data.	<ul style="list-style-type: none"> - Computer lab exercises with real datasets (DHS, IPUMS, World Bank) - In-class demonstrations - Group data projects 	<ul style="list-style-type: none"> - Assignments (data analysis reports) - Group project (Week 9–14) - Final Exam (empirical component)
CLO4: Critically evaluate the economic consequences of demographic changes (population growth, demographic dividend, aging).	<ul style="list-style-type: none"> - Critical reading of journal articles (Lam, Lee, Case & Deaton) - Structured debates (e.g., “Is population growth good for the economy?”) - Policy case studies (China’s One-Child Policy, Thailand’s aging challenge) 	<ul style="list-style-type: none"> - Group project presentations - Participation in debates - Final Exam (essay questions)
CLO5: Communicate findings and policy implications effectively in written and oral forms.	<ul style="list-style-type: none"> - Group project with written report and oral presentation - Peer feedback sessions - Workshop on policy brief writing (Week 15) 	<ul style="list-style-type: none"> - Group project (15%) - Class participation - Presentation evaluation rubric
CLO6: Demonstrate teamwork, responsibility, and ethical awareness in addressing population	<ul style="list-style-type: none"> - Group-based learning and collaborative assignments - Emphasis on integrity and respect in teamwork 	<ul style="list-style-type: none"> - Group project (teamwork assessment) - Participation evaluation - Reflection notes

CLO	Learning Management	Evaluation
and family economics issues.	- Reflection activity on ethics and population policy	

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
CLO1: Define and explain fundamental demographic measures and concepts	Quizzes (short answer/MCQ), Midterm Exam (conceptual section)	Quizzes: Weeks 2–3; Midterm: Week 7	10%
CLO2: Apply micro/macro theories to fertility, mortality, migration, marriage, and aging	Midterm Exam (analytical), Final Exam (theory-application), Assignments	Midterm: Week 7; Final: Week 16; Assignments Weeks 4–12	80%
CLO3: Use quantitative methods to analyze population and economic data	Assignments (data exercises), Group Project (data analysis report)	Assignments Weeks 5–12; Project Weeks 9–14	2.5%

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
CLO4: Critically evaluate economic consequences of demographic changes	Group Project (policy analysis report + presentation), Final Exam (essay)	Project presentation Week 15; Final Week 16	2.5%
CLO5: Communicate findings and policy implications effectively	Group Project presentation, Written report, Class participation	Weeks 13–15	2.5%
CLO6: Demonstrate teamwork, responsibility, and ethical awareness	Group Project (teamwork evaluation), Participation, Reflection activity	Weeks 9–15	2.5%

Main Text: Lecture notes will be provided by the lecturer via Google Classroom

Recommended Texts & Materials

Suggested Readings:

1. Weeks, J. R. (2021). *Population: An introduction to concepts and issues* (13th ed.). Cengage Learning. ISBN 9781305094505
2. Bloom, D. E., Canning, D., & Sevilla, J. (2003). *The demographic dividend: A new perspective on the economic consequences of population change*. RAND Corporation. ISBN 0833029266
3. Rosenzweig, M. R., & Stark, O. (Eds.). (1997). *Handbook of population and family economics* (Vol. 1A–1B). Elsevier. ISBN 9780444826459

Lecture Schedule: Friday 9.00 a.m. to 12.00 p.m.

Date	Topics
1	<p>Introduction to Population Economics</p> <p>Core topics: Defining population economics; demographic measures (CBR, CDR, TFR, IMR, dependency ratio); the population balancing equation; overview of global population growth and structure.</p>
2	<p>Historical Demographic Transitions</p> <p>Core topics: Malthusian model of preindustrial equilibrium; preventive and positive checks; demographic transition theory (stages, drivers, implications); historical examples (Europe, Asia, Africa).</p>
3	<p>Population Growth & the Economy</p> <p>Core topics: Becker's theory of fertility; quantity–quality substitution; income vs. substitution effects; education, child health, and parental investment; evidence from fertility transitions.</p>
4	<p>Fertility I: Quantity–Quality Tradeoff</p> <p>Core topics: Becker's theory of fertility; quantity–quality substitution; income vs. substitution effects; education, child health, and parental investment; evidence from fertility transitions</p>
5	<p>Fertility II: Opportunity Costs & Female Labor</p>

Date	Topics
	Core topics: Impact of female wages and employment on fertility; rising education and delayed marriage; labor market participation; empirical cases.
6	<p>Contraception, Abortion & Policy</p> <p>Core topics: Role of contraceptive technology; legalization of abortion; reproductive rights; family planning programs; coercive vs. voluntary policies (e.g., China's One-Child Policy).</p>
7	<p>Human Capital & Intergenerational Transmission</p> <p>Core topics: Human capital theory; education as investment; intergenerational mobility; link between fertility and investment in children; returns to education and schooling outcomes.</p>
	Midterm
8	<p>Mortality, Health & Economic Growth</p> <p>Core topics: Mortality transition and rising life expectancy; determinants of mortality (income, health care, environment); health as human capital; morbidity trends (Case & Deaton's "deaths of despair").</p>
9	<p>Poverty, Inequality & Demography</p> <p>Core topics: Methods of measuring poverty and inequality (Lorenz curve, Gini, headcount index); demographic correlates of poverty; fertility and family size effects on inequality; global vs. national evidence.</p>
10	<p>Migration Economics</p> <p>Core topics: Push–pull model; Harris–Todaro framework; internal migration vs. international migration; remittances; brain drain; assimilation vs. segregation; migration policy debates.</p>
11	<p>Marriage, Family & Household Economics</p> <p>Core topics: Becker's marriage market model; assortative mating; divorce and remarriage; family as economic unit; intra-household bargaining; changing family structures.</p>

Date	Topics
12	<p>Population Aging & Economic Consequences</p> <p>Core topics: Rising old-age dependency; pensions and social security; health care burdens; savings and capital accumulation; longevity and late-life inequality; policy responses.</p>
13	<p>Demographic Dividend & Youth Bulge</p> <p>Core topics: Definition and phases of demographic dividend; conditions for reaping benefits (education, jobs, governance); risks of youth bulge (conflict, unemployment); cross-regional experiences (East Asia vs. Africa).</p>
14	<p>Population Policy & Commons Debate</p> <p>Core topics: Market failures and externalities in fertility and aging; Tragedy of the Commons and population; pro-natalist and anti-natalist policies; comparative family policies in high-income countries.</p>
15	<p>Review, Policy Synthesis & Paper Workshop</p> <p>Core topics: Integration of theories and empirical evidence; open policy debates (aging vs. growth, migration, family policy); student paper presentations; review for final exam.</p>
	<p>Final exam</p>

Evaluation

Midterm Examination	30%
Final Examination	45%
Group project or reports	10%
Quizzes, Assignments, and participation	15%



Course Outline

EE481 Industrial Economics

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: EE311

Course Description:

This course studies behaviors of firms under imperfectly competitive markets. It covers the structure–conduct–performance (SCP) paradigm, which examines the relationship among market structure, firms' conducts and their performance. It also covers firms' decision on operation, resource allocation, as well as firm's strategic actions. Price theory and game theory will be used to analyze issues such as pricing, research and development, advertising, and firms' decision under imperfect information

Student Evaluation:

Assignments	10%
Project	15%
Mid-term examination	35%
Final examination	40%

Learning Management and Evaluation

CLOs	Learning Management	Evaluation Method
CLO K1 K2 K4 Able to analyze and propose solutions to	<ul style="list-style-type: none"> Lecture Case study 	<ul style="list-style-type: none"> Written exam (75%)

CLOs	Learning Management	Evaluation Method
industry problems using economic theory and tools, and apply such knowledge effectively in practical work settings.	<ul style="list-style-type: none"> Self-directed learning through in-class activities and group reports 	<ul style="list-style-type: none"> Analysis and recommendations in the group report (15%) Analysis in weekly exercises (10%)
CLO S1S2 Able to select and apply appropriate tools, such as price theory, game theory, and the Structure-Conduct-Performance (SCP) framework, to solve problems in markets and industrial sectors.	<ul style="list-style-type: none"> Lecture Case study Self-directed learning through in-class activities and group reports 	<ul style="list-style-type: none"> Written exam (75%) Selection and application of tools in group reports and responses during presentations (15%) Selection and application of tools in weekly exercises (10%)
CLO E1 Adheres to academic ethics and properly cites academic work.	<ul style="list-style-type: none"> Self-directed learning through in-class activities and group reports 	<ul style="list-style-type: none"> Proper citation of sources in group reports and during presentations, and contribution of opinions on classmates' presentations (included in the 15%)
CLO E3 Able to assess ethical impacts on society, resource distribution, and sustainability, and capable of recommending economic decisions and designing policies with social responsibility in mind.	<ul style="list-style-type: none"> Lecture Case study Self-directed learning through in-class activities and group reports 	<ul style="list-style-type: none"> Written exam (75%) Ethical analysis and recommendations in group reports (15%) Ethical analysis and recommendations in weekly exercises (10%)
CLO C1 Able to work in teams and demonstrate leadership in group tasks.	<ul style="list-style-type: none"> Self-directed learning through in-class activities and group reports 	<ul style="list-style-type: none"> Appropriate division of responsibilities in group work and contribution of opinions on classmates' presentations (included in the 15%)

CLOs	Learning Management	Evaluation Method
<p>CLO C 2 C4 Possesses creativity, accepts differing opinions, plans work systematically, and continuously develops oneself.</p>	<ul style="list-style-type: none"> Self-directed learning through in-class activities and group reports 	<ul style="list-style-type: none"> Development of the final group report based on feedback from the draft and responsiveness to peer feedback during presentations (included in the 15%)

Main Text:

1. Carlton, D.W. and J.M. Perloff, *Modern Industrial Organization*, 4th ed., Addison-Wesley, 2005. **(CP)**
2. Recommended Texts & Materials: Church, J. and R. Ware, *Industrial Organization: A Strategic Approach*, McGraw-Hill, 2000. **** Main Textbook for some chapters ** (CW)** (available online)

Suggested Readings:

1. Rasmusen, E., *Games & Information*, 3rd. ed., Blackwell, 2001. **(R)**
2. Tirole, J., *Industrial Organization*, The MIT Press, 1989.
3. Harvard Business Review (<http://hbr.org>)
4. General Newspaper

Teaching Plan:

1. Introduction and Theory
 - a) Overview **CP 1** or CW 1
 - b) The Firm and Cost / Theory of the Firm **CP 2** or CW 3
2. Dominant Firm
 - a) Dominant Firm **CP 4**
*You should have learned about Monopoly already from EE311.
3. Game Theory
 - a) Static Games **R 1, 2, 3**
 - b) Dynamic Games **R 4, 5, 6**
4. Oligopoly
 - a) Cartel **CP 5**
 - b) Cournot model **CP 6** or CW 8.2
 - c) Bertrand model **CP 6** or CW 8.3
 - d) Multi-period Models of Oligopoly **CP 6** or CW 10
 - e) Industry Structure and Performance **CP 8**

5. Business Practices Strategies and Conduct
- a) Price Discrimination **CP 9, CP 10**
 - b) Strategic Behavior **CP 11**
 - c) Vertical Integration and Vertical Restrictions **CP 12**
6. Government Policies
- a) Antitrust **CP 19** or CW 19
 - b) Regulation **CP 20** or CW 24
7. Other Issues (if time allows, we will study some of these topics)
- 1. Production Differentiation **CP 7** or CW 11
 - 2. Advertising **CP 14** or CW 17
 - 3. Information **CP 13**
 - 4. R&D and Patent **CP 16** or CW 18

Tentative Learning Activities:

Class No.	Date	Topics
1	Aug 6	Introduction and Theory
2	Aug 13	Dominant Firm
3	Aug 20	Game Theory
4	Aug 27	Oligopoly
5	Sep 3	Industry Structure and Performance
6	Sep 10	Price Discrimination
7	Sep 17	Price Discrimination
Midterm Examination		
8	Oct 1	Strategic Behavior
9	Oct 8	Strategic Behavior
10	Oct 15	Vertical Integration and Vertical Restrictions
11	Oct 22	Production Differentiation
12	Oct 29	Information and Advertising
13	Nov 5	R&D and Patent
14	Nov 12	Student Presentation
15	Nov 19	Student Presentation
Final Examination		



Course Outline

EE482: Economics of Innovation and Industrial Development Semester 1/2025

Number of Credits: 3 Credits (3-0-6)

Prerequisite:

- **EE312 (Curriculum 2018)**
 - **EE311 (Curriculum 2023)**
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Course Description

This course explores the economics of innovation and industrial development, focusing on theoretical foundations, policy frameworks, and empirical experiences across Asia. Drawing from growth theory, institutional economics, entrepreneurship, and industrial policy, the course prepares students to critically evaluate innovation systems, development strategies, and industrial transformation processes. Special emphasis is placed on the Thai innovation landscape and regional dynamics.

Learning Objectives

- Understand and apply economic theories of innovation and growth
 - Analyze the role of institutions, geography, and entrepreneurship in development
 - Evaluate industrial and innovation policies, including green and digital strategies
 - Compare national innovation systems across Asia
 - Explore innovative approaches to industrial and innovation policies in Thailand
-

Expected Learning Outcomes

By the end of the course, students will be able to:

1. Demonstrate Ethical and Social Responsibility
 - Uphold academic integrity and professionalism in individual and group work.
 - Evaluate the societal, environmental, and ethical implications of innovation and industrial policies.
 - Understand the role of inclusive innovation and sustainability in development.
2. Apply Economic Theories to Innovation and Development
 - Understand and utilize key economic frameworks including endogenous growth theory, Schumpeterian dynamics, new economic geography, and institutional analysis.
 - Critically assess the roles of entrepreneurship, institutions, and geography in shaping innovation outcomes.
3. Analyze Industrial and Innovation Policy
 - Evaluate policy tools and governance models for innovation, industrial transformation, and green transitions.
 - Compare national and regional innovation systems, with a focus on Asia and Thailand.
 - Design and propose context-sensitive policy responses to specific challenges in Thailand.
4. Develop Research and Analytical Skills
 - Conduct empirical and comparative analysis of innovation systems and policy outcomes.
 - Synthesize theoretical, institutional, and case study insights into coherent policy briefs or research projects.
 - Use appropriate data and indicators (e.g., innovation indices, governance scores, cluster maps) for policy evaluation.
5. Collaborate, Communicate, and Use Digital Tools Effectively
 - Work effectively in teams to analyze cases and present findings.
 - Communicate economic arguments and policy insights clearly through written and oral presentations.

- Utilize ICT tools and platforms to collect, process, and visualize data relevant to innovation and development.
-

Weekly Schedule

PART I: Theoretical Foundations

Week 1: Innovation and Economic Growth

- Classical growth models: Solow's model
- Romer's endogenous growth and technology as an input
- Aghion & Howitt: creative destruction and Schumpeterian growth
- Comparative growth accounting with selected Asian countries

Week 2: New Economic Geography and Innovation Diffusion

- Krugman's core-periphery models and agglomeration
- Knowledge spillovers, innovation hubs, and regional clusters
- Technology diffusion models and S-curve dynamics
- Mapping key Asian innovation clusters and analyzing diffusion patterns

Week 3: Institutions and Innovation Systems

- North: institutions and economic performance
- Peter Evans: "embedded autonomy" and state capacity
- Innovation systems and institutional complementarities
- Institutional analysis using global governance and innovation indicators

Week 4: Innovation, Inequality, and Development

- Dual economy and labor market segmentation
 - Technology-driven inequality (SBTC, routine-biased change, and automation)
 - Inclusive and frugal innovation in the Global South
 - Grassroots vs elite-led innovation pathways
-

PART II: Entrepreneurship and Origins of Ideas

Week 5: Economics of Entrepreneurship

- Schumpeterian vs. Kirznerian entrepreneurship
- Firm dynamics, lifecycle of startups and innovation bottlenecks
- Entrepreneurial ecosystems in Asia

- Comparative case study analysis of startups in Singapore, Indonesia, and Vietnam

Week 6: Where Do Good Ideas Come From?

- Steven Johnson: liquid networks and adjacent possible
- Von Hippel: user innovation and open innovation models
- Failure, bricolage, and serendipity in idea formation
- Ricardo Hausmann: The Atlas of Economic Complexity

Week 7: Digital Innovation and Platforms

- Network effects and two-sided markets
- Data-driven innovation and platform monopolies
- Challenges in regulating digital ecosystems
- Analysis of digital platforms in Southeast Asia (Grab, Gojek, Lazada)

PART III: Industrial Policy and Governance

Week 8: Modern Industrial Policy Theory

- Dani Rodrik: Growth diagnostics and pragmatic policy design
- Ha-Joon Chang: historical institutionalist perspective
- Keyu Jin: industrial policy in China's rise
- Policy design exercise for middle-income countries

Week 9: Green Industrial Policy and Sustainability

- Market failures in environmental innovation
- Industrial policy tools for decarbonization and green technologies
- Just transition strategies in manufacturing sectors
- Green innovation index and sustainability comparisons across Asia

Week 10: Innovation Governance and the Entrepreneurial State

- Mazzucato: mission-oriented innovation and the “Entrepreneurial State”
- Public-private partnerships and coordination problems
- Innovation agency design (e.g., DARPA, SPRING)
- Evaluation of national Innovation policies in Asia.

PART IV: Innovation Experiences (ASEAN and the World)

Week 11: Case Studies I

- Silicon Valley vs. Shenzhen: contrasting state-market roles
- Taiwan: semiconductor specialization and industrial parks
- Comparative innovation ecosystems.

Week 12: Case Studies II

- Singapore: innovation-led growth and foreign talent strategies
 - South Korea: rapid industrial transformation, chaebol-led clusters, and coordinated innovation governance
 - Regional competition and complementarities
-

PART V: Thailand Focus

Week 13: Thailand's Innovation System and Industrial Policy

- Thailand's industrial transformation: ISI → EOI → Thailand 4.0
- Structure and evolution of Thailand's National Innovation System (NIS)
- Eastern Economic Corridor (EEC) and high-tech zone strategy
- University–industry linkages and innovation capability-building
- BOI investment promotion schemes and SME support policies
- Institutional barriers and coordination failures in Thai innovation policy
- Comparative reflections on middle-income country governance

Week 14: Thailand's Electric Vehicle Industry and Green Transition

- Evolution of Thailand's automotive sector and strategic pivot to EVs
 - Government incentive programs: EV3.0, EV3.5
 - Global value chains and localization strategies
 - Green industrial policy, circular economy, and workforce transition
 - Policy coherence across energy, transport, and innovation
 - Regional comparisons with Indonesia and Vietnam
-

PART VI: Presentations and Wrap-up

Week 15: Student Presentations and Synthesis

- Group presentations (20–30 mins each)
 - Thematic synthesis and discussion
 - Final course reflections and feedback
-

Learning Management and Evaluation

CLO	Learning Management	Evaluation
To be specified	Lectures, seminars, case studies, group work, presentations, policy design exercises, and problem sets	Quizzes, assignments, midterm essay, research project, final exam

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
1	Problem Sets or Quizzes	Periodic	30%
2	Midterm Essay	Week 8	25%
3	Final Exam	End of Semester	15%
4	Research Project (Group Presentation)	Week 15	30%

Main Text

To be announced and updated by the instructor.

Core Readings

- Romer, P. (1990). *Endogenous Technological Change*. Journal of Political Economy.
- Aghion, P., & Howitt, P. (2023). The creative destruction approach to growth economics. *European Review*, 31(4), 312-325.
- Rodrik, D. (2007). *One Economics, Many Recipes: Globalization, Institutions, and Economic Growth*. Princeton University Press.
- Krugman, P. (1998). What's new about the new economic geography? *Oxford review of economic policy*, 14(2), 7-17.
- Kirzner, I. M. (1999). Creativity and/or alertness: A reconsideration of the Schumpeterian entrepreneur. *The review of Austrian economics*, 11(1), 5-17.

- North, D. (1990). *Institutions, Institutional Change and Economic Performance*.
- Suri, T., & Udry, C. (2022). Agricultural technology in Africa. *Journal of Economic Perspectives*, 36(1), 33-56.
- Evans, P. (1995). *Embedded Autonomy: States and Industrial Transformation*.
- Aiginger, K., & Rodrik, D. (2020). Rebirth of industrial policy and an agenda for the twenty-first century. *Journal of industry, competition and trade*, 20(2), 189-207.
- Chang, H.-J. (2002). *Kicking Away the Ladder: Development Strategy in Historical Perspective*.
- Jin, K. (2023). *The New China Playbook*.
- Mazzucato, M. (2013). *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*.
- Johnson, S. (2010). *Where Good Ideas Come From: The Natural History of Innovation*.
- Von Hippel, E. (2005). *Democratizing Innovation*.
- P. Intarakumnerd & P. Charoenporn (2023). *The Window of Opportunity: A Case Study of the Battery Electric Vehicle in Thailand*. *Asia Pacific Journal of Innovation and Entrepreneurship*, 18(4), 322–339.
- A. Kohpaiboon (2020). *Industry 4.0 Policies in Thailand*. ISEAS – Yusof Ishak Institute.
- Intarakumnerd, P., & Jutarosaga, A. (2023). *The Evolution of University–Industry Linkages in Thailand*. *Asian Economic Policy Review*, 18(2), 265–282.
- Kohpaiboon, A. (2024). Policies to promote EV uptakes in Thailand. *Journal of Southeast Asian Economies*, 41(3), 221-244.

Course Policies

- Attendance is mandatory for lectures, seminars, and presentations.
 - Academic integrity is strictly enforced; plagiarism results in failure.
 - Extensions for assignments granted only with valid documentation.
 - Active participation in group work and class discussions is expected.
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Course Outline

EE483 Economics of Regulation and Competition

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: EE311

Course Description:

Study of regulatory theories, competition policies, together with their economic rationales. Study of approaches, methods, instruments and impact assessment of regulation and competition policies. Study of regulatory institutions, governance and performance. Study of case studies from the developed and developing countries.

Course Objectives:

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

1. Explain the key economic theories and rationales underlying regulation and competition policies
2. Describe and compare different regulatory approaches, methods and instruments
3. Assess the impact and performance of regulation and competition policies
4. Analyze the role of regulatory institutions and governance
5. Apply course concepts to real-world case studies from various countries and industries

Required Textbooks:

1. Viscusi, W. Kip, Harrington, Joseph E., & Sappington, David E. M. (2018). *Economics of Regulation and Antitrust* (5th ed.). Cambridge, MA: MIT Press.

Suggested Readings:

- Baldwin, R., Cave, M., & Lodge, M. (2012). *Understanding Regulation: Theory, Strategy, and Practice* (2nd ed.). Oxford: Oxford University Press.
- Decker, C. (2014). *Modern Economic Regulation*. Cambridge University Press.
- Motta, Massimo (2004). *Competition Policy: Theory and Practice*. Cambridge: Cambridge University Press.
- Joskow, P. L. (2007). Regulation of natural monopolies. *Handbook of Law and Economics*, 2, 1227-1348.
- Rysman, M. (2009). The economics of two-sided markets. *Journal of Economic Perspectives*, 23(3), 125-143.
- Hazlett, T.W. (2024) U.S. Antitrust Policy in the Age of Amazon, Google, Microsoft, Apple, Netflix and Facebook. *Const Polit Econ* **35**, 73–108. <https://doi.org/10.1007/s10602-022-09391-9>
- Additional readings may be suggested later.

Term Group Assignment: Project Options

As part of this course, students will work in groups to complete a term project that delves into specific aspects of regulation and competition policy. Each group will choose one of the following topics, and together, they will conduct an in-depth analysis. The projects are designed to allow students to apply the theories and concepts learned in class to real-world scenarios and case studies.

Suggested Project Topics**1. Analysis of Antitrust Case in a High-Tech Industry**

- Investigate a recent antitrust case involving a major technology company. Analyze the economic arguments, the outcome of the case, and its implications for competition policy in the tech sector.

2. Case Study Analysis of a Regulated Industry

- Analyze a specific regulated industry in Thailand, evaluating the role of regulation in shaping market outcomes, including competition, pricing, and innovation, with recommendations for potential reforms.

3. The Role of Competition Policy in Digital Markets

- Investigate the challenges and impact of competition policy in digital markets, focusing on issues like platform dominance, data privacy, Artificial Intelligence and consumer protection.

4. Regulatory Challenges in the Gig Economy

- Examine the regulatory challenges and economic implications of the gig economy (e.g., Uber, Airbnb, Grab), addressing issues such as labor laws, taxation, and market competition.

5. Comparative Analysis of Energy Regulation in Different Countries

- Compare regulatory approaches in the energy sector across different countries including Thailand, assessing the impact on prices, competition, and environmental outcomes.

6. Regulation in Thailand Telecommunications: A Case Study

- Conduct a case study on regulation in the telecommunications industry, analyzing its impact on competition, pricing, and consumer access to services.

7. Emerging Technologies and Competition Regulation Challenges

- Examine the challenges that new and emerging technologies (e.g., AI, blockchain, cryptocurrencies) pose to existing competition regulation frameworks. Discuss potential regulatory responses and the implications for market dynamics and consumer welfare.

Project Guidelines

- **Group Composition:** Groups should consist of 3-5 students.
- **Deliverables:** Each group is required to submit a comprehensive written report (10-12 pages) and present their findings.
- **Evaluation Criteria:** Projects will be evaluated based on the depth of analysis, application of economic theory, clarity of argument, use of evidence, and overall presentation.
- **Submission Deadlines:** A project proposal is due by Week 5 (September 3), with the final report due by Week 16 (November 19).

Tentative Class Schedule:

Week	Date	Topic	Suggested Readings
1	Aug 6	Introduction to Economics of Regulation and Competition. Competition and Welfare	Viscusi et al. (2018), Chapter 1-3 Motta (2004), Chapter 1-2
2	Aug 13	Oligopoly and Collusion	Viscusi et al. (2018), Chapter 4 Motta (2004), Chapter 4
3-4	Aug 20 Aug 27	Market Structure and Dynamic Competition	Viscusi et al. (2018), Chapter 5 Motta (2004), Chapter 2
5-6	Sep 3 Sep 10	Horizontal Mergers and Case Studies	Viscusi et al. (2018), Chapter 6 Motta (2004), Chapter 5
7	Sep 17	Vertical Mergers and Vertical Restraints	Viscusi et al. (2018), Chapter 7 Motta (2004), Chapter 6
8		Midterm Examination	
9	Oct 1	Monopolization and Abusive Practices	Viscusi et al. (2018), Chapter 8 Motta (2004), Chapter 7

Week	Date	Topic	Suggested Readings
10	Oct 8	Competition Policy in the New Economy	Viscusi et al. (2018), Chapter 9
11-12	Oct 15 Oct 22	Thailand's Competition Law and Case Studies	TBD
13	Oct 29	Introduction to Economic Regulation	Viscusi et al. (2018), Chapter 10 Baldwin et al (2012) Chapter 2-4, 7
14	Nov 5	Optimal Pricing	Viscusi et al. (2018), Chapter 12
15	Nov 12	Incentive Regulation	Viscusi et al. (2018), Chapter 13
16	Nov 19	Sectoral Regulations in Thailand	TBD
		Final Examination	

Grading Criteria:

Midterm Examination:	35 %
Final Examination:	40%
Group Assignment and Presentation:	25 %

Expected Learning Outcomes

1. Morality and Ethics EE483

Applicability	Expected Learning Outcomes	Evaluation Method
●	<ul style="list-style-type: none"> Students demonstrate integrity and ethics as a researcher 	Examination and Class discussion
○	<ul style="list-style-type: none"> Students recognizes social responsibility and accountability to the society. 	Examination and Class discussion
●	<ul style="list-style-type: none"> Students recognize the importance of competition policy and economic regulation on consumers' welfare and well-being. 	Examination and Class discussion

2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	51. Explain the key economic theories and rationales underlying regulation and competition policies.	Examination and Class discussion
●	52. Describe and compare different regulatory approaches, methods and instruments.	Examination and Class discussion

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	31. Assess the impact and performance of regulation and competition policies	Examination and assignments
●	32. Analyze the role of regulatory institutions and governance	Examination and assignments
●	33. Apply course concepts to real-world case studies from various countries and industries	Examination and assignments
●	34. Students improve critical thinking in analyzing the problems	Examination and assignments

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students are responsible for the assigned tasks	Group Assignment
○	2. Students work effectively as a team, demonstrating leadership and teamwork	Group Assignment
○	3. Students respects other opinions and provide constructive comments	Group Assignment

5. Quantitative Analysis, communication, and information technology

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students can apply mathematical methods in solving the problems in the fields	Exam and group presentation
●	2. Students communicate effectively and select appropriate presentation approach to deliver discussion points and ideas to solve the problems	Exam and group presentation
○	3. Students use information and communication technologies appropriately to analyze the problems and propose policy recommendations.	Exam and group presentation

Remark: ● Primary expected outcome ○ Secondary expected



Course Outline

EE489 Seminar in Industrial Economics

Semester 1/2025

Number of Credit: 3 Credits (3-0-6)

Prerequisite: Having completed at least two 400-level (or the above level) courses in field of Industrial Economics

Course Description: Seminar and research on topics in Industrial Economics under the supervision of the lecturer.

Course Objectives: In this course, students will learn to conduct a systematic research on their topic of interest. Since this course focuses on industrial economic issues, your topic should be related to industrial economics and/or industrial policies. What the course will do is to stimulate an active-learning environment. Unlike most of the classes you have attended, there won't be that many lectures. My role in this class will be a facilitator and an advisor, rather than a lecturer.

This course is split into two big parts. In the first part, I hope to introduce you to important elements of good research. To do this, we will discuss how to come up with meaningful research questions. We will then, discuss different components of a standard research report (your seminar paper). This includes introduction, literature review, theoretical framework, methodology and findings. You will be assigned to read journal papers discussions about these papers in class.

In the second part, students will take turn to present your research progress. Occasionally, we will turn the class into individual meetings. This is where you discuss specific questions regarding your research and methodology with the instructor.

Main Text: There is no specific textbook for this course. However, I will post journal papers and some good readings on "how to write" on Google Classroom.

Grading Criteria:

1. Paper summary assignments	15%
2. Progress Presentation	10%
3. Class participation and comments	25%
4. Final paper presentation	10%
5. Final paper (report)	40%

About the assignments:

- 1. Group assignments** – Each student is expected to lead at least 1 paper discussion.
- 2. Paper summary** – Students are required to submit a 1-page summary of each paper that will be discussed in class. The summaries are due on the Sunday before class.
- 3. Final research report (your seminar paper)** - The paper should be between 8,000-12,000 words, **excluding** graphs, tables, figures bibliography and appendices. The paper should be well-organized in different parts. For example, 1) introduction 2) literature review 3) theoretical framework and methodology and 4) findings 5) conclusion. We will discuss about each part in more details in class.
 - **AI (such as chatGPT) is only allowed for you to proofread your grammar. However, you are not allowed to use AI to write the report (or any part of the report). Doing so will result in an F for this class.**

Tentative Class Schedule (Tentative):

Week	Agenda	Assignment/Reading
1	Introduction - Review of Course and Research Resources. Identification of Topics.	Read the suggested readings and start thinking about your topic.
2	Individual Meetings to identify research topics, relevant literature	
3	Guest Speaker #1 Then, individual group meeting on topic & methodology	
4	Guest Speaker #2 Then, Lecture 1 – writing &	Paper1, 2
5	Paper discussion (Price Dispersion)	Paper3, 4
6	Paper discussion (Price Discrimination) Lecture 2 – writing	Paper5, 6
7		Yes

Week	Agenda	Assignment/Reading
	Workshop1 – Topic/Literature Review/Methodology	1) A rough draft of your introduction, literature review, methodology (* At least 5 pages long in total -- 1.5 page intro, 1.5 pages literature review, 1 page methodology) 2) 5-minute Powerpoint presentation
8	Midterm Week, No Class.	Work on your paper
9	Paper discussion (Network Effects and Entry Deterrence) Meetings & Improve your papers	Paper 7, 8
10	Paper discussion (Loss-leader competition) Lecture 3 - writing	Paper 9, 10
11	Paper discussion (Platform Competition) Meetings & Improve your papers	Paper 11, 12
12	Present your research progress	
13	Individual meetings.	Max. 10 minutes long.
14	Online individual meetings (optional) * Public holiday (no class)	
15	Individual meetings	
16	Final Presentation	Max. 15 minutes

Expected Learning Outcomes

1. Morality and Ethics **EE489**

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students demonstrate integrity.	Class participation/presentation and report

○	2. Students prioritize social and public benefits over personal ones.	Class participation/presentation and report
●	3. Students are punctual and comply with the code of conduct of the institution and society at large.	Class participation/presentation and report
●	4. Students are responsible and accountable to society, the nation, and the subject of economics.	Class participation/presentation and report
○	5. Students realize the cultural and environmental value of a sustainable society.	Class participation/presentation and report

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.	Class participation/presentation and report
●	2. Students know and understand Thai and global economic structure and the importance of major international economic events.	Class participation/presentation and report
●	3. Students know and understand the instruments of economic analysis.	Class participation/presentation and report
●	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.	Class participation/presentation and report
○	5. Students are informed about related fields including sociology, business administration, education, law policy, and science.	Class participation/presentation and report

3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students have developed individual critical thinking.	Class participation/presentation and report
●	2. Students are sufficiently trained in research skills.	Class participation/presentation and report
●	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.	Class participation/presentation and report

4. Interpersonal Skills and Responsibilities

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

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

Remark: ● Primary expected outcome ○ Secondary expected

Learning Management and Evaluation

CLO	Learning Management	Evaluation
CLO1.1 Identify meaningful research questions	Class discussions; individual meetings; review of past research topics.	Participation; early-stage written submissions.
CLO1.2 Critically review and summarize academic literature.	Assigned journal readings; student-led paper discussions.	Paper summary assignments; in-class discussions.
CLO1.3 Design appropriate methodology for empirical or theoretical analysis.	Lectures on research methods; proposal writing workshops; group consultations.	Midterm draft submissions; individual feedback meetings.
CLO2.1 Present research progress clearly and constructively engage with feedback.	Progress presentations; peer comments; individual meeting sessions.	Progress presentation; final presentation.
CLO2.2 Produce a well-structured research report with academic integrity.	Step-by-step writing support; outline reviews; feedback on structure and argumentation.	Final seminar paper (8,000–12,000 words).

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
CLO1.1 Identify meaningful research questions	Class participation; initial topic proposals.	Weeks 1–3	10%
CLO1.2 Critically review and summarize academic literature.	Paper summary assignments; leading paper discussions.	Weeks 4–6, 9–11	15%
CLO1.3 Design appropriate methodology for empirical or theoretical analysis.	Rough draft submissions; methodology feedback sessions.	Weeks 6–7, 13	10%
CLO2.1 Present research progress clearly and constructively engage with feedback.	Progress presentation; peer feedback during class.	Week 12, 16	20%
CLO2.2 Produce a well-structured research report with academic integrity.	Final presentation and final report.	Week 16 (presentation), Week 17 (report)	45%