BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

(Tentative) Course Syllabus
for
Economics Courses
Semester 1/2025

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE211 PRINCIPLES OF MICROECONOMICS

Semester 1/2025

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

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

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

Applicability	Expected Learning Outcomes
●	1.1 Students demonstrate integrity.
O	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.
O	1.4 Students are responsible and accountable to society, the nation, and the subject of economics.
O	1.5 Students realize the cultural and environmental value of the sustenainable society.

2. Knowledge

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

3. Intellectual Development

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

4. Interpersonal Skills and Responsibilities

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

5. Quantitative Analysis, communication and information technology

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

Remark: ● Primary expected outcome O Secondary expected outcome

Textbooks:

Mankiw, N.G., (2018) **Principles of Microeconomics**, 8th ed., Cengage, (ISBN-10: 1-305-97149-3 ISBN-13: 978-1-305-97149-3) ***with MINDTAP***

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

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

Evaluation:

Homework Assignments, Quizzes and Class Attendances	10 points
Midterm Exam	40 points
Final Exam	50 points
Total	**100 points**

Study Plan:

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

Sessions	Date	Topics	Activities/Text & Materials/ Media
#1: **Economics: The Study of Choice**	10 – 17 Aug (2 lectures)	○ **What is Economics all about?** ○ **The Basic Economic Problems** ○ **Circular Flow** ○ **Microeconomics Vs. Macroeconomics** ○ **Confronting Scarcity: Production Possibilities Curve (PPC)** ▪ Assumptions ▪ An Illustration of Scarcity, Choice and Opportunity Costs Using the PPC ▪ Economic Growth and Changes in the PPC ○ **Economists' Tool Kit** ▪ Equilibrium Analysis ▪ Comparative Static Analysis ▪ Constrained Optimization	**Read**: Mankiw, chs.1-2; KW, chs.1-2
#2-#3: **Demand, Supply, and Equilibrium**	19 – 31 Aug (4 lectures)	○ **Market: Meaning and Components** ○ **Demand: Buyers' Behavior** • 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** • Meaning • Law of Supply • Firm and Market Supplies • The Determinants of Supply (or Supply Shifters) • The Distinction of "Change in Quantity Supplied" and "Change in Supply"	**Read**: Mankiw, ch.4; KW, ch.3

Sessions	Date	Topics	Activities/Text & Materials/ Media
		○ **Market Equilibrium: When Demand and Supply Meet** • 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** • When demand curve shifts • When supply curve shifts • When both demand and supply curve simultaneously shift	
#4: **Elasticity: A Measure of Response**	2 – 7 Sep (2 lectures)	○ **Elasticity** ▪ Meaning ▪ Measurement ▪ Why Elasticity? :Absolute Change, Relative Change, and Percentage Change ○ **Price Elasticity of Demand: Defined** ▪ Computing Price Elasticity of Demand • Point-Price Elasticity of Demand • Arc-Price Elasticity of Demand • Determinants of Price Elasticity of Demand • Total Revenue and Price Elasticity of Demand ○ **Other Demand Elasticities** • Income Elasticity of Demand • Cross Price Elasticity of Demand ○ **Elasticity of Supply: Meaning, Measurement and Determinants**	**Read:** Mankiw, ch.5; KW, ch.6
#5: **Consumers, Producers, and the Efficiency of Markets**	9 Sep (1 lecture)	○ **Consumer Surplus** ▪ Willingness to Pay (WTP) ▪ Using the Demand Curve to Measure Consumer Surplus ▪ Effect of a Price Change on Consumer Surplus	**Read:** Mankiw, ch.7; KW, ch.4

Sessions	Date	Topics	Activities/Text & Materials/ Media
		▪ What Does Consumer Surplus Measure? ○ **Producer Surplus** ▪ 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**	
#6 **Applications on Demand, Supply, and Government Policies**	14 Sep (1 lecture)	○ **Government Intervention in Market Prices** ▪ Price Ceilings ▪ Its effect on price and quantity ▪ Its inefficiency in resource allocation ▪ Welfare Analysis of Price Ceilings (Who gain and lose from the policy?) ▪ Price Floors ▪ 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 • 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 • Its effect on price consumers paid, price producers received, consumes' tax	**Read:** Mankiw, ch. 6; KW, chs.5 and 7

Sessions	Date	Topics	Activities/Text & Materials/ Media
		burden, producers' tax burden, government tax revenue, consumer and producer surplus, and total surplus • Demand and Supply Elasticities: Implications on tax burdens incurred by consumers and producers • The differences between Unit Tax imposed on producers and on consumers ▪ Effects of Subsidy Given to Producers	
#7-#9: **The Theory of Consumer Choice**	16 – 23 Sep (4 lectures)	○ **Utility Theory (or Cardinal Approach)** • 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 • The Meaning of Indifference Curve • Properties of Indifference Curve • Slope of Indifference Curve and Marginal Rate of Substitution (MRS) ○ What the Consumer Can Afford • Budget Line: Meaning, Slope, and Change in Budget Line ○ How the Consumer Optimally Chooses	**Read:** Mankiw, ch.21; KW, chs.10-11; Frank, chs.3-4;; Lipsey, ch. 6 (& appendix);

Sessions	Date	Topics	Activities/Text & Materials/ Media
		○ Consumer Equilibrium and Change in Equilibrium ○ Derivation of an Individual Demand Curve Using Indifference Curves and Budget Lines ○ How a Consumer Responds to Change in Price: Substitution and Income Effects (Hicksian Approach)	
#10-#12: **Production and Cost in the Short-Run and in the Long-Run**	5 – 26 Oct (7 lectures)	○ **Firm and the Objectives of Production** ○ **Production Functions** ○ **The Meaning of Cost** ▪ 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** ▪ 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** ○ Isocost ○ Least Cost Combination ○ Expansion Path ○ The Meaning of Returns to Scale ○ Long-run Costs of Production: LTC, LAC, LMC ○ Relationship between Expansion Path and LTC ○ Relationship between Long-run and Short-run Costs	**Production in the Short-Run** **Read:** Mankiw, ch.13; 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	Date	Topics	Activities/Text & Materials/ Media
		○ Economies and Diseconomies of Scale	
#11-#13: **Market Structure**	28 Oct – 16 Nov (6 lectures)	○ **Meaning** ○ **Structure of Perfect and Imperfect Markets** ○ **Producer's Objectives** ○ **The Meanings of Profits and Loss** ○ **Profit Maximization** ▪ TR-TC Approach ▪ MR-MC Approach ○ **Perfectly Competitive Market** ▪ 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** ▪ 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.14-15; KW, chs. 13-14
#14: **Factor Markets**	18 – 23 Nov (2 lectures)	○ **Demand for factor as a derived demand** ○ **The firm's demand for a factor** ○ **The supply of a factor** ○ **Determination of factor prices** Under the two scenarios: 1) Both factor market and output market are perfectly competitive. 2) Factor market is perfectly competitive but output market is under monopoly	**Read:** Mankiw, ch.18; KW, ch. 20; Perloff, ch. 15.1-15.3
#15: **Market Failure**	25 Nov (1 lecture)	○ **Meaning and Characteristics** ○ **Origins of Market Failure** ▪ Monopoly Power ▪ Public Goods	**Read:** Mankiw, chs.10-11, 15 and 22; KW, chs. 17-18

Sessions	Date	Topics	Activities/Text & Materials/ Media
		▪ Externalities ▪ Asymmetric Information ○ **Consequences of Market Failure** ○ **Correction of Failure and Imperfections: Government or Private sector**	**Watch:** "Erin Brockovich" , "Day After Tomorrow".

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE212 PRINCIPLES OF MACROECONOMICS

Semester 1/2025

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

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 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.

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

Coyle, D. (2014). ***GDP: A Brief but Affectionate History***. Princeton University Press

Core-Econ, ***The Economy*.**

Thorn Pitidol (2018) Changing Thailand's Future with Tax Reform, FES-Thailand
https://library.fes.de/pdf-files/bueros/thailand/14720.pdf

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

Krugman, P. and Robin Wellls (2018), Macroeconomics (5th ed.): Worth Publishers.

Grading Criteria:

Essay	10%
Group assignments/quizzes	10%
Midterm exam	30%
Final exam	50%

Essay:

Student is required to write an essay (approximately 800 words). Its objective is to encourage student to read, think, analyse and write academic essay. *Plagiarism will not be tolerated.* More detail about topics and structure will be announced in class.

Tentative Class Schedule:

Topics

1. Introduction to Macroeconomics (4.5 hours)

1.1 Introduction to Economics

1.2 Macroeconomic objectives and macroeconomic policy
1.3 A brief history of macroeconomics
  1.3.1 Keynes VS Hayek
1.4 Basics in macroeconomics
  1.4.1 Tools in understanding macroeconomics
  1.4.2 Tradeoffs between macroeconomic objectives
  1.4.3 Basic concepts in macroeconomics

1.4.3.1 Resource maintenance: stock vs. flow variables
1.4.3.2 Production: real vs. nominal variables
1.4.3.3 Distribution
1.4.3.4 Consumption

1.5 Well-being, poverty, inequality

Read: Case, Fair & Oster, ch. 5, 7; LRS, ch. 1, 2, 19, 31; Mankiw ch. 1, 2, 23
First chapter of the ebook from http://www.core-econ.org/

2. National Income and National Product (4.5 hours)

2.1 Circular flow of production and expenditure
2.2 Meaning and significance of national income accounting
2.3 GDP: A brief history
2.4 Distinction between GNP and GDP
2.5 Measurement of GDP
- 2.5.1 Expenditure approach
- 2.5.2 Income approach
- 2.5.3 Product approach

2.6 Applications of GNP in economic analysis
- 2.6.1 Distinction between Money and Real GNP
- 2.6.2 GNP per capita
- 2.6.3 GDP growth
- 2.6.4 Some remarks on the applications of GDP concept

2.7 Measurement of price level
2.8 Measurement of unemployment

Read: Case, Fair & Oster, ch. 6; LRS, ch.20, Mankiw ch. 10, 11

Coyle, D. (2014). GDP: A Brief but Affectionate History. Princeton University Press

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 and consumption theories
  - 3.2.1.1 Absolute income hypothesis
  - 3.2.1.2 Permanent income hypothesis
  - 3.2.1.3 Life cycle hypothesis
- 3.2.2 Desired aggregate investment expenditure
  - 3.2.2.1 Determination of aggregate investment
  - 3.2.2.2 Present Value (PV) and net present value (NPV) concept
  - 3.2.2.3 MEC and MEI
  - 3.2.2.4 The accelerator principle
- 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

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

4. Fiscal Policy at Work (3 hours)

4.1 Meaning, objectives and tools of fiscal policy
4.2 Effects of fiscal policy on equilibrium national income
4.2.1 The government spending multiplier
4.2.2 The tax multiplier
4.2.3 The balanced-budget multiplier
4.3 Fiscal policy and its effectiveness in solving macroeconomics problems
4.4 The real world of fiscal policy
4.4.1 Fiscal budget
4.4.2 Taxation
4.4.3 Government debt
4.5 Case Study: Reforming Thailand's Tax System

Read: Case, Fair & Oster, ch. 9; LCR, ch. 32, Froyen Ch. 18, Mankiw ch. 21
Thorn Pitidol (2018) Changing Thailand's Future with Tax Reform, FES-Thailand
https://library.fes.de/pdf-files/bueros/thailand/14720.pdf

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

5.1 Demand for money
5.1.1 Transaction demand for money
5.1.2 Precautionary demand for money
5.1.3 Speculative demand for money
5.2 Supply of money
5.2.1 The banking system and money creation
5.2.2 Money multiplier and the size of money supply
5.3 Equilibrium in money market
5.4 Monetary policy
5.4.1 The role of the central bank
5.4.2 Controlling the quantity of money

Read: Case, Fair & Oster, ch. 10-11; 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 AD curve from IS-LM model
    8.1.2 Move along AD curve
    8.1.3 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 AD-AS model
    8.3.2 Changes in equilibrium in AD-AS model
8.4 The analysis of fiscal policy and monetary policy using 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

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Expected Learning Outcomes
●	1.6 Students demonstrate integrity.
O	1.7 Students prioritize social and public benefits over personal ones.
●	1.8 Students are punctual and comply with the code of conduct of the institution and society at large.
O	1.9 Students are responsible and accountable to society, the nation, and the subject of economics.
O	1.10 Students realize the cultural and environmental value of the sustainable society.

2. Knowledge

Applicability	Expected Learning Outcomes
●	2.6 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.7 Students know and understand Thai and global economic structure, and the importance of major international economic events.
●	2.8 Students know and understand instruments of economic analysis.
●	2.9 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.
O	2.10 Students are informed about related fields including sociology, business administration, education, law policy, and science.

3. Intellectual Development

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

4. Interpersonal Skills and Responsibilities

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

5. Quantitative Analysis, Communication and Information Technology

Applicability	Expected Learning Outcomes
●	5.1 Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.
O	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.

BACHELOR OF ECONOMICS
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Course Outline

EE311 Microeconomics Theory

Semester 1/2025

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

Course Description:

Prerequisites: EE211 and MA216

Demand and supply analysis, consumer behaviour and demand theory, production and cost of production, different types of product market structures, price determination in factor markets, decision-making over time, general equilibrium analysis, and introductory welfare economics and public policy.

Ojectives of the course:

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

Method of Instruction: There are a total of 60 class-hours for this course or 4 hours per week. Class activities in each week will consist of three hours of lectures, and one hour of discussions, exercises and quizzes. Students are expected to work on about four 15-minute quizzes during class hours, and participate in class discussions.

Student Evaluation:

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

Main Textbooks

There are several textbooks that cover similar materials. **The first three books will be used extensively, but, for many topics, they can be used interchangeably with the other listed books.** It is important to realize, however, that no single textbook contains **all** the materials covered in this course. It is therefore essential that you read several sources, and that you review the concepts listed under "REVIEW" on your own, so that our time can be more valuably spent on new topics.

1) **Besanko, David, and Ronald R. Braeutigam, *Microeconomics: An Integrated Approach*, (4th ed.) New York:John Wiley& Sons, 2014.**
2) **Pindyck, Robert S. and Daniel E. Rubinfeld. *Microeconomics,* (9th ed.), New Jersey: Prentice -Hall, 2018.**
3) **Perloff, *Microeconomics*, (8th ed.) Boston: Peason, 2018.**
4) Salvatore, Dominick, *Microeconomics: Theory and Applications,* (5th ed.), New York: Oxford University Press. 2008.
5) Frank, Robert H. (8th ed.). *Microeconomics and Behavior,* New York: McGraw-Hill, 2010.
6) Miller, R.L., and R.P.H. Fishe. *Microeconomics: Price Theory in Practice,*New York: Harper Collins, 1995.
7) Hirshleifer, Jack *Price Theory and Applications* (6th ed.), New Jersey: Prentice - Hall, 1998.
8) Griffiths, Alan and Stuart Wall, *Microeconomics: Theory & Applications,* London: Longman, 2000.
9) Nicholson, Walter and Christopher M. Snyder, *Intermediate Microeconomics and Its Application,* (11th ed.), Dryden Press, 2009.
10) Varian, Hal *Intermediate Microeconomics*, (5th ed.) New York: Norton, 1999.

Supplementary Reading (for fun)**:**

Levitt, Steven D. and Stephen J. Dubner, *Freakonomics,* New York: Harper Torch, 2006.

Harford, Tim**,** *The Undercover Economist: Exposing Why the Rich Are Rich, the Poor Are Poor--and Why You Can Never Buy a Decent Used Car!*, Oxford University Press, 2006.

Marshall Jevons, *Murder at the Margin,* New Jersey: Princeton University Press, 1978, 1993.

The Fatal Equilibrium, New York: Balantine Books, 1985.

A Deadly Indifference, New Jersey: Princeton University Press, 1995.

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

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

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

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

Movies:

"A Beautiful Mind" Universal Studios, 2001.

"An Inconvenient Truth", 2006.

"Inside Job", 2010.

Some Useful Links:

Student Resources for Frank's text:

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

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

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

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

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

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

The Undercover Economist: http://timharford.com

The Airport Economist: http://www.theairporteconomist.com

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

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Expected Learning Outcomes	Evaluation Method
●	1.11 Students demonstrate integrity.	Participation, Homework, Exam
O	1.12 Students prioritize social and public benefits over personal ones.	
●	1.13 Students are punctual and comply with the code of conduct of the institution and society at large.	Participation, Homework, Exam
O	1.14 Students are responsible and accountable to society, the nation, and the subject of economics.	
O	1.15 Students realize the cultural and environmental value of the sustainable society.	

2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	2.11 Students know and understand modern economics principles and theories, and are up to date with new developments.	Participation, Homework, Exam
●	2.12 Students know and understand Thai and global economic structure, and the importance of major international economic events.	Participation, Homework, Exam
●	2.13 Students know and understand instruments of economic analysis.	Participation, Homework, Exam
●	2.14 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.	Participation, Homework, Exam

O	2.15 Students are informed about related fields including sociology, business administration, education, law policy, and science.	

3. Intellectual Development

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

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes	Evaluation Method
●	6.1 Students are responsible for assigned tasks and work in groups effectively.	Participation, Homework, Exam
●	6.2 Students have problem-solving skills	Participation, Homework, Exam
O	6.3 Students show leadership skills and team spirit.	
●	6.4 Students are always improving themselves.	Participation, Homework, Exam
O	6.5 Students have good interpersonal skills, adapting and working under different conditions.	

5. Quantitative Analysis, Communication and Information Technology

Applicability	Expected Learning Outcomes	Evaluation Method
●	5.1 Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	Participation, Homework, Exam
○	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.	Participation, Homework, Exam

Teaching Plan (Subect to change):

1. Introduction

1.1 Why Study Microeconomics?

Application of Demand and Supply concepts: government intervention

Review: Concepts of consumer and producer surplus.

Read: Besanko & Braeutigam Chs. 2 & 9, Pindyck & Rubinfeld Chs. 2 and 9, Perloff Chs.2,3,9, Frank Ch. 2, Salvatore Ch.2.

2. Consumer Behavior and Demand Theory

2.1 Indifference Curve Analysis

- assumptions
- analysis of goods, bads, neuters

Review: Properties of indifference curves.

Read: Besanko & Braeutigam Ch. 3 & 4., Pindyck & Rubenfeld Ch. 3, Perloff Ch.4 & App. 4A, Salvatore Ch.3 (3.1-3.2), Frank Ch.3, Hirshleifer Ch. 3(pp.70-73), Miller & Fishe Ch.5,

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

2.2 Consumption equilibrium and changes in equilibrium

- consumption equilibrium and duality
- changes in income
- changes in price: income effect and substitution effect
- compensated and uncompensated demand curves
- market demand
- network externalities
- application: vouchers vs. income transfers
- revealed preferences, index numbers, and welfare changes

Review: Construction of demand curves, elasticities.

Read: Besanko & Braeutigam Ch. 5, Pindyck & Rubenfeld Ch. 4, Appendix, Perloff Ch. 5; Salvatore Ch 3 (3.4-3.5) Chs.4 -5, Frank Ch.4-5, Appendix; Hirshleifer Ch.4,Ch.5 (pp.117-152), Miller & Fishe Ch.4 (pp.119-120); Appendix 5A and Ch.6, Griffiths and Wall Ch.1 (pp.33-50), Ch.2, (pp.55-68) , Varian Ch. 7.8 & Ch. 8.

2.3 Intertemporal consumption (consumption overtime)

- time preference and time value of money
- cases: regular income, productive opportunities, inheritance
- supply of saving
- consumption and pricing of durable goods and non-renewable resouces

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

2.4 Consumption under uncertainty

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

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

3. Transactions Costs and Institutional Economics

- costs of market exchange
- components of transactions costs
- optimal search
- meaning of “institutions”
- origin of firms, an example of an institution
- rules, behavior and objectives of the firm
  - profit maximization
  - utility maximization and satisficing

Read: Miller & Fishe Ch.7, Frank Ch.6 Appendix, Griffiths and Wall Ch.5, Baumol W.J.Economic Theory and Operations Analysis, 4 th ed.(Prentice – Hall) 1977, Ch.15, Kreps, A Course in Microeconomic Theory, (Harvester Wheatsheaf) 1990, Ch. 20, Coase "The Nature of the Firm", Economica, 4:386-405, 1937, Stigler, "The Economics of Information", Journal of Political Economy, 69:3, 1961.

4. Production and Costs

4.1 Production equilibrium

- least cost combination
- duality in production
- relationship between product curves and cost curves

4.2 Production functions and costs

- homogeneous production functions and their properties
- returns to scale
- elasticity of substitution

Review: All product and cost curves; e.g. AP, MP, TP, TC, AC, MC.

Read: Besanko & Braeutigam Ch. 6-8, Pindyck & Rubinfeld Chs.6-7, Perloff Ch.6-7,

5. Product Markets

5.1 Perfectly competitive markets

- long-run equilibrium and efficiency

Review: Characteristics of perfectly competitive markets, price and output under perfect competition.

Read: Besanko & Braeutigam Ch. 9, Pindyck & Rubinfeld Ch.8, , Perloff Ch. 8, Hirshleifer & Glazer Ch.7 (pp.175-186), Salvatore Ch.9, (pp.240-248), Frank Ch.11, Miller and Fishe Ch.10, Griffiths and Wall Ch.6.

5.2 Monopoly

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

Review: Simple monopoly

Read: Besanko & Braeutigam Ch. 11.1-11.6 & 12, Pindyck & Rubinfeld Ch.10 (10.1-10.4 and 10.7) & Ch.11, Perloff Ch.11,12; Salvatore Ch.10 & Ch.13, Frank Ch.12, Miller & Fishe Ch.11-12,

5.3 Monopolistic competition

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

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

5.4 Oligopoly

- meaning of oligopoly
- various models of oligopoly:
  - kinked demand
  - collusion and cartel
  - Cournot, Bertrand and Stackelberg
  - price leadership or dominant firm
- game theory and its application to oligopolistic markets
  - introduction
  - equilibrium: Dominant strategy, Nash equilibrium, Maximin
  - Prisoners' dilemma
  - sequential games
  - Strategic moves: entry deterrence

Read: Besanko & Braeutigam Ch. 13.1-13.4 & 14, Pindyck and Rubinfeld Ch.12.2-12.6 & Ch.13, Perloff Ch. 13,14, Hirshleifer Ch.10, Salvatore Ch.11 (11.3-11.8) Ch. 12 , Frank Ch.13, Miller & Fishe Ch.13 (pp.526-557); Chiang, Fundamental Methods of Mathematical Economics, Ch. 21.

Watch: "A Beautiful Mind"

6. Factor Markets

6.1 Competitive factor markets

- demand for a factor (cases of one variable input and several variable inputs)
- supply of inputs to a firm and market supply of inputs
- price and quantity of factor employed

Read: Pindyck & Rubinfeld Ch.14.1-14.2, Perloff Ch.5 (5.5), 15 (15.1).Hirsheifer Ch.11, Salvatore Ch. 14, Frank Ch.14, Miller & Fishe Ch.14 (pp.565-592),Griffiths & Wall Ch.9 (pp.379-383).

6.2 Factor Markets with Monopoly and Monopsony Power

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

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

6.3 Factor Markets with Monopoly Power of Seller of Input

- monopoly power over the wage rate
- price and quantity of factor employed
- bilateral monopoly

Read: Pindyck & Rubinfeld Ch.14.4, Hirshleifer Ch.12 (12.4) (pp.356-363), Salvatore Ch.15, Miller & Fishe Ch.14 (pp.599-606).

6.4 Economic Rent

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

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

7. General Equilibrium Analysis and Welfare Economics

7.1 General Equilibrium: consumption, production, and exchange

- welfare criteria
- Pareto optimum and efficiency
- perfect competition and Pareto optimum
- welfare maximization and Pareto optimum conditions

Read: Besanko & Braeutigam Ch. 16.1-16.4.Pindyck & Rubinfeld Ch.16 (16.1-16.4, 16.6), Perloff Ch. 10, Hirshleifer Ch.15 (15.2), Miller & Fishe Ch.16, Salvatore Ch.17, Frank Ch.16,

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"

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE312 Macroeconomic Theory

Semester 1/2025

Number of Credit: 4 credits

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

Course Description: 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; economic stabilization policies; growth theory, micro-foundation of macroeconomics focusing on real business cycle model, new classical model, and new Keynesian model; applications of Macroeconomic theory to analyze economic situations.

Course Objectives:

To provide students with an understanding of macroeconomic theory and its analytical approach to economic system, as well as an ability to apply macroeconomic theory to economic problems and policies.

Expected Learning Outcomes

1. Morality and Ethics EE312

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students demonstrate integrity.	Quizzes & Group HW / Exams
O	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 & Group HW / Exams
O	4. Students are responsible and accountable to society, the nation, and the subject of economics.	
O	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 & Group HW / Exams
●	2. Students know and understand Thai and global economic structure and the importance of major international economic events.	In-class participations / Quizzes & Group HW / Exams
●	3. Students know and understand the instruments of economic analysis.	In-class participations / Quizzes & Group 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 entrepreneurial economics as well as agribusiness.	In-class participations / Quizzes & Group HW / Exams
O	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 & Group HW / Exams
●	2. Students are sufficiently trained in research skills.	In-class participations / Quizzes & Group 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 & Group 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 & Group HW / Exams
●	2. Students have problem-solving skills.	In-class participations / Quizzes & Group HW / Exams
O	3. Students show leadership skills and team spirit.	
●	4. Students are always improving themselves.	In-class participations / Quizzes & Group HW / Exams
O	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
O	1. Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	
O	2. Students communicate effectively and select appropriate presentation methods.	
O	3. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	

Remark: ● Primary expected outcome O Secondary expected

Main Text:

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

Suggested Readings:

Supplement readings will be posted on the *Google Classroom*.

Assessments:

• Quizzes & HW	15	points
• Mid-term exam	40	points
• Final exam	45	points
Total	100	points

Note: Evaluation methods and weights are subject to change.

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 determine the letter grade, I use a mixed procedure between the criteria-based and the distribution-based method. When the criteria-based grading can be directly applied, I follow the general guideline of the university described below.

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:

Topics	Reading
1. Overview and introduction *(0.5 lecture)*	
1.1) **Class overview**: ***logistic information***	*W. Ch. 1 / Ch. 2*
1.2) **Roadmaps**: ***where we are headed***	*Self-study Video clip*
1.3) **Measuring macroeconomic activities (self-study)**	
Part I Closed-economy business cycle fluctuations (9 lectures)	
2. Introduction to business cycle studies and economic fluctuation *(0.5 lecture)*	*W. Ch. 3*
2.1) **What is a business cycle?**	*M. Ch. 10*
2.1.1) **Nature of macroeconomic data**	
2.1.2) **Measuring and characterizing business cycles**	
2.2) **Framework for business cycles theory**	
2.2.1) **Ingredient of business cycle theories**	
2.2.2) **Overview of AD-AS framework**	
3. The core AD-AS framework *(5 lectures)*	
3.1) **The Classical long-run macroeconomy (1.5 lecture)**	F. *Ch. 3 - 4*
3.1.1) **Aggregate production function**	*M. Ch 3*
a) Key properties and Graphical illustration	
b) Law of diminishing marginal product	
3.1.2) **Labour market outcome**	
a) Labour supply	
b) ***Labour demand***	

Topics	Reading
3.1.3) **Natural level of aggregate variables and Potential output**	
3.2) **Foundation of aggregate demand theory (0.5 lecture)**	*Self-study Video clip*
3.2.1) **Keynesian DAE**	
3.2.2) **The IS-LM model**	*F. Ch. 5 - 6*
3.3) **Foundation of aggregate supply theory (1.0 lecture)**	
3.3.1) **Long-run aggregate supply**	
3.3.2) **Short-run aggregate supply**	*M. Ch. 14*
3.4) **AD-AS equilibrium and business cycles (2.0 lectures)**	
3.4.1) **Short-run fluctuations**	
a) Shocks and Propagation mechanism	
b) Macroeconomic policy analysis	
3.4.2) **Self-adjusting mechanism and Medium-run fluctuations**	
a) Swift adjustment process	
b) Gradual adjustment process	
c) Staggered adjustment process	
3.4.3) **How well does the AD-AS framework fit the data? (optional)**	
4. Inflation and business cycles (3.5 lectures)	
4.1) **Some stylized facts of inflation**	*M. Ch. 5*
4.2) **Long-run theory of inflation**	
4.2.1) **Quantity theory of money**	
4.2.2) **Cost and benefit of inflation**	
4.3) **Business cycles perspectives of inflation**	*M. Ch. 14*
4.3.1) **The Phillips curve and its derivation**	
4.3.2) **Short-run *and* Long-run Phillips curve**	
4.4) **Macroeconomic policy design**	
Part II Open-economy business cycle fluctuations (4.5 lectures)	
5. International financial markets *(1.5 lectures)*	
5.1) **Keep tracking in the globally connected economy: *international accounts***	*Self-study video clip*
5.1.1) **Current account**	
5.1.2) **Capital account**	*F. Ch 14*
5.1.3) **Balance of payments account**	

Topics	Reading
5.2) **Foreign exchange market**	*F. Ch 14*
5.2.1) **Exchange rate determination: *Long-run PPP approach***	
5.2.2) **Exchange rate determination: *Short-run approach***	
a) *Demand and Supply for foreign currency*	
b) Equilibrium exchange rate and Balance of payments	
5.2.3) **Exchange rate economics**	
a) *Flexible exchange rate regime*	
b) Fixed exchange rate and Implementations	
c) Exchange rate policies and sterilizations	
6. Framework for open-economy business cycle analysis *(3 lectures)*	*F. Ch 15*
6.1) **An open-economy macroeconomics model: *IS-LM-BP framework***	
6.1.1) **Open-economy IS curve**	
6.1.2) **Open-economy LM curve**	
6.1.3) **The balance of payment curve (BP curve)**	
6.2) **Disequilibrium and adjustments towards equilibrium**	
6.2.1) **Adjustments under flexible exchange rate**	
6.2.2) **Adjustments under fixed exchange rate**	
6.3) **Macroeconomic shocks and open-economy propagation mechanism**	
6.3.1) **Origin of the fluctuations**	
6.3.2) **Spill-over effect and international transmission of shocks**	
6.3.3) **Equilibrium adjustment under different exchange rate regimes**	
6.3.4) **The case of flexible exchange rate regime**	

Topics	Reading
6.4) **Macroeconomic policies under a small opened economy** 6.4.1) **Macroeconomic imbalances and policy corrections** 6.4.2) **Issues on policy effectiveness** 6.4.3) **The impossibility trinity theorem**	
Mid-term Exam:	
Part III: Micro-foundation approach to macroeconomics	
7. A Closed-Economy One-Period Macroeconomic Model *(4 lectures)* 7.1) **General equilibrium macroeconomy and Circular flow of macroeconomy**	*W. Ch 4*
7.2) **Optimizing-agent decision** 7.2.1) **Households** ***a) Preferences over consumption and leisure*** ***b) Choice set and constraint*** ***c) Work-leisure decision and labor supply*** 7.2.2) **Firms** ***a) Production and technology*** **b) *Profit maximization problem and labour demand***	*W. Ch 5*
7.3) **Competitive equilibrium and Pareto optimality** 7.3.1) **Government and tax** 7.3.2) **Equilibrium** 7.3.3) **Pareto optimality**	
7.4) **Model applications** 7.4.1) **Changes in government spending** 7.4.2) **Changes in total factor productivity**	
7.5) **How well does the model fit the data?**	
8. Two-Period model: the consumption-savings decision *(3 lectures)*	*W. Ch. 9*

Topics	Reading
8.1) **Credit market and allocation over time**	
8.2) **Preference over life-time consumption**	
8.2.1) **Intertemporal life-time consumption problem**	
8.2.2) **Behaviour of current consumption and its determinants**	
a) Effect of interest rate on consumption and saving behaviour	
b) Effect of permanent and temporary increases in income	
8.3) **Government sector and Competitive equilibrium**	
8.4) **The Ricardian equivalence theorem**	
9. A Real Intertemporal Model with Investment *(5 lectures)*	
9.1) **Circular flow of a production economy over time**	*W. Ch.11*
9.2) **Optimizing-agent decision under intertemporal environment**	
9.2.1) **Consumer's problem**	
*a) **Current labour supply***	
*b) **Demand for consumption goods***	
9.2.2) **Consumer's problem**	
*a) **Current labour demand***	
*b) **Investment decision***	
9.3) **Competitive equilibrium**	
9.4) **Model applications**	
9.4.1) **Changes in government spending**	
9.4.2) **Change in capital stock**	
9.4.3) **Change in total factor productivity**	
10. Long-term Economic Growth *(4 lectures)*	
10.1) **Long-term growth stylized facts**	W. Ch.7
10.2) **Growth accounting**	
10.3) **Solow growth model**	
10.4) **Theory confronts with data**	W. Ch.8
10.5) **Income disparities and Growth policies**	
Final Exam (Required):	

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE 320 Introductory Mathematical Economics

Semester 1/2025

Number of Credit: 3 credits

Prerequisite: a) EE 211, EE 212 and MA 216 (or MA211) or

b) EE 213, EE 214 and MA216 (or MA 211)

Course Description:

Applying mathematical concepts and tools such as functions, equations, matrices, univariate and multivariate differential calculus, constrained and unconstrained optimization and integral to explain concepts of microeconomic and macroeconomic theory and to understand the relationship between different economic variables. 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.

Main Text:

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

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Learning Goals
●	1.1 Students demonstrate integrity.
O	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.
O	1.4 Students are responsible and accountable to society, the nation, and the subject of economics.
O	1.5 Students realize the cultural and environmental value of the sustenainable 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.
O	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 in Thailand. Based on analsyis 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.

Course Outline:

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
3. Static and Comparative Static Equilibrium Analysis - 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	CW. Ch. 3

Topics	
4. Linear Model, Basic Matrix Algebra and Applications - 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: - Partial market equilibrium - Excise tax and market equilibrium - Simple macroeconomic model - IS-LM model	CW. Ch. 4, 5
5. Nonlinear Model and Differential Calculus in Economic Theory - Quadratic theory - Other nonlinear functions - Slope and derivatives of a function - Rule of differentiation - Non differentiable functions - Examples in Economics - Derivative and marginality - Relations among the total, the average and the marginal functions - Elasticity, total revenue and marginal revenue	CW. Ch. 6, 7, 8
6. Optimization without Constraints: One Independent Variable Case - Maxima, minima and inflection point - Convexity and concavity - Maximize profits - Competitive market case - Monopoly case - Effects of taxes - Lump-sum tax - Profit tax - Excise tax - Maximization of tax revenue	CW. Ch. 9
MIDTERM	

Topics	
7. Derivatives of More-Than-One Independent Variable Function - First-order partial derivatives - Second-order partial derivatives - Differential - Total differential - Total derivatives - Implicit function and its derivative - Examples in economics - Partial market equilibrium - Multipliers in macroeconomic models - Utility function - Production function	CW. Ch. 7, 8
8. Optimization without Constraint: More-Than-One Independent Variable Cases - Conditions for maximum or minimum - Third degree price discrimination - Multiplant-firm - Multiproduct-firm	CW. Ch. 11
9. Optimization under Equality Constraint - Lagrange multiplier - Conditions for optimization - Maximize output level subject to cost constraint - Minimize cost subject to output constraint - Minimize utility subject to fixed budget	CW. Ch. 12
10. Integration and Its Application - Terminology in Integration - Rules of Integration - Definite Integration - Applications: - 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 - Consumption and saving functions from marginal propensity functions - Capital formation and investment functions - Consumer surplus, producer surplus and total surplus - First degree price discrimination	CW. Ch. 14
FINAL	

Note: The class schedule shown above may be adjusted during the semester as needed.

Assessment:

1.	Assignment	15%
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.

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE 325 Introductory Econometrics

Semester 1/2025

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

Prerequisite: EE211, EE212, MA216 (or MA211), and ST216 (or ST211).
(Credits will not be awarded to students who are taking or have completed EE 425)

Course Description: Application of statistical and economic theories in analyzing economic data, with emphases on parameter estimation techniques and applications of simple and multiple regression models to economic analyses. Use of computer application in practice is also covered.

Course Objectives: This course provides an introduction to basic results and techniques of econometric theory. The emphasis will be on principles of econometrics and the application of econometric techniques rather than the derivation of theoretical statements. It is expected that at the completion of the course, students will be able to employ econometric investigation in their preparation for writing a seminar paper and to read critically empirical literature.

Instructor's Note:

This is an introductory course for econometric analysis. To understand and be able to apply it effectively, you need to learn some basic theories and the reasoning underlying an estimated equation. Some applied examples will be discussed in class but exercises in homework will provide various examples of econometric application for students. Students are expected to use an econometrics computer package to do the homework. We will primarily use Stata statistical and econometrics software package for computer work in this course. There will be 2-3 STATA workshops in the student computer lab. Each of these workshops will last 1.5 hours. The dates and times will be announced in class accordingly.

Homework will be assigned on a regular schedule. An assortment of assignments based on theory and some computer applications that involve programming. Homework assignments are expected to be handed on time. There will be both online- and paper-based homework. Late submission will be graded on the basis of 50% of the total scores of that assignment. More than two-day late homework will not be accepted. There will be occasional, possibly unannounced, quizzes during the semester. Missed quizzes may not be made up (unless this is the result of an officially excused absence)

Main Text:

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

2. **Wooldridge, J. M. Introductory Econometrics: A Modern Approach. 6th ed. Thompson: South-Western, 2016.

**Main Text

Recommended Texts & Materials

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, Princton University Press (2009)

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

Other teaching materials:

Teaching notes will be uploaded on Moodle at least 1 days prior to class.

Grading Criteria:

Homework Assignments and Quizzes	20 points
Class Attendances and participations	10 points
Midterm Exam	30 points
Final Exam	40 points

Expected Learning Outcomes:

1. **Morality and Ethics**

Applicability	Learning Goals
●	1.6 Students demonstrate integrity.
O	1.7 Students prioritize social and public benefits over personal ones.
●	1.8 Students are punctual and comply with the code of conduct of the institution and society at large.
O	1.9 Students are responsible and accountable to society, the nation, and the subject of economics.
O	1.10 Students realize the cultural and environmental value of the sustenainable society.

2. **Knowledge**

Applicability	Learning Goals
●	2.6 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.7 Students know and understand Thai and global economic structure, and the importance of major international economic events.
●	2.8 Students know and understand instruments of economic analysis.
●	2.9 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.
O	2.10 Students are informed about related fields including sociology, business administration, education, law policy, and science.

3. **Intellectual Development**

Applicability	Learning Goals
●	3.4 Students have developed individual critical thinking.
●	3.5 Students are sufficiently trained in research skills.

●	3.6 Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand causes of current economic problems in Thailand. Based on analsyis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.

4. Interpersonal Skills and Responsibilities

Applicability	Learning Goals
●	6.1 Students are responsible for assigned tasks and work in groups effectively.
●	6.2 Students have problem-solving skills.
O	6.3 Students show leadership skills and team spirit.
●	6.4 Students are always improving themselves.
O	6.5 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.
O	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.

Tentative Class Schedule:

Introduction

- What is econometrics?
- Methodology of econometrics
- Types of economic data

(Wooldridge, ch.1 or Gujarati, ch. 1)

Review of Some Statistical Concepts

- Random variables and distributions
- Expectation, variance, covariance and correlation
- Estimators and desirable properties of estimators

(Wooldridge, Appendix B or Gujarati, Appendix A, pp.869-912)

Simple Regression Models

- Principle, assumptions and derivation of ordinary least squares (OLS) estimators
- Properties of OLS estimators
- Statistical inference
- Prediction
- Test on individual regression coefficients
- Regression Through the Origin
- Data scaling on OLS statistics
- More on functional forms

(Wooldridge, ch. 2, ch. 6 (6.1 and 6.2)) or Gujarati, chs. 2 – 6)

==========MIDTERM EXAM:.==========

Multiple Regression Analysis (Estimation)

- Motivation
- Model and assumptions
- Estimation of parameters and properties of estimators
- Meaning of partial regression coefficients
- Measuring goodness of fit: R2 and adjusted R2
- The matrix approach to linear regression model

  (Wooldridge, ch. 3 or Gujarati: ch. 7, Appendix B, C)

Multiple Regression Analysis (Inference)

- Sampling Distribution of the OLS estimators
- Test on individual regression coefficients
- Testing the multiple linear restrictions
- Testing the equality of two regression coefficients
- Testing for equality or stability of parameters (Chow test)
- Prediction with general linear model

(Wooldridge, ch. 4 or Gujarati: ch. 8)

Dummy Variable Regression Models

- Describing Qualitative Information
- Models with a single dummy independent variable
- Using dummy variables for multiple categories
- Interactions involving dummy variables

(Wooldridge, ch. 7 or Gujarati: ch. 15)

Multicollinearity Problem

- Nature and Consequences of Multicollinearity
- Detecting Multicollinearity

(Wooldridge, ch. 3 (3.4) or Gujarati, ch. 10)

Heteroscedasticity Problem

- Nature and Consequences of heteroscedasticity for OLS
- Testing for heteroscedasticity
- Remedial measures (weighted least squares estimation)

(Wooldridge, ch. 8 or Gujarati, ch. 11)

Autocorrelation Problem

- Nature and Consequences of Autocorrelation, Serial Correlation
- Testing for Autocorrelation
- Remedial measures

(Wooldridge, ch. 12 (12.1-12.3) or Gujarati, ch. 12)

Specification Errors and Data Problems

- Type of specification errors
- Consequences of specification error
- Tests of specification error
- Errors of measurement

(Wooldridge ch. 9 or Gujarati: ch. 13)

==========FINAL EXAM: ==========

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

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 major attempt of this course is to examine the development of Thai economics and politics that led to modern Siam state and market, and the divergence between the "city" and the "rural". Such an attempt is done together with the investigation of the roles of Thai politics in contributing to such a divergence.

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. These groups are explained as the 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 understanding the characteristics of Ayuthaya, to the fall of Ayutthaya and the birth of Early Rattanakosin. The investigation proceeds to 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 the critical insights into the economic history Thailand, using the political economy approach. Debates on the following questions will be key to the course

1. What was the key characteristics of Ayutthaya's economics and society? Why is that important?
2. How did the market system developed in early Rattanakosin?
3. What propelled Siam toward modernization of the state?
4. What were the consequences of the modernization of Thai economy?

In discussing the above questions, the course also shed lights onto the following aspects throughout Thai history

1. The changing lives of Thai farmers
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 Ayudtthaya: 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 (will be provided)

Please see additional readings for each topic below in the Topics section

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Evaluation

Mid-term exam	30	percent
Final exam	40	percent
(Both mid-term and final exams are take-home exam)		
Discussions and participation in class	10	percent
Group works	10	percent
Essay	10	percent

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

Expected Learning Outcomes:

1. **Morality and Ethics**

Applicability	Expected Learning Outcomes
●	1.11 Students demonstrate integrity.
O	1.12 Students prioritize social and public benefits over personal ones.
●	1.13 Students are punctual and comply with the code of conduct of the institution and society at large.
O	1.14 Students are responsible and accountable to society, the nation, and the subject of economics.
O	1.15 Students realize the cultural and environmental value of the sustenainable society.

2. **Knowledge**

Applicability	Expected Learning Outcomes
●	2.11 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.12 Students know and understand Thai and global economic structure, and the importance of major international economic events.
O	2.13 Students know and understand instruments of economic analysis.
●	2.14 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.

●	2.15 Students are informed about related fields including sociology, business administration, education, law policy, and science.

3. Intellectual Development

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

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes
●	8.1 Students are responsible for assigned tasks and work in groups effectively.
●	8.2 Students have problem-solving skills.
O	8.3 Students show leadership skills and team spirit.
●	8.4 Students are always improving themselves.
O	8.5 Students have good interpersonal skills, adapting and working under different conditions.

5. Quantitative Analysis, Communication and Information Technology

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

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
- Moving on to Thonburi and Bangkok
- The restoration of Ayutthaya in early Rattanakosin: basic economic and political challenges
- Chinese merchants in early Rattanakosin: birth and influence of Siam bourgeoisie
- Thai villages in the past: key arguments and debates of Thai communities

Additional reading

· Chris Baker and Pasuk Phongpaichit (2017). A History of Ayudtthaya: 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 fragmented and inefficient 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
- 22 years from the height of absolute monarchy to 1932 revolution.
    - What exactly was 1932 revolution?

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

- Post 2475 conflicts
    - Phibul's military nationalism and the Pridi's socialism
    - The rise of bureaucratic capitalism
- 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	Early Rattanakosin Chinese Merchants
Week 4	Thai village in the past	Thai village in the past
Week 5	Bowring treaty	Klongs and rice farmers
Week 6	Tax-collectors and foreign businesses	Building the Absolutist Modern State
Week 7	Building the Absolutist Modern State	The fall of Thai Absolutism
Week 8	Mid-term exam	
Week 9	2475 Revolution	Post 2475 Conflict
Week 10	Phibul's Nationalism	Phibul's Economic Nationalism
Week 11	Cold War and the rise of Sarit	The rise of Bankers' Capitalism
Week 12	Import-substitution	Import-substitution
Week 13	Peasants during National Development Plan	Peasants during National Development Plan
Week 14	From 1976-1979 October	Export-Oriented: Miracle
Week 15	Export-Oriented: New capitals	1997 economic crisis
Week 16	Onward from 1997 economic crisis	Conclusion to the course

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE302 WORLD ECONOMIC HISTORY

Semester 1/2025

Number of credits: 3 credits

Course Content:

Study and analysis of world economy with an emphasis on the economic expansion of Western territories between the 14th and the 21st centuries. Emphases are given to contextual changes in economy, geography, history society, culture, religion and politics as the role of determining economic leadership of certain economies, such as Italy, Portugal, Spain, the United Kingdom, Belgium, the Netherlands, France, Germany, Sweden, the United States and Japan.

Course Objectives:

This class has three primary purposes. Firstly, it is to identify the major economic changes that have occurred throughout world history, and to analyze what they were, when they occurred, and why. Thus, students will be expected to know (or learn) the basic outlines of world history, so that they can learn how economic rules have shaped it.

Secondly, the class seeks to demonstrate how the rules and laws of economics are universal; they apply through time and space. Thus, students will learn how complex organizations have been created throughout history, how material, technological and human capital limitations have influenced societies and history, and how different societies have solved similar problems in different, and similar, ways. And they will learn how the laws of economics apply in non-market economies, how decisions and resources are allocated in the absence of modern markets.

Finally, the class will explore the economic, societal and political prerequisites of economic growth. Economic growth throughout history shows some persistent patterns, and these patterns apply to today, as well as the past. Different theories of growth and development stress different factors as being key; the answer to the question of what specific factors are necessary for sustained economic growth has great import to the world today.

Prerequisites:

Econ 211 (introduction to economics) is not a prerequisite for this course, though it will be very helpful. While this course will be very non-mathematical, a certain degree of familiarity with economic terms and concepts is assumed. A basic knowledge of world history is also assumed for this course. Students should be familiar with the broad outlines of world history. Certain periods of history will be highlighted in greater detail, to demonstrate or illustrate concepts taught, but students will not be expected to know these periods in detail before class.

Text: (Moodle Code – 2437)

There is not a standard text for this subject, and most of the books on the subject assume either an extensive working knowledge of Western History, or a great deal of familiarity with economic subjects; often the books assume both. As such, the material for the course will come from several sources, all collected into a general reader. The readings are drawn from the books and articles listed below. All books are available in my office, those who want to read deeper into the topics.

Landes, David, The Wealth and Poverty of Nations, New York, W.W. Norton and Company, 1999

Cameron, Rondo and Larry Neal, A Concise Economic History of the World: From Paleolithic Times to the Present, New York, Oxford University Press, 2003

Jones, Eric, The European Miracle; Environments, Economies and Geopolitics in the History of Europe and Asia, New York: Cambridge University Press, 2003

North, Douglass C. and Robert Paul Thomas, The Rise of the Western World: A New Economic History, New York; Cambridge University Press, 1973

North, Douglass C., Structure and Change in Economic History, Douglass C. North, W.W. Norton and Company, New York, 1981

Mokyr, Joel, The Lever of Riches: Technological Creativity and Economic Progress, New York, Oxford University Press, 1990

Clark, Gregory, A Farewell to Alms: A Brief Economic History of the World, Princeton, Princeton University Press, 1997

Mentioned Texts:

These are books that have had a significant impact outside economics, which will be briefly covered in class. Again, they are available, but are not required for class.

Olsen, Mancur, The Rise and Decline of Nations, New York, Yale University Press, 1981

Kennedy, Paul, The Rise and Fall of the Great Powers: Economic Change and Military Conflict from 1500 to 2000, New York, Vintage Books, 1987

Diamond, Jared, Guns, Germs and Steel; the Fates of Human Societies, New York, W.W. Norton and Co, 1999

Evaluation:

The class evaluations will be based on two exams, given throughout the semester. Each exam will be 1½ hours in length, students will have a choice of what questions to answer. A sample exam will be passed out before the midterm.

Midterm: 40%

Final: 60%

Cheating:

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

Topics:

Below is a tentative course outline. Depending on student knowledge, some parts may move a little faster or slower. Certain classes, will involve a more in depth analysis of historic facts; essentially I will use those classes to make sure you know the history of the period well enough to discuss the economic underpinnings of it. Other classes will delve into economic theory more.

Introduction: Homo economicus throughout time. Economic history, vs. history of economics. Economics as human capital. People as rational beings. Evolutionary models of economic progress. The S curve. Humans as social animals.

Week 1a The world 10,000 B.C.
Prehistoric man. The hunter-gatherer tribe. Population pressure, and **the S curve**. Property rights. **Marginal values** of everything. The jungle wasteland. **Time allocation and gender roles**.

Two Models of early Population growth. Jared Diamond/Kemmer model. Property

rights, spillover effects. The conservative (safety) bias of society, and **risk adverse** tribes. **Early trade and specialization**. **Comparative and absolute advantage** in family production.

Week 1b – The world 7,000 B.C.
The first agricultural Revolution. **The North Model**. **Olsen's roving bandit** model. The **raw materials** of agricultural growth, **factors of production**. The beginning of **property rights**, and **economic specialization and social classes**.

Week 2a – The world 3,000 B.C.
The second agricultural revolution. The birth of empires. The **Hydraulic society**. The **problem of coordination**. **Technological problems vs. institutional problems**. Ancient Babylon. Ancient Assyria. Ancient Egypt. Ancient China. Ancient India. The **holdout problem** in irrigation. **Transaction costs**. "**The Surplus"**, and the use(s) of it.

The north model of government. **The Olsen model of tyranny**. Ancient **public goods** vs. **publicly provided goods**.

Week 2b The world 431 B.C.
Trade and Money. **Coinage and agoras**. The role of money. The greek city states. Transportation costs. Specialization and **Smithian growth (pt. 1)**. Government as other than tyranny. **Colonization**. **Incentives**. **Planned vs. emergent organization**. Athens and Sparta, Citizens and Helots. Natural disasters and the end of capital. Relative effects on Capital and Labor.

Week 3a The world 1 A.D.
Empire: The Romans. Roman law and courts. The **economics of the Law**. Organizational genius. **Smithian growth, absolute and comparative advantage in a large empire**. **Economies of scale** for enterprises and states. Roman agriculture, the **slave system**. Extended example: The Roman legion, and the complexity of ancient societies. Baumol, good and bad **entrepreneurship**.

Week 3b The world 478 A.D.
The Roman decline. The technological explanation (North). The biological explanation (xxxx). The military explanation (Luttwak, Higgens). The **distributive coalition** hypothesis (Olsen). Also, Byzantium, and early Islam.

Week 4a Interlude -- Taking stock of the world, and how it was governed.
The state. Theories of the State. North. Olsen, Others. Going back in time: China, Egypt, Persia, Greece, Rome, The Barbarians.

Week 4b The world in 1066 A.D.
The Early middle ages and the problem of security. Feudalism and the Manorial system. The western world. Violence. Trade as a public good – "the encompassing interest". Economies of scale in violence. The feudal system of national defense. Self-sufficiency, the absence of encompassing power. Political competition. The role of military technology. A model of path-dependent military dominance, the hurdle effect on a new Rome – monopoly and barriers to entry.

Week 5a The world of 1348
The Black Death. Recap of Diamond hypothesis. The effect on Europe, the Middle East and Asia. The Malthusian hypothesis. Relative prices of factors of production. Changes in the status of the peasantry. Legal rights. The Rebirth of Mediterranean trade, and the new commercial organizations – banks, insurance, corporations, double entry bookkeeping, credit, etc.

Week 5b The world of 1500
The age of exploration. Portuguese and Chinese fleets. Columbus and the new world. The Aztecs, incas, and silver. The gunpowder revolution, the end of feudalism and the rise of the nation state. European economies – The Netherlands, England, Spain, France. The three field system. The market economy, the common law system. Thick markets.

Week 6a The world of 1700
The early industrial revolution, mercantilism, colonies and trade.
Narrative of the industrial revolution 1
Theories of the industrial revolution 1

Week 6b The world of 1850
Narrative of the industrial revolution 2
Narrative of the industrial revolution 2
Schumpetarian growth, rising productivity. Escape from Malthusian economics. Free trade, most favored nation status. The Technological arms race.

Week 7a The world of 1914
The later industrial revolution, imperialism, free trade, global smithian growth (globalization), trade unionism, the beginning of the welfare state. Central planning, Marxism (fascism), and the USSR.

Week 7b The world of 1948
Standardization, global monopolies and cartels

Week 8a The world of 2005 A.D.
The (non) importance of resources. Human Capital and the Asian Miracle. (idea – Arab and Asian face). The Modern Welfare State. Petrolocracies. Free trade and modern finance. The role of economics in economies. Public choice theory. The bureaucratic state.

Course Evaluation:

Type of evaluation	Evaluation Method	Evaluation date
Midterm Exam	40%	July
Final Exam	60%	August

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE361 ECONOMICS OF CLMV COUNTRIES

Semester 1/2025

Number of Credits : 3 (Three)

Prerequisites : None

Course Objective

The objective of this course is to understand the drivers of economic growth along with economic development issues and challenges facing Cambodia, Lao PDR, Myanmar and Vietnam (CLMV), since the beginning of the political and economic reforms of the post-war 1980s until the present.

Course Description

Four Southeast Asian countries namely Cambodia, Laos, Myanmar and Viet Nam (CLMV) have experienced phenomenal growth, averaging between 4-6% per year since year 2000, making the region currently one of the world's best performers in terms of economic growth. In understanding the development progress of these countries, it is imperative to provide an overview of their historical contexts i.e., shared experiences of colonialism, social/political conflicts following independence, and the post-conflict era of the 1990s and understand the various reforms undertaken by the governments of these countries. The opening up of the economy and the establishment of the Greater Mekong Subregion (GMS) Programme in 1992 enabled the gradual presence of official development assistance (ODA) channelled through, among others, the United Nations, World Bank, Asian Development Bank and various bilateral donors. These important milestones have contributed to the transformation of the socio-economic development of CLMV which we see today.

The course will further discuss commonalities and differences in their development trajectories and relationships with the outside world as well as issues and challenges in developing and implementing policies and programs in key development sectors, such as agriculture; education and health; transportation; trade; and urban and rural development, as well as in cross-cutting areas such as the environment, gender, climate change, and foreign aid

and investments and international capital flows. The relationships between CMLV and Thailand as well as the rest of the world will also be discussed. Important lessons can be drawn from the successes and failures of development approaches, policies and programs as well as actual projects in these countries, which will be discussed in detail throughout the course. In order to hone students' understanding of the issues, case studies will be provided and students will form groups and present their understanding of the issues discussed during the course.

Main Text : Todaro, M. and S. Smith. 2013. Economic Development, 13th ed. Addison Wesley: NY.

Additional Readings: To be announced in BE Moodle

Grading Criteria

The final grade will not rest on one or two activities, but rather, on how many points will be accumulated throughout the semester. Course requirements include participation (including virtual attendance, quizzes, and contribution to class discussions); group presentation on a particular topic learned in class; which aims to foster collaboration among students in selecting and appropriate topic based on course lecture; issue paper relating to coursework; and midterm and final exams. Late submission of assignments/exam: up to 30 minutes a penalty of 10%, up to 60 minutes a penalty of 25%. The weights of each of these items are as follows, and will be factored in towards the final grade:

- Participation and quizzes 15%
- Group presentation 15%
- Issue paper 15%
- Midterm exam 25%
- Final exam 30%

Grade conversion

Numerical grades will be converted to letter grades as follows:

- >85–100 A
- >80–85 B+
- >70–80 B
- >65–70 C+
- >60–65 C
- >55–60 D+
- >45–55 D
- 45 and below F

Class Policy and Expectations

In adherence with the latest University Announcements, BE Economics classes will be onsite and strictly follow health protocols. Communication, announcements and grade posting will be on BE Moodle. At the beginning of each class, some time will be spent using the lecture format highlighting the key issues, but students will spend the rest of the time of the time engaging in discussions that support or confront the materials extracted from the required reading, for which students are expected to read ahead and be prepared. For any further clarifications and/or queries, students may either e-mail or set up an appointment with the lecturer.

Expected Learning Outcomes:

It is expected that by the end of the course, students will have a good understanding of (i) the economic development trajectories of Cambodia, Lao PDR, Myanmar and Viet Nam; (ii) commonalities and variations in terms of CLMV development policies and outcomes; (iii) key economic development sectors, their role in economic development and government policies to address the issues that arise; and (iv) the role of domestic, regional and international actors in the economic development of CLMV.

Tentative Class Schedule

Date/Week	Topic	Reading Materials
<u>Week 1</u>		
	Introduction - Course objectives and requirements - Expectations of the course - Scope and coverage	Course syllabus
	Geographical and Historical Context - CMLV and Southeast Asia - The pre-colonial era - Colonial rule and liberation - Post-war periods of social conflict	Steinberg & Hakim, Ch 1
<u>Week 2</u>		
	Era of Reform and Economic Growth - The reform era: 1980s and 1990s - Resumption of foreign aid - Regional cooperation	Steinberg & Hakim, Ch 1; Cheang & Wong
	The GMS Programme - Improving connectivity Program - Increasing competitiveness - Instilling sense of community	ADB GMS Economic Cooperation

Week 3		
	Agriculture Transformation and Rural Development - Agriculture labor and productivity - Land policy and food security	Todaro, Ch 9
	Agriculture Development in CLMV - Agriculture issues, trends and policies in CLMV - Case study: Vietnam's agricultural transformation	Rillo and Sombilla
Week 4		
	Human Capital: Education and Health - Education, health and productivity - Issues in education - Issues in health - Role of government in human development	Todaro, Ch 8
	Case study: Social Development Policies in Lao PDR	Dennis
Week 5		
	Transportation and Physical Connectivity - Transportation systems and components Transport - Transport and connectivity challenges	UN-ESCAP Sustainable
	Urban Development - Spatial and economic trends - Rural-urban linkages - Urban management and finance	Todaro Ch 7
Week 6		
	Urban Development in CLMV	Steinberg & Hakim, Chp 1 & 4
	Environmental Management and Climate Change - Environment vs the economy - Environmental policy - Climate change adaptation and mitigation	Todaro Ch 10
Week 7 reports		
	Environmental Management in CLMV-Case Studies - Nam Theun II hydropower, Laos - Biodiversity conservation corridors, Cambodia - Forestry livelihood improvement, Viet Nam	ADB project
	International Trade - Benefits and costs of trade	Todaro, Ch 12

Week 8	Midterm exam	
Week 9	Trade in CLMV	TBD
	Economic Development in Cambodia - Country context - Reform policies - Issues and challenges	ADB Cambodia CPS 2019-2023
Week 10	Economic Development in Lao PDR - Country context - Reform policies - Issues and challenges	World Bank 2017 Country Diagnostic
Week 11	King Bhumibol Adulyadej Great Memorial Day: No classes	
	Economic Development in Myanmar - Country context - New mechanism and other reform policies - Issues and challenges	ADB 2012 Myanmar in Transition
Week 12	Economic Development in Viet Nam - Country context - Doi Moi and other reform policies - Issues and challenges	World Bank Viet Nam CPF 2018-2022
	Gender and Development - Importance of Gender - Gender Mainstreaming	ADB: Gender and Development
Week 13	Issues in Gender	
	Foreign Aid - Objectives of official development assistance - Pros and cons of aid	Todaro Ch 14
	Foreign Aid in CLMV	Moolio and Kong

Week 14

Foreign Direct Investment and International Capital Flows	Todaro Ch 14
Thailand and CLMV Relationships	Sompop Manarusungan

Week 15

Group Presentations

Group Presentations

Week 16

Group Presentation

Wrap up

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE362 ECONOMICS OF SELECTED ASIAN COUNTRIES

Semester 1/2025

Number of credits: 3 credits

Course description

Economic development trends of various countries in Asia. The evolution of economic structure; The role of private and public institutions along with other economic , social, and political factors that contributes to the economic adjustments of those nations; The relationship between Thai economy and the world economy, by focusing on a particular country or many Asian countries at the same time which will be announced in advance.

Course description

This course introduces basic neoclassical and political economic concepts. The emphasis will be on applying those concepts in analyzing the countries' economic adjustments and conditions. It is expected that at the completion of the course, students will be able to employ economic tools in their preparation for writing a case paper regarding East Asian countries.

Textbooks

1. The Political Economy of East Asia: Striving for Wealth and Power by Ming Wan, CQ Press; 1 edition (October 17, 2007)

2. Systemic Vulnerability and Sustainable Economic Growth: Skills and Upgrading in Southeast Asia by Bryan Ritchie (Aug 1, 2010)

Supplementary Texts

1. PowerPoint Slides and Lecture Notes
2. www.adbi.org
3. www.worldbank.org

Evaluation

1. Seminar presentation and papers 40%
2. Class Discussion 10%
3. Midterm Examination 20%
4. Final Examination 30%

Presentation and papers

1. **Group of two people presentation and paper on the Country of interest.**
2. **Group of four people presentation and paper on contemporary issues regarding East Asian Economy.**

Tentative weekly schedule

Week	Course Content	Reading References
1	Introduction	Ming Wan Ch.1 with supplement reading from Asia Development Bank Institute and World Bank
2	East Asian National System of Political Economy	Ming Wan Ch.2 with supplement reading from Asia Development Bank Institute and World Bank
3	Chinese World Order	Ming Wan Ch.3 with supplement reading from Asia Development Bank Institute and World Bank
4	Modern Imperialism	Ming Wan Ch.4 with supplement reading from Asia Development Bank Institute and World Bank
5	East Asian Miracle	Ming Wan Ch.5
6	The Asian Financial Crisis and Hamburger Crisis	Ming Wan Ch.6 with supplement reading from Asia Development Bank Institute and World Bank
Week	Course Content	Reading References
7	Student Presentation	

8	Midterm Exam Date 9th Oct 2015	Time 9.30-11.00	Venue TBA
9	The Political Economy of East Asian Production	Ming Wan Ch.7 with supplement reading from Asia Development Bank Institute and World Bank	
10	The Political Economy of East Asian Trade	Ming Wan Ch.8 with supplement reading from Asia Development Bank Institute and World Bank	
11	The Political Economy of East Asian Trade	Ming Wan Ch.8 with supplement reading from Asia Development Bank Institute and World Bank	
12	Country Case: Japan, Taiwan, South Korea	Ritchie Ch.1-8 with supplement reading from Asia Development Bank Institute and World Bank	
13	Country Case: Singapore	Ritchie Ch.1-8 with supplement reading from Asia Development Bank Institute and World Bank	
14	Country Case: Malaysia and Thailand	Ritchie Ch.1-8 with supplement reading from Asia Development Bank Institute and World Bank	
15	Regional Economic Partnership	Ming Wan Ch.11 with supplement reading from Asia Development Bank Institute and World Bank	
16	Student Presentation		
17	Final Exam Date 19th Dec 2015	Time 9.00-12.00	TBA

Schedule Conflict:

Any schedule conflict should be brought to the instructor's attention as soon as possible.

Exam Policy:

No make-up exams will be arranged under any circumstances. Students who missed any of the exams for the legitimate reasons, such as family emergency or medical absence should provide certified official documents. Then, the student will receive a grade based on the other exam taken. Any other reason for absence will result in zero counted points. There is only one exception such as observance of religious holidays; however, you must contact me before the exam date.

Final Grade comes from both curve fitting and standardized score.

Attendance: Attendance will not be counted.

Unacceptable Behavior

Academic dishonesty: Simply, the rule is NO CHEATING. Penalties can range from receiving an “F" in the course to referral to the dean of the college or school in which you are enrolled for further disciplinary action.

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE363: ECONOMICS OF SELECTED ASIAN COUNTRIES

Semester 1/2025

Number of Credit: 3

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

Course Description: This course will introduce Economic development in China. The transformation of China's economic structure. The roles of the public and private institutions along with other economic, social, and political factors that contribute to China's economic changes. The relationship between China's economy and the world and Thai economies.

Course Objectives: The course will familiarize students with issues related to the contemporary Chinese economy: its history, the success of its reforms in the past four decades and the reasons for it, China's specific institutions in the world economy and problems it is facing in the 21st century.

Expected Learning Outcomes

ELO(s)	Major Emphasis	Minor Emphasis	Evaluation Method
1. Moral & virtue			
(1)	Possess honesty, sacrifice, self-, social-, and environmental responsibility.		Class participation
(2)	Value "sufficiency" theory and adapt it in life path by adhering to adequacy, rationale, and immunity development		Class participation
(3)	Value disciplines, respect, and comply with the rules and regulations of the institution and society at large.		Class participation
(4)	Acquire knowledge related to business morality and ethics, and be able to handle ethical dilemma with integrity.		Class participation
(5)			
2. Knowledge			
(1)	Acquire knowledge on and understand the important concepts in economics.		Exam and homework
(2)	Acquire knowledge on and understand the		Exam and homework

	important social and science concepts related to economic development.		
(3)	Acquire the knowledge on academic advancement and professional development in economics including the understanding of the situational adaptability and its impacts on economy.		Exam and homework
(4)	Acquire knowledge on and understand the important concepts related to economic processes, planning, structures, operations, control, performance evaluation and contingency plan to suit the circumstances.		Exam and homework
(5)			
3. Intellectual skills			
(1)	Be able to search and process information and utilize various concepts appropriately in a given circumstance in order to		Exam, homework and in-class discussion

	obtain relevant information to benefit in the rapidly changing economic environment.		
(2)	Be able to think systematically, rationally and creatively and to integrate knowledge from other disciplines to solve the problems in economics and other settings.		Exam, homework and in-class discussion
(3)	Be able to collectively propose solutions to problems at hand and analyze the impacts of the proposed solutions and be able to choose the solution that is appropriate to a given situation to ensure economics competitive advantages.		Exam, homework and in-class discussion
4. Interpersonal skills & responsibility			
(1)	Be able to work in team, possess interpersonal skills and leadership skills, and be professionally adaptive to a given situation.		Exam, homework and in-class discussion
(2)	Be creative and constructively criticize to solve		Exam, homework and in-class discussion

	problem of the team.		
(3)	Be responsible in lifelong learning to develop self and professional career.		Exam, homework and in-class discussion
(4)			
(5)			
5. Numeral analytic, communication, and information technology skills			
(1)	Be able to apply mathematics, statistics, quantitative analysis in analyzing and making decisions in economics and daily life.		Exam, homework and in-class discussion
(2)	Be able to explain the issues and make the issues clear in verbal or writing, and be able to choose the appropriate pattern of communication for different groups of audience both in economics context and in other contexts.		Exam, homework and in-class discussion
(3)			

*** Major Emphasis: ●, Minor Emphasis:** ○

Main Text: *The Chinese Economy. Adaptation and Growth*, by Barry Naughton , MIT Press 2018.

Recommended Texts & Materials *China's Economy. What everyone needs to know*, by Arthur R. Kroeber, Oxford University Press 2016.

Grading Criteria:

Midterm Examination	35%
Final Examination	35%
Home Work	20%
Class Participation	10%
Total	**100%**

Expected Learning Outcomes:

By the end of this course, you would be able to:

1. Describe the historical background and path of evolution of China's economic development.
2. Compare, contrast, and evaluate China's economic reforms as well as analyze its future trends.
3. Apply the economic theories and empirical methods introduced in class to the analysis of economic phenomena related to China.
4. Apply the knowledge in cross-border investment and business strategy analysis

Tentative Class Schedule:

1. August 10: Basic set up of the system
2. August 17: Important reforms over the past decades
3. August 24: Stock market and the economy
4. August 31: Real estate
5. September 7: Banking and shadow banking
6. September 14: Credit and expansion
7. September 21: Agriculture and urbanization

Midterm Exam

8. October 5: FDI
9. October 12: E-commerce and related industry
10. October 19: Cultural diversity, regional differences, and the economy
11. October 26: ESG

12. November 2: Education
13. November 9: International investment
14. November 16: Population, individuals' behavior and the role/impact in the economy
15. November 23: Group discussion

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE 364 GENDER ECONOMICS

Semester 1/2025

Number of Credit: 3 credits

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

ELO(s)	Major Emphasis	Minor Emphasis	Evaluation Method
1. Moral & virtue			
(6)	●		Assignments/Quizzes/Final & Midterm Exams
(3)	●		Assignments/In-class Exercises/Participation In-class behavioral observation
2. Knowledge			
(6)	●		Final & Midterm Exams
(7)	●		Assignments/Quizzes/In-class Exercises
(4)	●		Final & Midterm Exams
3. Intellectual skills			
(4)	●		Assignments/Final & Midterm Exams
(5)	●		Assignments/Final & Midterm Exams
(6)	●		Assignments/Final & Midterm Exams
4. Interpersonal skills & responsibility			
(6)	●		Assignments/In-class Exercises/Participation
(7)	●		Assignments/In-class Exercises/Participation
(4)	●		Assignments/In-class Exercises/Participation

*** Major Emphasis: ●, Minor Emphasis:** ○

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

Alon, T. M., Doepke, M., Olmstead-Rumsey, J. and Tertilt, M. 2020. "The Impact of COVID-19 on Gender Equality." *NBER Working Paper 26947*.

Blau, F. and Kahn, L., 2007. "Changes in the labor supply behavior of married women: 1980-2000," *Journal of Labor Economics,* 25, 393–438.

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

Blinder, A. S., 1973. "Wage Discrimination: Reduced Form and Structural Estimates," *Journal of Human Resources*, 8(4): 436-455.

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. 2020. "Alternative Boomerang Kids, Intergenerational Co-residence, and Maternal Labor Supply." *Review of Economics of Household* (Forthcoming 2022)

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

Oaxaca, R. L., 1973. "Male-Female Wage Differentials in Urban Labor Markets," *International Economic Review*, 14(3): 693-709.

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. and Liao, L. 2019. "Parenthood Penalty and Gender Wage Gap: Recent Evidence from Thailand." *Journal of Asian Economics - Forthcoming 2022*.

Paweenawat, S.W., and Liao, L. 2019. "'Gold Miss' or 'Earthy Mom'? Evidence from Thailand." *PIER Discussion Paper 110*, Puey Ungphakorn Institute for Economic Research.

Paweenawat, S.W., and Liao, L. 2020. "A Shesession? The Impact Of COVID-19 Pandemic on Labor Market in Thailand." *ERIA Research on COVID-19 and*

Regional Economic Integration, Economic Research Institute for ASEAN and East Asia.

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.

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%

Expected Learning Outcomes:

This course is designed for students to have basic knowledge and understanding of theories and empirical studies related to topics in gender economics.

Tentative Class Schedule:

Week	Date	Tentative Topic and Class Activity
1	Aug. 9, 11	Evolution of male and female roles in the economic system.
2	Aug. 16, 18	The role of Thai women in the economy in Thailand.
3	Aug. 23, 25	Theories of family formation.
4	Aug. 30 Sep. 1	Differences in gender-related time allocation for market and non-market activities.
5	Sep. 6, 8	Differences in gender-related time allocation for market and non-market activities. (continued)

Week	Date	Tentative Topic and Class Activity

6	Sep. 13, 15	Supply and demand factors determining gender-related differences in occupation and income, and gender roles switching in occupation.
7	Sep. 20, 22	Supply and demand factors determining gender-related differences in occupation and income, and gender roles switching in occupation. (continued)
Midterm Exam		
8	Oct. 4, 6	Roles of female in socio-economy and politics.
9	Oct. 11	Gender in the aging economy • No class on Oct. 13 (H.M. King Bhumibol Adulyadej The Great Memorial Day) • Make-up class on Oct. 11 (5.00-6.30 PM)
10	Oct. 18, 20	Gender and informal economy.
11	Oct. 25, 27	Roles of the LGBT in the economy.
12	Nov. 1, 3	Effects of COVID-19 on family and gender in the labor market.
13	Nov. 8, 10	Different effects of policies or welfare programs on gender.
14	Nov. 15, 17	Gender equality in international criteria.
15	Nov. 22, 24	Research issues on gender roles in the economy.
Final Exam		

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE375 APPLIED ECONOMICS FOR NATURAL RESOURCES AND ENVIRONMENT

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.

Course Schedule and Topics:

Date	Topics	Notes
Aug 10 Aug 12	1. Introduction to natural resource and environmental economics Relationship between economics, natural resources, and environment and key insights	HSW (Ch.1)
Aug 17 Aug 19	2. Economic Approach a. Economic efficiency b. Efficient market allocations c. Externalities and market failure	HSW (Ch.2) TL (Ch.2)
Aug 24, 26, 31 Sep 2	3. Valuing the environment: Concepts and methods a. What 'economic value' means b. Cost-benefit analysis c. Types of valuation methods	HSW (Ch.3, 4) TL (Ch. 3,4)
Sep 7 Sep 9	4. Applications: Energy a. Problems and their sources b. Economic and policy instruments	TL (Ch. 7)
Sep 14	5. Applications: Water a. Problems and their sources b. Economic and policy instruments	TL (Ch.9)
Sep 16	6. Applications: Land a. Problems and their sources b. Economic and policy instruments	TL (Ch. 10)
Sep 21	7. Applications: Forest a. Problems and their sources b. Economic and policy instruments	TL (Ch. 11) HSW (Ch.10)
Sep 23	8. Applications: Fishery a. Problems and their sources b. Economic and policy instruments	TL (Ch.12)
Mid-term exam		
Oct 5 Oct 7	9. Economics of Climate Change	TL (Ch.16) HSW (Ch.9)
Oct 12 Oct 14	10. Economics of Pollution Controls	TL (Ch.14)

Date	Topics	Notes
Oct 19 Oct 21	11. Applications: Air pollution a. Problems and their sources b. Economic and policy instruments	TL (Ch. 15, 17)
Oct 26 Oct 28	12. Applications: Water pollution a. Problems and their sources b. Economic and policy instruments	TL (Ch. 18) HSW (Ch.11)
Nov 2 Nov 4	13. Applications: Waste and toxic substances 1. Problems and their sources 2. Economic and policy instruments 3. Environmental Justice	TL (Ch.19)
Nov 9	14. Sustainable Development	TL (Ch.20)
Nov 11	Summary and review	
Nov 16, 18 Nov 23, 25	Group project presentations	
Final Exam		

Main Reading Lists:

[TL] – Tietenberg, T. and Lewis, L. Environmental Natural Resource Economics, 2015 (10th edition), Pearson.

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

Additional materials related to the topics will be provided before the class.

Grading Criteria:

Midterm Examination	30%
Final Examination	30%
Group project	15%
Assignment and quiz	25%

Group project: Students will work in groups of 4-5. Each group will identify problems of interests related to natural resources and environment, approach the problems using economic concepts and tools and propose policy considerations. The evaluation will be based on the quality of two deliverables i) A 20-minute group presentation ii) A 5-page policy brief.

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
1. Moral & virtue 1.1 Students demonstrate integrity and ethics as a researcher 1.2 Students recognizes social responsibility and accountability to the society and the environment 2.4 Students recognize the importance of sustainable development from economic activities	Assignment and discussions in class
2. Knowledge 2.1 Students understand problems related to the fields 2.2 Students can apply economic principles to understand the causes of the problems 2.3 Students understand various economic instruments that can be used to solve the problems in the fields	Assignment and quiz
3. Intellectual skills 3.1 Students improve critical thinking in analyzing the problems 3.2 Students are trained in research skills 3.3 Students demonstrate abilities to analyze and propose policy recommendations using economic concepts and tools	Assignment and quiz
4. Interpersonal skills & responsibility 4.1 Students are responsible for the assigned tasks 4.2 Students work effectively as a team, demonstrating leadership and teamwork 4.3 Students respects other opinions and provide constructive comments	Group project
5. Numeral analytic, communication, and information technology skills 5.1 Students can apply mathematical methods in solving the problems in the fields 5.2 Students communicate effectively and select appropriate presentation approach to deliver discussion points and ideas to solve the problems 5.3 Students use information and communication technologies appropriately to analyze the problems and propose policy recommendations.	Exam and group presentation

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE376 ECONOMICS OF CLIMATE CHANGE

Semester 1/2025

Number of credits: 3 credits
Prerequisites: EE 210 or EE 211 or EE 213
(Credits will not be awarded to students who are taking or have completed any 400-level courses in this subfield.)

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.

Lecture Schedule

Date	Topics
1-2 Aug.	**1. Introduction to Climate Change Science** • The Earth's climate system • Greenhouse gas (GHGs), global energy balance, and the greenhouse effect • Important GHGs: CO_2 and carbon cycles, other GHGs • Dissenting opinions: the great hoax? **Reading:** H Ch. 1-4, T Ch. 1, Nordhaus Ch.5, 13-14, 24-25, Incropera Ch. 2-6, 9.
Aug.	Holiday: ***Queen Sirikit The Queen Mother's Birthday No class
3-4 Aug.	**2. Anthropogenic global warming and consequences** • 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 **Reading:** H Ch. 6-7, Incropera Ch. 5, T Ch. 2, IPCC (2013a), Stern Ch. 3-6
5-6 Aug.	**3. Climate Change and Market Failure** • Externalities and carbon pricing • Global commons and Tragedy of Commons • The under provisioning of Public Goods **Reading:** HR Ch. 3-4, T Ch. 3

7- 9
Sep.
	4. Carbon Taxes
	• Optimum emission
	• Correction market failure with carbon
	  ○ Single source
	  ○ Multiple sources
	• Pros and cons of carbon taxes
	• Carbon tax research
	Reading: HR Ch. 16, T Ch. 4, Pearce, David (1991) pp. 938-948.

10 - 12	**5. Carbon Market or Cap-and-Trade** • Definition and concept of Carbon market • Demand and supply of carbon credits

Date	Topics
Sep.	○ 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 **Reading:** HR Ch. 16, T Ch. 5
13-14 Sep.	**6. Technological Development Policy and mitigation** • Why do mitigation technology grow so slow? • Technology-push vs. Demand-pull debate • Policy for inducing technological change • Costs of low carbon technology and mitigations **Reading:** Grubb, M. (2004), Goulder and Schneider (1999), T Ch. 5
15 Sep.	**7. Carbon Labeling** • Life cycle assessment (LCA) • What is carbon labelling? • Economics of carbon labelling • Types of carbon labelling • Carbon labelling situation in other countries • Carbon labelling in Thailand
	Midterm:
16 Oct.	**8. Forestry and mitigation** • Forest situation in Thailand • Examples of forest bonds in other countries • Proposted forest bond system for Thailand
17 Oct.	**9. Behavioral Economics and climate mitigation** • **Concept of nudge** • **Applications**
18 Oct.	**7. Environment and Business** • Environmental trends • Sustainability: Megatrend • Business Adaptation

Date	Topics
Oct.	**Holiday: King Rama IX Memorial Day and bridge holiday** **No class**
19-20 Oct.	**9. Global Institutions: Kyoto Protocol and Post-Kyoto** • The Intergovernmental Panel on Climate Change (IPCC) • The United Nations Framework Convention on Climate Change (UNFCCC) • Kyoto Protocol • 'Annex-I' vs. 'Non-Annex-I' countries • Emissions Trading Scheme (ETS), Joint Implementation (JI), and Clean Development Mechanism (CDM) Cooperation failure? • Paris Agreement **Reading:** Incropera Ch. 8, T Ch. 5

21-22
Oct.
	10. International Trade and Climate Change
	• Mitigation & competitiveness
	• Carbon offshoring and Carbon leakages
	• Concepts about GHGs responsibility
	  ○ Production-based and consumption-based responsibility
	• Carbon leakages and Border-Carbon Adjustment (BCAs) or Carbon-Border-Adjustment Measures (CBAM)
	  ○ Pros and cons of BCAs
	• World Trade Organization (WTO) and Climate Change
	Reading: Incropera Ch. 8, T Ch. 8-9

23-24 Nov.	**11. Economic Concepts (III): Social Costs of Climate Change** • Cost-Benefit Analysis (CBA) concept • Social discount rates • Economic assessment of the damages caused by global warming • Climate risks • Climate change adaptation • Economics of technology & adaptation **Reading:** FF Ch.6, Stern Ch. 5,6, 9, 12, 18-20, Nordhaus Ch.15-16, 18
25	**12. Economics of Climate Change Adaptation** • Climate risks • Climate change adaptation

Date	Topics
Nov.	• Economics of technology & adaptation • **Reading:** Stern Ch.5, 18-20, OECD (2015)
26-28 Nov.	**14. Group project presentation**
	Final exam

Evaluation

Midterm Examination	35%
Final Examination	35%
Group project or reports	15%
Assignment and participation	15%

Group project (15 points): maximum 3 member/group

- 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.

Topic lists:

Charging stations for EV	Electric train system	Low carbon aviation	Internal carbon pricing
Concentrating solar power	Low carbon agriculture or fishery	Biotechnology for adaptation	Green financing
Pumped storage hydropower	Energy-intensive industry	Draught management	Food waste management
Bio fuel	Plant-based meat	Flood management	Forest management
Nuclear power	Coral reef restoration technology	Solid waste management	Gender or Youth impacts
Small wind turbine energy	Green city	Waste water management	Poverty impacts
Energy storage technologies	Low carbon tourism	Coastal adaptation	IT/AI and 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, attractive and reader-friendly poster design. The total mark will come from peer evaluation (7 marks) and instructor evaluation (8 marks)

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

Submission date of selected topic:	October
Submission date of the outline:	October
Presentation dates:	November

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

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 CO_2 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.

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 (2022) 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/

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE382 ECONOMICS OF SERVICE SECTORS

Semester 1/2025

Number of Credit: 3

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.

Recommended Texts & Materials:

Fitzsimmons, J. A., Fitzsimmons M. J. and Bordoloi, S., ***Service Management Operations, Strategy, Information Technology***, 8th Edition, McGraw-Hill, 2014

Jansson, J. O., ***The Economics of Services: Microfoundations, Development and Policy***, 2nd Edition, Edward Elgar, 2013

Zhou, Z., ***The Development of Service Economy: A General Trend of the Changing Economy in China***: Truth & Wisdom Press and Springer Science+Business Media Singapore, 2016

Suggested Readings:

Charoenporn, P. and Sukpanich N. (2022). Analysis of the Innovation Ecosystem in the Thai

Service Sector, a research granted by National Research Council of Thailand (NRCT), written in Thai.

Edvardsson, B. and Olsson, J. (1996). Key concepts for new service development. *The Service*

Industries Journal; Apr 1996; 16, 2; ABI/INFORM Global, PP. 140-164.

Goff, P.M. (2015). The Trade in Services Agreement Plurilateral Progress or Game-Changing

Gamble?*CIGI Papers, No. 53*.

Navarro, T. M. and Roura, D. R. (2010). Growth and Productivity in the Service Sector: The State

of the Art. *Working Papers, the Institute of Social and Economic Analysis*.

OECD (2000). The Service Economy. *Science Technology Industry: Business and Industry Policy*

Forums.

Park, D. and Shin, K. (2012). The Service Sector in Asia: Is it an Engine of Growth. *ADB*

Economics Working Paper Series, No. 332.

Sukpanich, N. (2020). *Government policy supporting startups as a driving force of Thai economy*,

a research granted by the Thailand Research Fund (TRF), written in Thai.

World Travel & Tourism Council (2015). How Does Travel &Tourism Compare to Other Sectors,

Benchmark Report.

World Travel & Tourism Council (2017). *Travel & Tourism Economic Impact 2017 Thailand*.

United Nations (2008a). *Tourism Satellite Account: Recommended Methodological Framework 2008*.

United Nations (2008b). *International Recommendations for Tourism Statistics 2008*.

Grading Criteria:

Group project/group assignments	70%
Peer evaluation for group assignment contribution	10%
Individual assignments/participation	20%

Expected Learning Outcomes:

Application of relevant theories to selected service industry case study.

Topics:

1. Introduction to service sectors

1. Overview
2. Relevant definitions
3. General characteristics of service
4. Classification of service and service industry
5. Measurement of service Economy
6. Service sector in Thailand

Reading

Text: Fitzsimmons, Fitzsimmons and Bordoloi (2014), Ch. 1; Zhou (2016), Ch. 3

Paper: OECD (2000), Park and Shin (2012), World Trade Organization (1991)

2. Economic Impact of Service Sector

2.1 Service in National Accounts

2.2 Economic impact of service sector: the case study of travel and tourism industry

Reading

Text: Fitzsimmons, Fitzsimmons and Bordoloi (2014), Ch. 1

Paper: OECD (2000); World Travel & Tourism Council (2015); World Travel & Tourism Council (2017); United Nations (2008a), United Nations (2008b)

3. Development of Service Industry and Service Economy

3.1 Service industry evolution mechanism and track characteristics

3.2 Basic features of service economy development trend

3.3 Factors affecting service sector growth and service economy development

Reading

Text: Fitzsimmons, Fitzsimmons and Bordoloi (2014); Ch. 1, Ch. 3; Zhou (2016); Ch. 3, Ch. 4, Ch. 5, Ch. 6

Paper: OECD (2000); Park and Shin (2012)

4. Service Market Analysis (Structure Conduct and Performance)

Reading

Text: Fitzsimmons, Fitzsimmons and Bordoloi (2014), Ch. 2, Zhou (2016), Ch. 4, any standard textbook in Industrial Organization

Paper: TBA

5. Service Demand and Service Costs Issues

Reading

Text: Jansson (2013), Part II, Fitzsimmons, Fitzsimmons and Bordoloi (2014), Ch. 1, Zhou (2016), Ch. 4

Paper: TBA

6. Service Quality and Measurement

6.1 Dimension of service quality

6.2 Service quality GAP model

6.3 Cost of quality

6.6 Service recovery framework

Reading:

Text: Fitzsimmons, Fitzsimmons and Bordoloi (2014), Ch. 6

7. Service Innovation

7.1 Service innovation categories

7.2 Service innovation ecosystem

7.3 Innovation strategy

Reading:

Paper: Edvardsson and Olsson (1996), Charoenporn and Sukpanich (2022).

8. Service startup

Reading:

Paper: Sukpanich (2020)

9. International Trade in Service

Reading:
Paper: Goff (2015); OECD (2000); others TBA

Note:

Content in the outline is subjected to changes and update

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE403 LAW AND ECONOMICS

Semester 1/2025

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

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.

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

Evaluation

Mid-term examination	40	points
Final examination	60	points

Textbook

1. (**TM**) **Thomas J. Miceli, (2011). *The Economic Approach to Law. 2nd Edition*. Stanford Economics and Finance**
2. (RC)Cooter, R., & Ulen, T. (2008). *Law & economics*. Pearson/Addison Wesley

Topics

Topic 1. An Economic Model of Tort Law [**TM : Chapter 2, RC : Chapter 5**]

- What Is a Tort?
- An Economic Model of Accidents: The Model of Precaution
  - The Unilateral Care Model
  - Bilateral Care Model
  - The Hand Rule
  - The Reasonable-Person Standard
  - Contributory Negligence
- Further Topics
  - Sequential Care Accidents
  - Comparative Negligence
  - Causation and Liability
  - Punitive Damages

Topic 2. Applying the Economic Model of Tort Law [**TM : Chapter 3, RC : Chapter 6**]

- Products Liability
  - **An Economic Model of Products Liability**
- Workplace Accidents
- Liability for Environmental Damages
  - **Characteristics of Environmental Accidents**
- Medical Malpractice

Topic 3. The Economics of Contract Law I: [**TM : Chapter 4, RC : Chapter 7**]

- The Elements of a Valid Contract
  - Contracts and Efficient Exchange
  - The Elements of a Valid Contract
  - Reasons for Invalidating Contracts

Topic 4. The Economics of Contract Law II: Remedies for Breach [**TM : Chapter 5, RC : Chapter 8**]

- The Efficient Breach Model
  - Money Damages and Efficient Breach
  - Incentives for Efficient Reliance
  - Mitigation of Damages
  - Impossibility and Related Excuses
- Specific Performance
  - Transaction Costs
  - Subjective Value and Efficient Breach
  - The Value of Consent
- Self-Enforcement of Contracts

- Liquidated Damage Clauses
- Product Warranties
- Long-Term Contracts

Topic 5. The Economics of Property Law: Fundamentals [**TM** : **Chapter 6, RC** : **Chapter 4**]

- The Nature and Function of Property Right
  - The Definition of Property Rights
  - Property Rights and Incentives
  - The Emergence of Property Rights
  - Enforcement of Property Rights
- Fundamentals of the Economics of Property Law
  - The Coase Theorem
  - Enforcement of Property Rights
  - Trespass and Nuisance
  - The General Transaction Structure
- Limited and Divided Ownership
  - Leasing
  - Private Versus Group Ownership
  - Time-Limited Property Rights: Intellectual Property
    - Patents
    - Copyrights

Topic 6. The Economics of Dispute Resolution [**TM** : **Chapter 8 , RC** : **Chapter 9**]

- The Litigation Process
- Why Do Trials Occur?
  - The Differing Perceptions, or Optimism Model
  - The Asymmetric Information Model
  - The Social Versus Private Incentive to Sue
- Procedural Rules and Litigation Costs
  - The English Versus American Rule
  - The English Rule and Settlement
  - The English Rule and the Incentive to File Suit
- Rule 68
- Contingent Fees
  - The Benefits of Contingent Fees
  - Contingent Fees and Settlement
  - Do Contingent Fees Promote Frivolous Suits?
- Frivolous Suits

Topic 7. The Economics of Crime [**TM** : **Chapter 9, RC** : **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
  - Prison, Probation, and Parole
  - The Probability of Apprehension Is Variable
  - Repeat Offenders
  - Empirical Evidence on the Economic Model of Crime
  - The Death Penalty
  - Economics of the Death Penalty
- Plea Bargaining
  - Economic Models of Plea Bargaining
  - Plea Bargaining and Deterrence

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE404 HISTORY OF ECONOMIC THOUGHT

Semester 1/2025

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

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 (Curriculum 2013)

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 "theory".
4) Use the knowledge gained to better understand contemporary debates and issues.

Text:
The History of Economic Thought (Seventh 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 day before class on my website or through moodle. 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:
The moodle code for the course is 3569. All of the lecture notes will be put on moodle, though it is usually easier to get them off of my website: www.ajarnkennedy.com

Cheating:
Don't. If you do, and I catch you, you will be reported to the program director for 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 1½ 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 weighted towards materials studied in the second half of the semester. The exam schedule is given below:

Midterm Exam: 40%

Final Exam: 60%

Topics and Class Schedule: (This may change as the semester progresses, I will keep it up to date on my webpage)

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Learning Goals	Expected Learning Outcomes
O	1.16 Students demonstrate integrity.	
O	1.17 Students prioritize social and public benefits over personal ones.	
O	1.18 Students are punctual and comply with the code of conduct of the institution and society at large.	
O	1.19 Students are responsible and accountable to society, the nation, and the subject of economics.	
O	1.20 Students realize the cultural and environmental value of the sustenainable society.	

2. Knowledge

Applicability	Learning Goals	Expected Learning Outcomes
O	2.16 Students know and understand modern economics principles and theories, and are up to date with new developments.	
●	2.17 Students know and understand Thai and global economic structure, and the importance of major international economic events.	Understand the importance of the History of Economic Thought on Thai economic development

●	2.18 Students know and understand instruments of economic analysis.	Know how we got to where we are.
O	2.19 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.	
O	2.20 Students are informed about related fields including sociology, business administration, education, law policy, and science.	

3. Intellectual Development

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

4. Interpersonal Skills and Responsibilities

Applicability	Learning Goals	Expected Learning Outcomes
O	10.1 Students are responsible for assigned tasks and work in groups effectively.	
O	10.2 Students have problem-solving skills.	
O	10.3 Students show leadership skills and team spirit.	
●	10.4 Students are always improving themselves.	Do so
O	10.5 Students have good interpersonal skills, adapting and working under different conditions.	

5. Quantitative Analysis, Communication and Information Technology

Applicability	Learning Goals	Expected Learning Outcomes
O	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.	No presentations required, but participate in class discussions
●	5.3 Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	Do so.

Teaching Plan and Class Schedule

Date	Topic	Readings
Week 1	Class 1: Introduction, The Greeks, Romans, the Middle Ages Class 2: The Mercantilists	**Online Readings (Not Required), Chapter 1** **Chapter 2**
Week 2	Class 3: The Physiocrats Special Topics: Economic History vs. History of Economic Thought Class 4: The Classical School I - Adam Smith	**Chapter 3** **Chapter 4**
Week 3	Class 5: The Classical School II - Adam Smith Class 6: The Classical School III - Malthas, Say	**Chapter 5** **Chapter 6**
Week 4	Class 7: The Classical School IV - David Ricardo Class 8: The Classical School V - David Ricardo	**Chapter 8**
Week 5	Class 9: The Classical School VI – Bentham Class 10: The Classical School VII Senior, Mill	**Chapter 7**
Week 6	Class 11: The Socialists Class 12: The Socialists II	**Chapter 9**

Week 7	Class 13: The Marxists I Class 14: The Marxists II	**Chapter 10** **Supplemental Handout**
	Midterm	
Week 9	Class 15: German Historical School Class 16: The Institutionalists, the Austrians	**Chapter 11** **Chapter 19**
Week 10	Class 17 -18: The Marginal Revolution I The Marginal Revolution II	**Chapter 12 (optional)** **Chapter 13** **Chapter 14**
Week 11	Class 19 - 20: The Neoclassical School I (Marshall) The Neoclassical School II (Monetary)	**Chapter 15** **Chapter 16**
Week 12	Class 21: The Neoclassical School III (Imperfect competition) Class 22: Game Theory	**Chapter 17** **Supplemental Readings – we may skip this depending on time**
Week 13	Class 23-24: Welfare Economics I Welfare Economics II (Public Choice)	**Chapter 20** **Supplemental Readings**
Week 14	Class 25-26: The Keynesian Revolution 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**	
	Final Exam	

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE406 CONTEMPORARY ECONOMICS ISSUES

Semester 1/2025

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

Course Description:

EE406 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 course's teaching assistants are Annop Jaewisorn, Parinya Mingsakul, and Halit Sriputkeat.

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 spend its focus on epidemics, and the significance of its relationship to the economy, politics, as well as historical changes.

The course is therefore 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;

3. Train students on academic writing and presentation through class assignments and guide the development of research methods.

Prerequisites: *EE211 and EE212*

Evaluation:

Midterm examination	30%
Group assignment	20%
- progress report I	
- progress report II	
- final paper	
Presentation	10%
Final examination	40%

Main Text:

Class slides and references

Snowden, Frank M. (2019). *Epidemics and Society: From the Black Death to the Present*, Yale University Press. ProQuest Ebook Central, retrieved from https://ebookcentral.proquest.com/lib/thammasat-ebooks/detail.action?docID=5910244.

Recommended Text

Diamond, Jared. (1997). *Gun, Germs, and Steel: the Fates of Human Societies***.** W. W. Norton & Company.

Additional mandatory and suggested reading lists under each chapter will be provided via be-moodle.

Class Policies:

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 defence.

If a student has any question about the lecture, it is highly encouraged to raise them in class. For section 046402-03, please do not hesitate to consult the lecturer during office hours which is on Monday 9-11 am. For office hour visits, appointments must be made the Friday before, at the latest.

Exam materials are cumulative – meaning that in order to perform well in the finals, students must have good understanding of the materials covered throughout the course. 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 *BE-moodle*.

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Expected Learning Outcomes
●	1.21 Students demonstrate integrity.
O	1.22 Students prioritize social and public benefits over personal ones.
●	1.23 Students are punctual and comply with the code of conduct of the institution and society at large.
O	1.24 Students are responsible and accountable to society, the nation, and the subject of economics.
O	1.25 Students realize the cultural and environmental value of the sustainable society.

2. Knowledge

Applicability	Expected Learning Outcomes
●	2.21 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.22 Students know and understand Thai and global economic structure, and the importance of major international economic events.
●	2.23 Students know and understand instruments of economic analysis.

●	2.24 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.
O	2.25 Students are informed about related fields including sociology, business administration, education, law policy, and science.

3. Intellectual Development

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

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes
●	12.1 Students are responsible for assigned tasks and work in groups effectively.
O	12.2 Students have problem-solving skills.
O	12.3 Students show leadership skills and team spirit.
●	12.4 Students are always improving themselves.
●	12.5 Students have good interpersonal skills, adapting and working under different conditions.

5. Quantitative Analysis, Communication and Information Technology

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

Teaching Plans

Date*	Topic	Reading
12 Aug	**1. Introduction: Epidemics & Society (1.5 hours)** 1.1) Why the focus on epidemics? 1.1.1) Epidemics as economic phenomena; 1.1.2) Economic consequences of epidemics; 1.2) General course outline & evaluation	
14, 19, 21, 26, 28 Aug	**2. Globalisation & Epidemics (7.5 hours)** 2.1) Globalisation as a cause of COVID-19 Globalisation as a cause of the Bubonic Plague 2.2) Globalisation after COVID-19	
2, 4, 9, 11, 16 Sep	**3. Labour & Epidemics (7.5 hours)** 3.1) Working condition as a cause of COVID-19 3.2) The Yellow Fever and working conditions of Slavery in Haiti 3.3) How the COVID-19 impact working conditions & labour market	
18, 23, 25 Sep, 7, 9 Oct	**4. Poverty, Inequality, and Epidemics (7.5 hours)** 4.1) Poverty as a cause of COVID-19	

Date*	Topic	Reading
	4.2) Cholera as a disease of the poor 4.3) Poverty & inequality after COVID-19	
14, 16, 21, 23 Oct	**5. Environment & COVID-19 (6 hours)** 5.1) How the misdirected relationship between human & nature causes COVID-19 5.2) Deforestation & Ebola 5.3) How the relationship between human and nature should be after COVID-19	
28, 30 Oct, 4, 6, 11 Nov	**6. Government mismanagement & Epidemics (7.5 hours)** 6.1) How government mismanagements caused COVID-19 6.2) Bubonic Plague in Bombay 6.3) SARS in China and the Chinese Government 6.4) Policies and measures after COVID-19	
13, 18, 20, 25, 27 Nov	**7. World Order & COVID-19 (7.5 hours)** 7.1) Smallpox & the Invasion of America 7.2) World Order after COVID-19	

**Dates are based on section 1 & 2*

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE411 MICROECONOMIC ANALYSIS

Semester 1/2025

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

Prerequisites: EE311 and EE320 (or EE421)

I. Course Description

Study of microeconomic theory with an emphasis on utilizing mathematical tools to analyze various economic issues, such as consumer behavior, revealed preferences, intertemporal consumption, consumption and risk, and theory of production and cost. Topics covered also include market structures and behavior, game theory, factor markets, general equilibrium and welfare economics, and impacts of externalities, public goods, and asymmetric information on level of welfare.

II. Course Objectives

This course provides an introduction to advanced microeconomic theory. The course is designed to teach classical materials and to introduce some methodologies used by economists. Topics include: theories of individual choice (under certainty and uncertainty); theory of production; markets and welfares under different market structures. tools of comparative statics and their application to price theory; a noncooperative game theory which analyze agent's behaviors under strategic decision making.

III. Evaluation

Homework Assignment	10%
Midterm Exam	40%
Final Exam	50%.

IV. Textbook

Main Texts:

• Mas-Colell, Andreu, Michael D. Whinston, and Jerry G. Green (MWG),

Microeconomics Theory, Oxford University Press.

• Gibbons, Robert (G), Game Theory for Applied Economist, Princeton University Press.

Supplementary Texts:

• Jehle, Geoffrey A. and Philip J. Reny (JR), Advanced Microeconomic Theory, 3rd Edition, Pearson Addison Wesley.

• Varian, Hal R. (V), Microeconomics Analysis, 3rd Edition, W.W. Norton & Company.

• Silberberg, Eugene and Wing Suen (SS), The Structure of Economics: A Mathematical Analysis, 3rd. ed., Irwin McGraw-Hill.

Expected Learning Outcomes:

1. **Morality and Ethics**

Applicability	Learning Goals	Expected Learning Outcomes
●	1.1 Students demonstrate integrity.	Students do not cheat on exams
O	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.	Students come to class on time.
O	1.4 Students are responsible and accountable to society, the nation, and the subject of economics.	
O	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 understand core concepts in each topic.
O	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.	Students learn how to use optimization techniques in solving economic problems.
O	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.	
O	2.5 Students are informed about related fields including sociology, business administration, education, law policy, and science.	

3. Intellectual Development

Applicability	Learning Goals	Expected Learning Outcomes
●	3.1 Students have developed individual critical thinking.	Students can criticize the importance of assumption in various economic models.
O	3.2 Students are sufficiently trained in research skills.	
●	3.3 Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand causes of current economic problems in Thailand. Based on analsyis and synthesis,	Students know how to apply microeconomic theories with daily economic-related decisions.
	students demonstrate an ability to propose policy guidelines to resolve problems.	

4. Interpersonal Skills and Responsibilities

Applicability	Learning Goals	Expected Learning Outcomes
●	4.1 Students are responsible for assigned tasks and work in groups effectively.	Students submit their work assignments on time.
●	4.2 Students have problem-solving skills.	Students receive assigned problems in each topic.
O	4.3 Students show leadership skills and team spirit.	
●	4.4 Students are always improving themselves.	Students are evaluated on their works and received feedback from their works.
O	4.5 Students have good interpersonal skills, adapting and working under different conditions.	

5. Quantitative Analysis, Communication and Information Technology

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

V. Tentative Outline

Week	Topic	Book Chapter
1	Mathematics for Microeconomic Analysis	(MWG) Appendix
2	Mathematics for Microeconomic Analysis	(MWG) Appendix
3	Consumer Theory	(MWG) 1, 2, 3
4	Consumer Theory	(MWG) 1, 2, 3
5	Consumer Theory	(MWG) 1, 2, 3
6	Producer Theory	(MWG) 5
7	Risk and Uncertainty	(MWG) 6
	Midterm Examination	
8	Static Game	(G) 1, 3
9	Dynamic Game	(G) 2, 4
10	Partial Equilibrium	(MWG) 10
11	Market Failure	(MWG) 11, 12
12	Market Failure	(MWG) 11, 12
13	General Equilibrium	(MWG) 15, 16
14	General Equilibrium	(MWG) 15, 16
15	Information Economics	(MWG) 13, 14
	Final Examination	

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE422 MATHEMATICAL ECONOMICS 2

Semester 1/2025

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

Prerequisites: EE421 and having completed or currently taking EE312

I. Course Description

The application of mathematical tools including integral calculus, differential equations, difference equations, phase diagram and dynamic optimization such as optimal control theory and dynamic programming for explaining dynamic economic phenomena as well as for locating time path and stability of variables in the context of both microeconomics and macroeconomics.

II. Course Objectives

This course is a second sub-field course in quantitative economics and it is designed for the students who want to prepare themselves for further studying economics in the graduate level. This class will mainly focus on the dynamic analysis which will be used as a tool to analyze dynamic economic phenomena and the stability. This course composed of two parts: the ordinary differential equations and difference equations part and the dynamic optimization part.

III. Evaluation

Homework Assignment	20%
Midterm Exam	30%
Final Exam	50%.

IV. Textbook

Main Texts:

• [L] Sittisak Leelahanon, Lecture Notes for EE422 Mathematical Economics 2, Faculty of Economics, Thammasat University.

• [SHSS] Knut Sydsæter, Peter Hammond, Atle Seierstad and Arne Strøm,

Further Mathematics for Economic Analysis, 2nd ed., Prentice Hall.

Supplementary Texts:

• [SB] Carl P. Simon and Lawrence Blume, Mathematics for Economists,

W. W. Norton & Company, Inc.

• [C] Alpha C. Chiang, Elements of Dynamic Optimization, Waveland Press, Inc.

I. Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Learning Goals	Expected Learning Outcomes
●	1.1 Students demonstrate integrity.	Students do not cheat on exams
O	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.	Students come to class on time.
O	1.4 Students are responsible and accountable to society, the nation, and the subject of economics.	
O	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 understand core concepts in each topic.
O	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.	Students learn how to use optimization techniques in solving economic problems.
O	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.	
O	2.5 Students are informed about related fields including sociology, business administration, education, law policy, and science.	

3. Intellectual Development

Applicability	Learning Goals	Expected Learning Outcomes
●	3.1 Students have developed individual critical thinking.	Students can criticize the importance of assumption in various economic theories.
O	3.2 Students are sufficiently trained in research skills.	

●	3.3 Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand causes of current economic problems in Thailand. Based on analysis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.	Students know how to apply mathematical economics with daily economic-related decisions.

4. Interpersonal Skills and Responsibilities

Applicability	Learning Goals	Expected Learning Outcomes
●	4.1 Students are responsible for assigned tasks and work in groups effectively.	Students submit their work assignments on time.
●	4.2 Students have problem-solving skills.	Students receive assigned problems in each topic.
O	4.3 Students show leadership skills and team spirit.	
●	4.4 Students are always improving themselves.	Students are evaluated on their works and received feedback from their works.
O	4.5 Students have good interpersonal skills, adapting and working under different conditions.	

5. Quantitative Analysis, Communication and Information Technology

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

I. Tentative Outline

Week	Topic	Book Chapter
1	Integral Calculus	(L) 1, (SHSS) 4
2	Integral Calculus	(L) 1, (SHSS) 4
3	Integral Calculus	(L) 1, (SHSS) 4
4	Differential Equations	(L) 2, (SHSS) 5-7, (SB) 24
5	Differential Equations	(L) 2, (SHSS) 5-7, (SB) 24
6	Difference Equations	(L) 3, (SHSS) 11
7	System of Simultaneous Difference Equations	(L) 4, (SHSS) 23,25
	Midterm Examination	
8	System of Simultaneous Differential Equations	(L) 4, (SHSS) 23,25
9	System of Simultaneous Differential Equations	(L) 4, (SHSS) 23,25
10	Calculus of Variation	(L) 5, (SHSS) 8, (C) 1-6
11	Calculus of Variation	(L) 5, (SHSS) 8, (C) 1-6
12	Optimal Control Theory	(L) 6, (SHSS) 9-10, (C) 7-10
13	Optimal Control Theory	(L) 6, (SHSS) 9-10, (C) 7-10
14	Dynamic Programming	(L) 7, (SHSS) 12
15	Dynamic Programming	(L) 7, (SHSS) 12
	Final Examination	

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE425 ECONOMETRICS 1

Semester 1/2025

Number of Credit: 3 Credits

Prerequisite: MA216 (or MA211) and ST217 (or ST212)

Course Description: 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, heteroskedasticity, multi-collinearity and specification error. Other estimation techniques such as generalized least squares (GLS), maximum likelihood estimation (MLE) and the use of computer application in practice will also be covered.

Course Objectives: This course is the more advanced alternative to EE325 (Introductory Econometrics). It will focus on the theory that underpins standard econometric methods. Students will learn to derive simple theoretical results from standard principles. They will also learn to apply the knowledge to analyze actual datasets using a standard software such as STATA.

Main Text: Wooldridge, J. M. ***Introductory Econometrics: A Modern Approach***. 3rd ed. Thompson: South-Western, 2006.

Recommended Texts & Materials: Gujarati, D.N., and D.C. Porter**, *Basic Econometrics***. 5th ed., N.Y., McGraw-Hill, 2009.

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

Grading Criteria:

Homework	20%
Paper Replication	15%
Midterm Exam	30%
Final Exam	35%

***Late homeworks count as 50% of your actual marks.**
*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.

Tentative Class Schedule:

Introduction

- What is econometrics?
- Methodology of econometrics
- Types of economic data
  (Wooldridge, ch.1; Gujarati, ch. 1)

Review of Some Statistical Concepts

- Random variables and distributions
- Expectation, variance, covariance and correlation
- Estimators and desirable properties of estimators
  (Wooldridge, Appendix B; Gujarati, Appendix A, pp.869-912)

Simple Regression Models

- Principle, assumptions and derivation of ordinary least squares (OLS) estimators
- Properties of OLS estimators
- Statistical inference
- Prediction
- Regression Through the Origin
  (Wooldridge, ch. 2; Gujarati, chs. 2 – 6)

Multiple Regression Analysis (Estimation)

- Motivation
- Model and assumptions

- Estimation of parameters and properties of estimators
- Meaning of partial regression coefficients
- Measuring goodness of fit: R^2 and adjusted R^2
- The matrix approach to linear regression model
  (Wooldridge, ch. 3; Gujarati: ch. 7, Appendix B, C)

Multiple Regression Analysis (Inference)

- Sampling Distribution of the OLS estimators
- Test on individual regression coefficients
- Testing the multiple linear restrictions
- Testing the equality of two regression coefficients
- Testing for equality or stability of parameters (Chow test)
- Prediction with general linear model
  (Wooldridge, ch. 4; Gujarati: ch. 8)

========== MIDTERM EXAM ABOUT HERE ==========

Multiple Regression Analysis (Extensions)

- Data scaling on OLS statistics
- More on functional forms
  (Wooldridge, ch. 6, (6.1 and 6.2))

Dummy Variable Regression Models

- Describing Qualitative Information
- Models with a single dummy independent variable
- Using dummy variables for multiple categories
- Interactions involving dummy variables
  (Wooldridge, ch. 7; Gujarati: ch. 15)

Matrix Algebra in Economics

- Summary of Matrix Operations
- The Linear Regression Model in Matrix Form
  (Wooldridge Appendix D, Appendix E)

Heteroscedasticity Problem

- Nature and Consequences of heteroscedasticity for OLS
- Testing for heteroscedasticity
- Remedial measures (weighted least squares estimation)
  (Wooldridge, ch. 8; Gujarati, ch. 11)

Specification Errors and Data Problems

- Type of specification errors
- Consequences of specification error
- Tests of specification error
- Errors of measurement
  (Wooldridge ch. 9; Gujarati: ch. 13)

Multicollinearity Problem

- Nature and Consequences of Multicollinearity
- Detecting Multicollinearity
  (Wooldridge, ch. 3 (3.4); Gujarati, ch. 10)

Autocorrelation Problem

- Nature and Consequences of Autocorrelation, Serial Correlation
- Testing for Autocorrelation
- Remedial measures
  (Wooldridge, ch. 12 (12.1-12.3); Gujarati, ch. 12)

Instrumental Variables Estimation (if time allows)

- Motivation
- The instrumental variables (IV) method
  (Wooldridge, ch.15; Dougherty, ch.8.1-8.3)

========== FINAL EXAM ==========

Expected Learning Outcomes

ELO(s)	Major Emphasis	Minor Emphasis	Evaluation Method
1. Moral & virtue			
(7)	●		Do assignments and exams with integrity and honesty.
2. Knowledge			
(8)	●		Homework and Assignments
(9)	●		Exams
(10)	●		Paper Replication
3. Intellectual skills			
(7)	●		Paper Replication
4. Interpersonal skills & responsibility			
(8)	●		Homework and Assignments
(9)	●		Paper Replication
5. Numeral analytic, communication, and information technology skills			
(4)	●		Homework and Assignments
(5)	●		Paper Replication

*** Major Emphasis: ●, Minor Emphasis: ○**

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE432 MONETARY THEORY AND POLICY

Semester 1/2025

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

Prerequisite: EE312

Course Description:

This course aims to provide the student with an introduction to the role of money, financial markets, financial institutions and monetary policy in the economy, thus facilitating a solid foundation for further study and enhancing professional capability in the financial services industry.

It will investigate the role of money, theories regarding the supply of and demand for money and the relationship between money, credit and debt will also be emphasized. The course will then study the role of financial markets in the economy with a particular emphasis on bond markets, term structure and their implications. In addition, it will further analyze the evolving roles of central banks and their views regarding execution monetary policy, including recent and historical international policy actions. Both theoretical concept and empirical evidence, especially current economic situations will be used to examine the effects of monetary policies. In terms of theory, this course will adopt macroeconomic model to study the rationale behind monetary policy and provide a thorough understanding of transmission mechanisms and their impacts on macroeconomic variables, specifically economic growth and inflation.

Besides, it will also cover the formulation of unconventional monetary policy, so called quantitative easing, when interest rates approach the zero-lower bound. Another area of study in this course is the consideration of modern monetary theories, particularly, in the context of real business cycle model and the New Keynesian model.

Course Objectives:

1. To develop knowledge and analytic skill 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 participating individual assignment, exercise, in-class discussion and peer-to-peer learning.

Main Text:

The primary textbook will be:

Cecchetti, Stephen and Schoenholtz, Kermit. (2020) **Money, banking, and financial markets.** (6th edition). McGraw-Hill.

Recommended Texts & Materials:

Students are required to read all lecture notes presented through virtual classroom.

Suggested Readings:

Students should also study other related teaching materials, including case-based or topic-based articles, news clips and central banks' publications, posted on this subject's moodle platform.

Course Evaluation:

The course will be assessed by active learning approach with a variety of individual learning, including in-class discussion on current economic situation, individual exercise, individual report assignment, online mid-term examination, and online final examination. Students should also follow the current economic situations which will be brought into discussion via the online classes. Besides, the students are encouraged to utilize a web-based platform provided by Mc-Graw Hill Connect https://connect.mheducation.com, which linked to our BE-moodle as additional source of learning. The major materials are lecture note presentation provided on BE-moodle and other related materials posted on moodle platform. The assessment criteria are detailed as follow.

1. Attendance and in-class participation 10%
2. Individual exercise 10%
3. Individual report assignment 10%
4. Online mid-term examination 30%
5. Online final examination 40%

Grading Criteria:

A	=	80 and above
B+	=	75 - 79.9
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

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Expected Learning Outcomes
●	1.26 Students demonstrate integrity.
●	1.27 Students prioritize social and public benefits over personal ones.
●	1.28 Students are punctual and comply with the code of conduct of the institution and society at large.
●	1.29 Students are responsible and accountable to society, the nation, and the subject of economics.
O	1.30 Students realize the cultural and environmental value of the sustenainable society.

2. Knowledge

Applicability	Expected Learning Outcomes
●	2.26 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.27 Students know and understand Thai and global economic structure, and the importance of major international economic events.
O	2.28 Students know and understand instruments of economic analysis.

Applicability	Expected Learning Outcomes
●	2.29 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.
○	2.30 Students are informed about related fields including sociology, business administration, education, law policy, and science.

3. Intellectual Development

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

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes
●	12.6 Students are responsible for assigned tasks and work in groups effectively.
●	12.7 Students have problem-solving skills.
○	12.8 Students show leadership skills and team spirit.
●	12.9 Students are always improving themselves.
○	12.10 Students have good interpersonal skills, adapting and working under different conditions.

Quantitative Analysis, Communication and Information Technology

Applicability	Expected Learning Outcomes
O	5.4 Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.
O	5.5 Students communicate effectively and select appropriate presentation methods.
O	5.6 Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.

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)	
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 (Online)	
8.	The central bank balance sheet and the money supply process (Cecchetti & Schoenholtz Textbook Chapter 17)	

Week	Topic	Date
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	

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE431 ECONOMICS OF FINANCIAL MARKETS AND INSTITUTIONS

Semester 1/2025

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

Prerequisite: EE311

Course description:

Money and capital markets at the micro level; Financial assets; financial risks and financial risks bearing; Theory of equilibrium pricing of financial assets; the CAPM and APT models; Interest rate structure; bond and equity instruments; Financial derivatives; Asymmetric information in financial market; The study of financial institutions with the emphases on theories regarding the roles and functions of commercial banks; Risk management of financial institutions; Monitoring and controlling of financial institutions; The deposit insurance system and financial institution business from the perspective of industrial economics.

Course Objective:

1. To provide students with understanding of financial asset characteristics; risk, return and liquidity

2. To provide students with understanding of debt market and interest rate at micro level.

3. To provide students with understanding of decision process for investment in financial assets at microeconomic level, where investors seek to maximize their expected utility under constraint (combination of risk and returns available in the financial market).

4. To provide students with understanding of diversification, degree of risk aversion, risk premium, which are important determinants of the equilibrium price of financial assets in the financial market.

5. To provide students with understanding of asymmetric information problem in the financial market and the role of financial intermediaries.

6. To provide students with understanding of risk management of financial institutions.

7. To provide students of understanding of agency problem and excessive risk-taking in the financial market and how to mitigate the situation.

9. To provide students with understanding of bank's liquidity creation, bank's liquidity problem, bank runs and deposit insurance.

10. To provide students with understanding of financial crisis, and the relationship between the crisis and the financial sector.

Students are also encouraged to practice collaborative problem-solving and presentation skills in this class.

Teaching Materials and Resources:

Main textbook:

[Mishkin] Mishkin, F.S. **The Economics of Money, Banking, and Financial Markets**. Pearson/Addison Wesley.

[A&D] Ackert, L. and R. Deaves (2010) **Behavioral Finance: Psychology, Decision-Making, and Markets**. South-Western Cengage Learning.

[Brunnermeier et al.] Brunnermeier, M., A. Crocket, C. Goodhart, A.D. Persaud, and H. Shin (2009). The Fundamental Principles of Financial Regulation. **Geneva Reports on World Economy** 11. Parts 1 – 4.

Required Readings:

[Siegel&Thaler] Siegel, J.J. and R.H. Thaler (1997). Anomalies: the equity premium puzzle. **Journal of Economic Perspectives** 11(1), pp. 191 – 200.

[Daniel&Hirshleifer] Daniel, K. and D. Hirshleifer (2015). Overconfident investors, predicable returns, and excessive trading. **Journal of Economic Perspectives** 29(4), pp. 61 – 88.

[Brunnermeier, 2009] Brunnermeier, M. (2009). Deciphering the liquidity and credit crunch 2007 - 2008. **Journal of Economic Perspectives** 23(1), pp. 77 - 100.

[Aikman et al.] Aikman, D., J. Bridges, A. Kashyap, and C. Siegert (2019). Would macroprudential regulation have prevented the last crisis? **Journal of Economic Perspectives** 33(1), pp. 107 – 130.

Some Useful Links:

The Bank of Thailand: https://www.bot.or.th/English/Pages/default.aspx

The Securities and Exchange Commission: http://www.sec.or.th/EN/Pages/Home.aspx

The Stock Exchange of Thailand: http://www.set.or.th/set/mainpage.do

The Thai Bond Market Association: http://www.thaibma.or.th/

The Office of Insurance Commission: http://www.oic.or.th/en/

The Deposit Protection Agency: http://www.dpa.or.th/main.php?filename=index EN

The Bank for International Settlement: https://www.bis.org/

The International Monetary Fund: http://www.imf.org/external/index.htm

Handouts or related materials: (if any) will be uploaded on BE moodle at least two

days before each lecture.

Class Talks:

Students should arrange into 8 groups. There will be two talks on issues related to JEP articles and content in class. At each talk, each group summarizes related JEP articles, one page for each article, and submit to the lecturer. At each talk, each group present your own idea about the topic of the talk with Powerpoint (or something similar) not exceeding three pages. The presentation can cover anything related to the topic. At each talk, four groups will be selected to present their own idea about the topic of the talk. After that, class will discuss about current development and what will happen in the future.

Evaluation:

Class Talks	25%
Mid-term examination	30%
Final examination	45%

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Expected Learning Outcomes
●	1.31 Students demonstrate integrity.
●	1.32 Students prioritize social and public benefits over personal ones.
●	1.33 Students are punctual and comply with the code of conduct of the institution and society at large.
●	1.34 Students are responsible and accountable to society, the nation, and the subject of economics.
O	1.35 Students realize the cultural and environmental value of the sustenainable society.

2. Knowledge

Applicability	Expected Learning Outcomes
●	2.31 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.32 Students know and understand Thai and global economic structure, and the importance of major international economic events.

O	2.33 Students know and understand instruments of economic analysis.
●	2.34 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.
●	2.35 Students are informed about related fields including sociology, business administration, education, law policy, and science.

3. Intellectual Development

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

4. Interpersonal Skills and Responsibilities

Applicability	Expected Learning Outcomes
●	14.1Students are responsible for assigned tasks and work in groups effectively.
●	14.2 Students have problem-solving skills.

O	14.3 Students show leadership skills and team spirit.

●	14.4 Students are always improving themselves.
O	14.5 Students have good interpersonal skills, adapting and working under different conditions.

5. Quantitative Analysis, Communication and Information Technology

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

Teaching Plan:

No	Activity	Documents
1	Course outline + Class rules	Course Outline + Mishkin Ch.1
2	Money + The financial system	Mishkin Ch.2-3
3	Interest rates	Mishkin Ch.4
4	Behavior of the interest rates	Mishkin Ch.5
5	Risks in Mainstream Economics	A&D Ch.1

No	Activity	Documents
6	The Risk and Term Structure of Interest Rates	Mishkin Ch.6
7	Introduction to stock markets	Mishkin Ch.7
8	Mainstream: Expected Utility and asset pricing	A&D Ch.2
9	Mainstream: Stocks and CAPM	A&D Ch.2
10	Mainstream: Efficient Market Hypothesis (EMH)	A&D Ch.2, Mishkin Ch.7
11	Behavioral: Some challenges to EMH	A&D Ch.4
12	Behavioral: Prospect Theory	A&D Ch.3
13	Behavioral: The Equity Premium Puzzle	Siegel&Thaler
14	Behavioral: The Overconfidence Investors	Daniel&Hirshleifer
Midterm Exam.		
15	Class talk 1: Stock market in the future	Siegel&Thaler and Daniel&Hirshleifer
16	Economic analysis of the financial system	Mishkin Ch.8
17	Banking	Mishkin Ch.10
18	Regulation1: Deposit Insurance	Mishkin Ch.11, MacDonald, 1996
19	Regulation2: Risk based capital regulation and Mark-to-Market Accounting	Mishkin Ch.11

No	Activity	Documents
20	Regulation3: Procyclicality of some regulations	Brunnermeier et al. Section 2
21	The Sub-prime crisis 1: Important components	Mishkin Ch.9
22	The Sub-prime crisis 2: The crisis of credit visualized	https://www.youtube.com/watch?v=bx_LWm6_6tA
23	The Sub-prime crisis 3: Some mechanism	Brunnermeier et al. Section 2
24	Deciphering the liquidity and credit crunch 2007 - 2008	Brunnermeier, 2009
25	The Fundamental Principles of Financial Regulation 1: Countercyclical regulation	Brunnermeier et al. Section 3 - 4
26	The Fundamental Principles of Financial Regulation 2: VaR Vs CoVaR	Brunnermeier et al. Section 4
27	The Fundamental Principles of Financial Regulation 3: Mark to Funding	Brunnermeier et al. Section 5
28	Regulation at the present time	Aikman et al.
29	Class Talk 2: Regulation in the present time and the future.	Brunnermeier et al. and Aikman et al.
30	Class conclusion	
Final Exam		

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE434 BEHAVIORAL FINANCE

Semester 1/2025

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

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.

2. To learn how behavioral finance can help promote the understanding of how financial decision-makings are made in financial market, and how it can help us to understand 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*. STU-Student edition. Princeton University Press.

[Dhami] Dhami, S. (2016). *The Foundations of Behavioral Economic Analysis*. Oxford University Press.
Part 7
Puey Ungphakorn Library, Tha Phra Chan Campus HB74.P8 D43 2016
e-book: https://th1lib.org/book/2947003/5d0636
Main textbook:

Baddeley, Michelle. (2019). *Behavioural Economics and Finance*. Abingdon, Oxon ; New York, NY : Routledge, an imprint of the Taylor & Francis Group.
Chapter 13, 14, 15
Puey Ungphakorn Library, Tha Phra Chan Campus HB74.P8 B33 2019

Supplementary textbooks:

Statman, M. (2019). *Behavioral Finance: The Second Generation*. CFA Institute Research Foundation.

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

Recommended book (for fun and for knowledge):

Ariely, D. (2010). *Predictably Irrational : the Hidden Forces That Shape Our Decisions*. New York :Harper Perennial.

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

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

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

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

Academic Journal:

Papers discussed/mentioned in class will be provided on BE Moodle and 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:

Assignments	15 %
Capstone Project mini	20 %
Midterm Exam	25 %
Final Exam	40 %

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Learning Goals
●	1.36 Students demonstrate integrity.
O	1.37 Students prioritize social and public benefits over personal ones.
●	1.38 Students are punctual and comply with the code of conduct of the institution and society at large.
O	1.39 Students are responsible and accountable to society, the nation, and the subject of economics.
O	1.40 Students realize the cultural and environmental value of the sustenainable society.

2. Knowledge

Applicability	Learning Goals
●	2.36 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.37 Students know and understand Thai and global economic structure, and the importance of major international economic events.
●	2.38 Students know and understand instruments of economic analysis.
●	2.39 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.
O	2.40 Students are informed about related fields including sociology, business administration, education, law policy, and science.

3. Intellectual Development

Applicability	Learning Goals
●	3.22 Students have developed individual critical thinking.
●	3.23 Students are sufficiently trained in research skills.
●	3.24 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
●	16.1 Students are responsible for assigned tasks and work in groups effectively.
●	16.2 Students have problem-solving skills.
●	16.3 Students show leadership skills and team spirit.
●	16.4 Students are always improving themselves.
●	16.5 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.

Course Outline

Topics	Textbook
Part I: Foundations	
Introduction	
Foundations of Finance: Expected Utility Theory	A&D, Ch.1
Part II: Investor Behaviors, Stock Returns, Equity Premium Puzzle	
Models of investor behaviors under risk and uncertainty: - Prospect Theory, Framing, and Mental Accounting - Ambiguity aversion	A&D, Ch.3, Ch. 14 Thaler, Part 2, 5 Dhami, Ch. 20
Heuristics and Biases and their implications for financial decision-making	A&D, Ch.5, 8 Dhami, Ch. 19
Overconfidence and their implications for financial decision-making	A&D, Ch.6, 9
Emotional Foundations, Individual Investors and the Force of Emotion	A&D, Ch.7, 10
Social forces	A&D, Ch.11, 14
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

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

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE435 INTRODUCTORY FINANCIAL ECONOMETRICS

Semester 1/2025

Number of credits: 3 credits
Prerequisites: EE325 (or EE425) and EE431

Course Description:

The estimation methods of financial econometrics models, such as least square method and maximum likelihood, with the emphasis on time-series model including univariate time-series model, high frequency time-series model, multivariate time-series moel; financial forecasting; The regression estimation of variables with long run relationship and short run dynamics; The application of model to analyze financial economics issues.

Course Objectives:

This course aims to apply econometric methodology with the economic and financial theory in explaining empirical data, and introduce a more advanced econometrics methodology beyond basic econometrics, especially time series econometrics. The objective is to train students for empirical research. The course focuses mainly on model formulation, parametric estimation method, and applications of the model. Emphasize of the course will be on empirical examples rather than theoretical proof. However, students are all expected to have a good understanding of basic statistics, calculus, and matrix algebra. Thus, students are all responsible for all pre-requisites of the course. This course also aims to have students learn how to use computer software in estimating the econometric models by letting students work on empirical assignments concerning on each topic.

Required Text:

Brooks, C. (2008). *Introductory Econometrics for Finance*. 2nd ed. New York, NY: Cambridge University Press.

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. (Chapter 4)

Supported Text:

Baltagi, B.H. (2008). *Econometric Analysis of Panel Data*. 4th ed. West Sussex, UK: John Wiley & Sons.

Berndt, E.R. (1991). *The Practice of Econometrics: Classic and Contemporary*. New York: Addison-Wesley Publishing. (Chapter 2)

Enders, W. (2003). *Applied Econometric Time Series*. 2nd ed. New York: John Wiley & Sons.

Greene, W.H. (2008). *Econometric Analysis*. 6th ed. Upper Saddle River, NJ: Prentice Hall.

Hamilton, J.D. (1994). *Time Series Analysis*. Princeton, NJ: Princeton University Press.

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

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

Teaching Plan:

Class Schedule

Week	Date	Content	Reading
1		Review Least Squares Estimation Method - Ordinary Least Squares Estimation Method	Ch 1-2
		Review Least Squares Estimation Method - Generalized Least Squares Estimation Method - Least Squares Estimation – Matrix Approach	Ch 3-4
2		Application of Simple Regression Model Capital Asset Pricing Model Spot & Future Market Application of Multiple Regression Model Fama-French Three Factor Model	Handout

		Application of Dummy Variable Technique Calendar Effect in Stock Market	Handout
3		Simultaneous Equation Model Simultaneous Biased	Ch 6
		Simultaneous Equation Model Indirect Least Squares (ILS) Two Stage Least Squares (2SLS) Three Stage Least Squares (3SLS)	Ch 6
4		Maximum Likelihood Estimation (MLE) Method Concept	Heij 4
		Maximum Likelihood Estimation (MLE) Method Computation Inferential Statistics	Heij 4
5		Limited Dependent Variable Models Logit & Probit Model – Concept	Ch 11
		Limited Dependent Variable Models Logit & Probit Model – Inferential Statistics	Ch 11
6		Limited Dependent Variable Models Multinomial Logit & Probit Model Order Probit Model	Ch 11
		Limited Dependent Variable Models Censored Regression Model	Ch 11
		Truncated Regression Model	
7		Univariate Time Series Models Stationary vs Nonstationary	Ch 5
		Univariate Time Series Models (cont.) Integrated Series	Ch 5

8		**Midterm Exam**	

Week	Date	Content	Reading
9		Univariate Time Series Models (cont.) Unit Root Test	Ch 5
		Time Series Models (cont.) Cointegration & Error Correction Models	Ch 5
10		Univariate Time Series Models (cont.) ARIMA Model – Estimation	Ch 5
		Univariate Time Series Models (cont.) ARIMA Model – Forecast	Ch 5
11		Multivariate Time Series Models Vector Autoregressive (VARs) Model – Concept	Ch 6
		Multivariate Time Series Models (cont.) Vector Autoregressive (VARs) Model – Procedure	Ch 6
11		Multivariate Time Series Models (cont.) Impulse Response Analysis	Ch 6
		Multivariate Time Series Models (cont.) Orthogonal Impulse Response Analysis	Ch 6
12		Multivariate Time Series Models (cont.) Forecast Error Variance Decomposition	Ch 6
		Modelling Long-run Relationships in Finance	Ch 7
		Engle Granger Cointegration Test	
13		Modelling Long-run Relationships in Finance (cont.) Johansen Cointegration Test	Ch 7

		Modelling Long-run Relationships in Finance (cont.) Vector Error Correction Models (VECM)	Ch 7
14		Modelling Volatility and Correlation Autoregressive Conditional Heteroscedasticity (ARCH) ARCH-M	Ch 8
		Modelling Volatility and Correlation (cont.) Generalized Autoregressive Conditional Heteroscedasticity (GARCH) EGARCH	Ch 8
15		Panel Data Models Characteristic of Data and Problems. Model with Heteroscedasticity, Autocorrelation and Cross-sectional Correlation.	Ch 10
		Panel Data Models Fixed Effect Models. Random Effect Models.	Ch 10
16		Final Exam	

Grading:

1. Assignments 15%
2. Group Project 15%
3. Midterm Exam 30%
4. Final Exam 40%

100%

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE441 ECONOMICS OF PUBLIC EXPENDITURE

Semester 1/2025

Number of credits: 3 credits

Prerequisites: EE212 (or EE214) and EE311. The course will require basic and intermediate micro-economics.

Course Description :

The role of government in economic activities; Government Outlay; Welfare Economics; Theory of Public Goods, Theory of Externalities, Public Choice, Public Pricing and Policies, fiscal decentralization; The analysis of the effects of government spending on the macroeconomic goals, such as price stability, economic growth, distribution of income, and employment conditions, as well as the effects of government spending on important economic sectors.

Main Textbook:

The course will require one main textbook

Rosen, Harvey, and Gayer, Ted, ***Public Finance***, 9th edition, 2010 (or the later edition if that is what the bookstore has).
Additionally, there will be supplemental reading throughout the semester, drawn from current literature, which will be used to illustrate the principles taught in class. These readings will be posted to moodle, and will be available on my website.

Other Recommended Books:
Gruber, J., *Public Finance and Public Policy*, Worth Publishers 2nd ed. 2007.
Parthasarathi Shome, Ed, *IMF Tax Policy Handbook,* Fiscal Affairs Department, IMF, Washington D.C., 1995.

Stiglitz, J., ***Economics of the Public Sector***, W.W. Norton & Company 3rd ed., 1999.

Moodle: The moodle code for this class is TBA

I use Google Classroom for most functions. The notes for the class are available there. If the university shuts down during the semester due to the Wuhan Flu, Classes will continue via Zoom, and all classes will be archived on Google Classroom.

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 weighted towards materials studied in the second half of the semester. The exam schedule is given below:

Midterm Exam: 40%

Final Exam: 60%

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Learning Goals	Expected Learning Outcomes
●	1.41 Students demonstrate integrity.	Don't Cheat
●	1.42 Students prioritize social and public benefits over personal ones.	Be Good
●	1.43 Students are punctual and comply with the code of conduct of the institution and society at large.	Be a Man
●	1.44 Students are responsible and accountable to society, the nation, and the subject of economics.	N/A
O	1.45 Students realize the cultural and environmental value of the sustenainable society.	

2. Knowledge

Applicability	Learning Goals	Expected Learning Outcomes
●	2.41 Students know and understand modern economics principles and theories, and are up to date with new developments.	Master all knowledge taught in class.
●	2.42 Students know and understand Thai and global economic structure, and the importance of major international economic events.	Be able to apply the general knowledge taught in class to Thailand
O	2.43 Students know and understand instruments of economic analysis.	

●	2.44 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.	Know Public Finance and Public Choice Economics
O	2.45 Students are informed about related fields including sociology, business administration, education, law policy, and science.	

3. Intellectual Development

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

4. Interpersonal Skills and Responsibilities

Applicability	Learning Goals	Expected Learning Outcomes
●	18.1Students are responsible for assigned tasks and work in groups effectively.	N/A
●	18.2 Students have problem-solving skills.	Fulfil all class requirements
O	18.3 Students show leadership skills and team spirit.	
●	18.4 Students are always improving themselves.	Do so.
O	18.5 Students have good interpersonal skills, adapting and working under different conditions.	

5. Quantitative Analysis, Communication and Information Technology

Applicability	Learning Goals	Expected Learning Outcomes
O	5.1 Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	
O	5.2 Students communicate effectively and select	

	appropriate presentation methods.	
O	5.3 Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	

Teaching Plan and Class Schedule

Date	Topic	Readings
Aug.	Section I	Rosen and Gayer, chapter 1
Aug.	Section 2 (Tools of Positive and Normative Analysis)	Rosen and Gayer, chapter 2-3
Aug.	Section 3 (Public Goods)	Rosen and Gayer, chapter 4
Sep.	Section 4 (Externalities)	Rosen and Gayer, chapter 5
Sep.	Special Topic: Pollution, Global Warming, the garbage imbalance	Summers, World Bank Memo TBD
Sep.	Section 5 (Political Economy)	Rosen and Gayer, chapter 6 Stiglitz, chapter 12 (optional)
Sep.	Section 7 (Education)	Rosen and Gayer, chapter 7
Midterm Exam		
Oct.	Section 8 (Cost-Benefit Analysis)	Rosen and Gayer, chapter 8
Oct.	Section 9 (The Health-care market)	Rosen and Gayer, chapter 9
Oct	Section 10 (Government and the market for Health Care)	Rosen and Gayer, chapter 10
Oct.	Section 11 (Social Security)	Rosen and Gayer, chapter 11
Nov.	Section 12 (Income Redistribution – theoretical concepts)	Rosen and Gayer, chapter 12
Nov.	Section 13 (Income Redistribution – practice)	Rosen and Gayer, chapter 13 Stiglitz, chapter 25

Nov.	Section 14: U.S., EU and Thai issues of Income distribution	TBA
Nov.	Section 15: Public Choice and Public Finance	Public Choice, Chapter 1 and 6
Final Exam		

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE446 ECONOMIC ANALYSIS OF CORRUPTION

Semester 1/2025

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

Prerequisites: EE 311

Course Description:

A study of corruption using economic analytical frameworks employing both theoretical and empirical methodologies. The topics covered include the definition and coverage of corruption, the causes of corruption, the economic consequences of corruption - both at the micro and macro levels, together with the public policies and measures used in combating corruption. In addition, the roles the private sector, civic society, and international organizations play in tackling corruption will also be discussed with reference to relative case studies.

Course highlights:

- Developing an understanding of the concepts and principles at play within the field of the economics of corruption
- Studying the economic framework through the experimental, behavioural and institutional tools developed to allow the critical analysis of corruption behaviour
- Providing a wide variety of games and activities that can help participants understand the topics and concepts behind corruption motivation and behaviour
- Analysing, evaluating and presenting the corruption research findings available from academic research papers
- Designing your own study project (employing theoretical and experimental methods) and applying some of the resulting findings and ideas to public policy

Course objectives:

1) To obtain an understanding of the key concepts and insights within the economics of corruption
2) To learn how to evaluate economic research on corruption
3) To further your ability to discuss and analyse policy and its impact on society
4) To debate and express the findings of your own study research with clarity and precision

Grading Criteria:

- Examinations 60% (Midterm: 25% and Final: 35%)
- Research project 15%
- Presentation 10%
- Assignments 10%
- Paper summary 5%

Teaching Sessions:

Lecture 0: Introduction

Lecture 1: Corruption: concepts, types, causes and consequences

- Why study Economics of Corruption?
- Economic tools in analysis of corruption
- What is corruption?
- Classifications of corruption
- Causes and consequences of corruption

Lecture 2: Measuring corruption

- Official statistics
- Perceptual and attitudinal surveys
- Experiential and tracking surveys
- Other methods

Lecture 3: A theoretical analysis of corruption

- The microeconomics of corruption: the classical approach
- The institutional economics of corruption

Lecture 4: Experimental and behavioural approaches to understanding immoral and corrupt behaviour

- Laboratory, online and field experiments on dishonesty
- Bribery game and experiment

Lecture 5: Corruption in Thailand

- Type of Corruption in Thailand
- Case studies

Lecture 6: Choice architecture for tackling corruption

- Designing anti-corruption policies
- Behavioural interventions
- The costs of fighting corruption

Lecture 7: Legal and private enforcement of corruption

- Legal enforcement and intermediaries
- Private enforcement of corrupt deals
- A comparative study of anti-corruption systems

Lecture 8: Designing research on corruption: the experimental economics approach

- Designing research and brain-storming ideas
- Designing an experiment: treatments, samples, and payoffs
- Running the experiment and organising as sample
- Research presentation

Lecture 9: Lessons learned

Resources and study materials:

Books/Book Chapter:

Arnone, M., & Borlini, L. S. (2014). *Corruption: economic analysis and international law*. Cheltenham: Edward Elgar Pub. Ltd.

Holmes, L. (2015). *Corruption: A Very Short Introduction*. Oxford: Oxford University Press.

Lambsdorff, J. (2007). *The institutional economics of corruption and reform: theory, evidence, and policy*. Cambridge, U.K.: Cambridge University Press.

Menezes, F. M. (2001). Corruption & anti-corruption. In P. Larmour & N. Wolanin (Eds.), *The Microeconomics of corruption: The classical approach*. Canberra : Institute of Criminology: Asia Pacific Press.

Rose-Ackerman, S. (2006). *International handbook on the economics of corruption*. Cheltenham, U.K.: Edward Elgar.

Serra, D., & Wantchekon, L. (2012). Chapter 1 Experimental Research on Corruption: Introduction and Overview. In D. Serra & L. Wantchekon (Eds.), *New Advances in Experimental Research on Corruption* (Vol. 15, pp. 1-11): Emerald Group Publishing Limited.

Sequeira, S. (2012). Chapter 6 Advances in Measuring Corruption in the Field. In D. Serra & L. Wantchekon (Eds.), *New Advances in Experimental Research on Corruption* (Vol. 15, pp. 145-175): Emerald Group Publishing Limited.

Papers/ Reports:

Abbink, K., Irlenbusch, B., & Renner, E. (2002). An Experimental Bribery Game. *The Journal of Law, Economics, and Organization, 18*(2), 428-454. doi:10.1093/jleo/18.2.428

Barr, A., & Serra, D. (2010). Corruption and culture: An experimental analysis. *Journal of Public Economics, 94*(11), 862-869. doi:https://doi.org/10.1016/j.jpubeco.2010.07.006

Cohn, A., Fehr, E., & Maréchal, M. A. (2014). Business culture and dishonesty in the banking industry. *Nature, 516*(7529), 86-89. doi:10.1038/nature13977

Cohn, A., Maréchal, M. A., Tannenbaum, D., & Zünd, C. L. (2019). Civic honesty around the globe. *Science, 365*(6448), 70-73. doi:10.1126/science.aau8712

Dai, Z., Galeotti, F., & Villeval, M. C. (2018). Cheating in the Lab Predicts Fraud in the Field: An Experiment in Public Transportation. *Management Science, 64*(3), 1081-1100. doi:10.1287/mnsc.2016.2616

Jain, A. K. (2001). Corruption: A Review. *Journal of Economic Surveys, 15*(1), 71-121. doi:https://doi.org/10.1111/1467-6419.00133

Pruckner, G. J., & Sausgruber, R. (2013). Honesty on the Streets: A Field Study on Newspaper Purchasing. *Journal of the European Economic Association, 11*(3), 661-679. doi:10.1111/jeea.12016

Shleifer, A., & Vishny, R. W. (1993). Corruption*. *The Quarterly Journal of Economics, 108*(3), 599-617. doi:10.2307/2118402

Svensson, J. (2005). Eight Questions about Corruption. *Journal of Economic Perspectives, 19*(3), 19-42. doi:10.1257/089533005774357860

Khoman, S., Tantivasadakarn, C., Wrasai, P., & Prasertsri, L. (2009). *Comparative Study of Anti-corruption Measures and Procedures in Selected APEC Countries*. Retrieved from Thailand:

Teaching Plan:

No.	Date	Topics
1	August	Lecture 0 Lecture 1
2	August	Lecture 1
3	19 August 2021	Lecture 2

No.	Date	Topics

4	August	Lecture 2
5	August	Lecture 2
6	August	Lecture 3
7	September	Lecture 3
8	September	Lecture 3
9	September	Lecture 4
10	September	Lecture 4
11	September	Lecture 4
12	September	Lecture 4
13	September	Lecture 4
14	October	Lecture 5
15	October	Lecture 5
16	October	Lecture 6
17	October	Lecture 6
18	October	Lecture 6
19	October	Lecture 6
20	October	Lecture 7
21	November	Lecture 7
22	November	Lecture 7
23	November	Lecture 8
24	November	Lecture 8
No.	**Date**	**Topics**

25	November	Lecture 8
26	November	Lecture 8
27	November	Lecture 8
28	November	Lecture 9

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE451 INTERNATIONAL TRADE THEORY AND POLICY

Semester 1/2025

Prerequisite: *EE311*

Course Description:

Study on international trade and specialisation based on the principles of comparative cost, relative factor endowment, market structure, and returns to factor. Also covered are international trade policies and measures, international economic integration, theory and policy of international investment, international trade an economic development. An examination of problems, policies and strategies on international trade of developing countries and Thailand.

Evaluation:

Quiz	10%
Group work	10%
Term Paper	10%
Midterm Exam	30%
Final Exam	40%

Readings:

(AF) Appleyard, D.R. and A.J. Field, Jr. (2017) *International Economics*. 9th ed. McGraw-Hill: Singapore.

World Trade Organization. World Trade Statistics Review 2018 https://www.wto.org/english/res_e/statis_e/wts2018_e/wts2018_e.pdf

COURSE OUTLINE

1. Introduction — Aug.
   - 1.1. What is international trade about?
   - 1.2. General figures of world trade

   Read: AF ch. 1,

2. Explanations of Trade: Classical Theory — Aug.
   - 2.1. Mercantilism
   - 2.2. Adam Smith's Absolute Advantage
   - 2.3. David Ricardo's Comparative Advantage
     - (a) Assumptions
     - (b) Production Possibility Frontiers
     - (c) Gains from Trade
   - 2.4. Measuring trade advantage: The Balassa Index
   - 2.5. Extensions and Tests of the Classical Trade Model

   Read: AF ch. 2-4

3. Neoclassical Trade Theory — Aug.-Sep.
   - 3.1. Basic Tools
     - (a) The Theory of Consumer Behaviour
     - (b) The Production Theory
     - (c) The Edgeworth Box Diagram and The Production Possibility Frontier
   - 3.2. Gains from Trade in Neoclassical Theory
     - (a) Autarky Equilibrium
     - (b) Production and Consumption Gains from Trade
     - (c) Some Important Assumptions
   - 3.3. Offer Curves and Terms of Trade

   Read: AF ch. 5-7

4. Factor Endowments and the Heckscher-Ohlin Model — Sep.
   - 4.1. Assumptions
   - 4.2. Factor Abundance
   - 4.3. Commodity Factor Intensity
   - 4.4. The Heckscher-Olin Theorem
   - 4.5. The Factor Price Equalization Theorem
   - 4.6. Specific-Factors Model
   - 4.7. Empirical Tests of the Heckscher-Olin Theorem
     - (a) The Leontief Paradox
     - (b) Suggested Explanations for The Leontief Paradox

   Read: AF ch. 8-9

5. Economic Growth and International Trade — Sep.

   - 5.1. Classifying the Trade Effects of Economic Growth
   - 5.2. Sources of Growth and the Production-Possibilities Frontier
   - 5.3. Factor Growth, Trade and Welfare
     - (a) The Small-Country Case and the Rybczynski Theorem
     - (b) The Large-Country Case

   Read: AF ch. 11

6. International Factor Movement — Oct.
   6.1. Capital Movement
   6.2. Labour Movement
   Read: AF ch. 12

7. Alternative Theories and Intra-Industry Trade — Oct.
   7.1. Intra-Industry Trade
   7.2. The Imitation Lag Hypothesis and The Product Cycle Theory
   7.3. The Linder Theory
   7.4. The Kemp Model and External Economies of Scale
   7.5. The Krugman Model and Internal Economies of Scale with Monopolistic Competition
   Read: AF ch. 10

8. Trade Policy — Oct.-Nov.
   8.1. Import Tariffs
      (a) Measurement of Tariffs and Effective rate of protection
      (b) The impact of an import tariff
      (c) Stolper-Samuelson Theorem and distribution of income
      (d) The large country case
   8.2. Production Subsidy
   8.3. Export Taxes and Subsidies
   8.4. Nontariff Bariers
      (a) Import quotas
      (b) Voluntary export restraint
   8.5. Arguments for Protection
   Read: AF ch. 13-16

9. Economic Integration — Nov.
   9.1. Types of Economic Integration
   9.2. The Static Effects
      (a) Trade Creation and Trade Diversion
      (b) The Second Best Theory
   9.3. The Dynamic Effect
   Read: AF ch. 17

10. Current Issues in International Trade — Nov.
   10.1. Trade Institutions: WTO
   10.2. Thailand and ASEAN
   10.3. Other current issues
   Read: AF ch. 18

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE452 INTERNATIONAL MONETARY ECONOMICS

Semester 1/2025

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

Prerequisite: EE312

Course Description:

This course provides fundamental basis for understanding international financial economics and its application to the real-world analysis. Major topics include the balance of payments and its adjustment mechanism; foreign exchange markets; exchange rate determinations, aggregate demand and aggregate supply, price levels and output and exchange rates in the short-run and the long-run; international capital flows; evolution of international monetary system; international monetary problems and financial crises encountered by developing countries, Thailand and the rest of the world. In addition, other special topics such as the roles of the central bank, current financial crises and up-to-date international macroeconomic issues will also be discussed.

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 exchange rate system, foreign exchange market, capital markets, and how it is interconnected with rest of the economy. There will be theoretical applications to the real-world scenarios for all topics.

Evaluation:

Mid-term exam	30%
Final Exam	40%
Group Report/Presentation	20%
Individual assignment/Class Attendance/Quiz	10%

Main Textbook:

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

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

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

Recommended Articles:

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

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)

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	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 (2014): p. 1, 69-71;	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

No.	Topic/Activities	Documents	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 - J-Curve effect	Sodersten and Reed (1994): p. 512-24	
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	3 Law of One Price and Purchasing Power Parity-PPP) 3.1 Concepts 3.2 Problems relating to PPP 3.3 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. Exchange Rates vs Key Economic Variables 4.1 Exchange rate and trade	Jongwanich (2010)	

No.	Topic/Activities	Documents	Note
10	4.2 Exchange rate and financial account 4.3 Exchange rate pass-through	Jongwanich (2009, 2011, 2012, 2013)	Some parts are only in the lecture note
11	5. Macroeconomic Model 5.1 Macroeconomic Model Setting	Montiel, 2009: Ch 4	
12	5.2 Fixed Exchange Rate and Perfect Capital Mobility	Montiel, 2009: Chs 6: p.130-145	
13	5.3 Fixed but Adjustable Exchange Rate and Imperfect Capital Mobility 5.4 Floating Exchange Rate and Perfect Capital Mobility	Montiel, 2009: Ch.7, and Ch. 8: p.177-187	
14	6. Currency Crisis 6.1 First generation 6.2 Second generation 6.3 Third generation 6.4 Asian financial crisis 6.5 Global financial 2008-09 and impacts on Asian countries 6.6 COVID-19 and Russia-Ukraine War	Krugman, 2015: Ch.22 and James, W., etc. 2008	Some parts are only in the lecture note
Final Examination			

Method of Instruction: There are 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

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE459 SEMINAR IN INTERNATIONAL TRADE THEORY AND POLICY

Semester 1/2025

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

Prerequisite: (a) EE451 and EE452

Course Descriptions and Objectives:

More globalized world implies more unstable and volatile markets. As a result, the probability of experiencing fluctuation in both global trade and international financial markets gets higher. This course is aimed at broadening students' insight of international economics through various approaches, including lecture, class discussion, term paper, and seminars with guest speakers. Particularly, practices of applying analytical frameworks to the current issues and data of both global trade and international finance would enhance students' in-depth analytical skills towards more understanding of the global volatilities.

Teaching Materials and Resources

Please see the list of suggested readings in the teaching plans.

Teaching Plans

Week 1 (August 16, August 18) : Introduction and Global Trade Database

Readings

- Timmer, M., et. al. (2012), The World Input-Output Database (WIOD):

Contents, Sources and Methods, the European Commission.(http://www.wiod.org/publications/memoabstract.htm?id=10)

- International Trade Centre UNCTAD/WTO. (2009), Trade Map – Trade Statistics for International Business Development,

(http://legacy.intracen.org/marketanalysis/Docs/Trademap/TradeMap-Userguide-EN.pdf)

Week 2 (August 23, August 25) : Global Trade – Basic Analysis

Readings

- Schaffer, W. A.(2010), Regional Impact Models, Georgia Institute of Technology, School of Economics. (http://www.rri.wvu.edu/WebBook/Schaffer/chap05.html)

- De Backer, K. and Yamano, N. (2008) The Measurement of Globalisation using International Input-Output Tables, STI WORKING PAPER 2007/8Statistical Analysis of Science, Technology and Industry, Organisation for Economic Co-operation and Development (OECD)

- Yamano N., and MengB. (2011) Measuring Global Fragmentation using Harmonized International Input-Output Database

(http://www.iioa.org/files/conference-2/588_20110512061_yamano-mengIIOA2011.pdf)

Week 3 (August 30, September 1) : Review of Global TradePolicy Analyses

Readings

- Hertel (ed.),T.W. (1997), Global Trade Analysis: Modeling and Applications, , Cambridge University Press

(https://www.gtap.agecon.purdue.edu/products/gtap_book.asp.)

- Peter, P., Plummer, M. G. and Zhai, F. (2011), The Economics of the ASEAN Economic Community.

- Lee, H. and Plummer, M. G. (2011),Assessing the Impact of the ASEAN Economic Community, Discussion Paper: DP-2011-E-002, Osaka School of International Public Policy, Osaka University

Week 4 (September 6, September 8) : Global Trade – Current Issues

Readings

- Rogoff K. (2006), "Impact of Globalization on Monetary Policy," paper presented to the annual Jackson Hole symposium of the Federal Reserve Bank of Kansas City,(August)

(http://www.kc.frb.org/PUBLICAT/SYMPOS/2006/pdf/rogoff.paper.0829.pdf)

- Blinder A. (2006), "Offshoring: The Next Industrial Revolution?, Foreign Affairs, 85, pp. 113-128 (http://www.internationaltraderelations.com/Blinder.Offshoring%20(Foreign%20Affairs,%20March-April%202006).pdf)

- Shahid Y., Nabashima K. and Perkins D. (2006), "China and India Reshape

the Global Industrial Geography,in World Bank, Dancing with Giants: China, India and the Global Economy, Washington, D.C.: The World Bank, pp. 27-56,

(http://siteresources.worldbank.org/INTCHIINDGLOECO/Resources/CE_Ch02pp.027-56_FINAL.pdf)

- Eichengreen B. and Tong H. (2006), "How China is Reorganizing the WorldEconomy," Asian Economic Policy Review 1, pp.73-101, (http://www.aeaweb.org/annual_mtg_papers/2006/0106_1430_1702.pdf)

Week 5 (September 13, September 15) : Students' Presentation - Case Analysis I

Week 6 (September 20, September 22) : Regional Cooperation

Readings

- Kalemli-Ozcan, S., B.E Sorensen and O. Yosha (2003). Risk Sharing and Industrial Specialization: Regional and International Evidence, The American Economic Review, Vol 93, No 3, June. (http://www.econ.tau.ac.il/papers/inmemoriam/Yosha_Sorensen_Kalemni-Ozcan_2003.pdf)

- Eichengreen, B. (2006). Global Imbalances and the Asian Economies: Implications for Regional Cooperation, ADB Working Paper Series on Regional Economic Integration, No. 4, August.

(http://ideas.repec.org/p/ris/adbrei/0004.html)

Week 7 (September 27, September 29) : Guest Speaker, Global Trade and Economic Development

Guest Speaker : TBA

Readings

- Yanikkaya H. (2003),Trade Openness and Economic Growth:a Cross-Country Empirical Investigation, Journal of Development Economics, 72, pp. 57– 89

- Samman, E. (2005), Openness and Growth: An Empirical Investigation, Human Development Report Office, Occasional Paper, UNDP

---------- Mid-Term Exam Week ----------

Week 8(October 11, October 13) : Students' Presentation - Case Analysis I

Week 9(October 18, October 20) : Guest Speaker and International Finance – Financial Liberalization and Economic Development

Guest Speaker : TBA

Readings

- Flood R.P and Marion, N.P. (1998), Perspectives on the Recent Currency Crisis Literature, IMF Working Paper WP/98/130 (http://www.imf.org/external/pubs/ft/wp/wp98130.pdf)

- Flood, R. P. and Rose, A.K. (2001). Uncovered Interest Parity in Crisis:The Interest Rate Defense in the 1990s, unpublished manuscript, April

(http://www.internationalmonetaryfund.com/external/pubs/ft/wp/2001/wp01207.pdf)

Week 10(November 1, November 3) : International Finance – Financial Liberalization and Economic Development

Financial Liberalization and Economic Development

Readings

- Tressel, T. and Detragiache E. (2008), Do Financial Sector Reforms Lead to Financial Development? Evidence from a New Dataset, IMF Working Paper, No 265, WP/08/265 (http://www.imf.org/external/pubs/ft/wp/2008/wp08265.pdf)

- Geert B., Harvey, C.R. and Lundblad C. (2001), Does Financial Liberalization Spur Growth?, NBER Working Paper, No. 8245, Cambridge, Massachusetts. (http://www.nber.org/papers/W8245)

Financial Liberalization and Economic Development

Readings

- Kalemli-Ozcan S., Alfaro L., and Volosovich V. (2005), "Why Doesn't

Capital Flow from Rich to Poor Countries? NBER Working Paper no. 11901,

http://papers.nber.org/papers/w11901.

- Rajan R. (2006), "Foreign Capital and Economic Growth, unpublished

manuscript, International Monetary Fund, (August),

http://www.kansascityfed.org/publicat/Sympos/2006/pdf/PrasadRajanSubramanian.

0811.pdf

Week 11 (November 8, November 10) : Capital Flows and Global Imbalance

[NOTE: November 3 is the submission date for assignment #3 (the first draft of research paper)]

Readings

- Eichengreen B. (2006), “Global Imbalances: The Blind Men and the Elephant,”Brookings Policy Brief 1, (January) http://www.brookings.edu/views/papers/200601_iiep_eichengreen.pdf

- Eichengreen, B. (2006). Global Imbalances and the Asian Economies: Implications for Regional Cooperation, ADB Working Paper Series on Regional Economic Integration, No. 4, August.

(http://ideas.repec.org/p/ris/adbrei/0004.html)

- Borio C. and Disyatat P.(2011), Global Imbalances and the Financial Crisis: Link or no link?, BIS Working PapersNo. 346

(www.bis.org/publ/work346.pdf)

- Azis I., and Shin, H.S. "How do Global Liquidity Phases Manifest Themselves in Asia?", Asian Development Bank, 2013. (http://www.adb.org/publications/how-do-global-liquidity-phases-manifest-themselves-asia)

Week 12 (November 15, November 17) :International Finance – Economic Crises and

Contagion

Readings

- Baig, T &Goldfajn, I (1998), Financial Market Contagion in the Asian Crisis, IMF Working paper, WP/98/155 (http://www.imf.org/external/pubs/ft/staffp/1999/06-99/pdf/baig.pdf)

- Rigobon, R (2000). Contagion: How to Measure it, NBER Working Paper Series

No 8118, Cambridge, MA (http://papers.nber.org/papers/w8118.pdf)

Week 13(November 22, November 24) – Students' Presentation – Final Paper

Week 14 (November 29, December 6) – Students' Presentation – Final Paper

Evaluation Methods

Case analysis I	15%
Case analysis II	15%
First draft of research paper	20%
Final version of research paper	30%
Class participation	20%

Case analysis I & II – students will be assigned to analyze and present the policy recommendations of current issues in international economics. The main objective of these assignments is to introduce the practical implementation of theoretical frameworks in analyzing impacts of the international trade in both micro and macro levels.

First draft of research paper– as a preparation toward developing individual's final paper, the student has to write a 4-page draft which describes the background, literature review, overview of research methodology and the preliminary result of his/her research paper. Also the student has to present the summary in class in order to share and discuss main contents of this proposed research with other students.

Final version of research paper –The final paper is an individual work and should not be longer than 12 pages, double-space, excluding tables and figures; it should contain only the main points and written succinctly. The paper is to be submitted a week before class presentation. It is strongly advised that students make their plans early for the topic of the paper. The idea is, during the semester students can raise issues and questions related to their selected topic such that the treatment of the topic will provide more materials for them to write about. The extensive uses of statistical and econometrical analyses in the paper will carry extra credits.

Class policies (if any)

Student must attend all sessions.

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE462 DEVELOPMENT MACROECONOMICS

Semester 1/2025

Number of credits: 3 credits

Prerequisite: EE312

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.

Required Textbooks and Readings

- Perkin, D. H., Radelet, S., Lindauer, D. L., & Block, S. A. (2013). *Economics of Development*. Seventh Edition. W.W. Norton & Company. (The book is on reserve in the library.)
- 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
●	1.46 Students demonstrate integrity.	Students do not cheat on exams or engage in plagiarism.
●	1.47 Students prioritize social and public benefits over personal ones.	Students study hard and seek good jobs.
●	1.48 Students are punctual and comply with the code of conduct of the institution and society at large.	Students come to class on time.
●	1.49 Students are responsible and accountable to society, the nation, and the subject of economics.	Students study hard and know that they should be responsible.

O	1.50 Students realize the cultural and environmental value of the sustenainable society.	

2. Knowledge

Applicability	Learning Goals	Expected Learning Outcomes
●	2.46 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.
●	2.47 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.
O	2.48 Students know and understand instruments of economic analysis.	
●	2.49 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.	Students know about applied macroeconomics related to developing countries such as Thailand.
O	2.50 Students are informed about related fields including sociology, business administration, education, law policy, and science.	

3. Intellectual Development

Applicability	Learning Goals	Expected Learning Outcomes
●	3.28 Students have developed individual critical thinking.	Student can think critically as developed through their course work.
●	3.29 Students are sufficiently trained in research skills.	Students research their research papers.
●	3.30 Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand causes of current economic problems in Thailand. Based on analsyis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.	Through their essay assignment and exams students know how to analyze data and apply concepts of macroeconomics.

4. Interpersonal Skills and Responsibilities

Applicability	Learning Goals	Expected Learning Outcomes
●	20.1 Students are responsible for assigned tasks and work in groups effectively.	Students work in groups each week and undertake a joint essay project.
●	20.2 Students have problem-solving skills.	Students do problem solving in the course.
O	20.3 Students show leadership skills and team spirit.	

●	20.4 Students are always improving themselves.	Students are evaluated on their course work and can use that as a benchmark to improve themselves.
O	20.5 Students have good interpersonal skills, adapting and working under different conditions.	

5. Quantitative Analysis, Communication and Information Technology

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

Note: ● Primary expected outcome O Secondary expected outcome

Data/Information Sources:

Websites

- World Bank http://www.worldbank.org/
- 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.ggdc.net/pwt

Lecture Schedule

Week	Topics and Readings	Discussion Session
1 (Aug 11, 13)	**Introduction to Economic Development** *Perkins et al., chapters 1-2 Schrager, A. 2015. Why India keep growing faster than China? Bloomberg Deaton, A. (2008). Income, health and well-being around the world: Evidence from the Gallup World Poll. *Journal of Economic Perspectives*, *22*(2), 53-72.	
2 (Aug 18, 20)	**Patterns and Concepts of Growth and Development** *Perkins et al., chapter 3 *Bosworth, B., & Collins, S. M. (2008). Accounting for growth: Comparing China and India. *Journal of Economic Perspectives*, *22*(1), 45-66.	Bosworth & Collins (2008), pp. 45-66
3 (Aug 25, 27)	**Growth Theory: Basic Growth Model and Neoclassical (Solow) Growth Model** *Perkins et al., ch. 4 Jones, chapter 2 *Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. *The Quarterly Journal of Economics*, *107*(2), 407-437. Lee, J.-W. and K. Hong. 2012. Economic growth in Asia: Determinants and Prospects. *Japan and the World Economy*, vol. 24, pp. 101-113	*Mankiw, Romer, & Weil (1992) pp. 407-437
4 (Sept 1, 3)	**Endogenous Growth Models** *Jones, chapter 5, 8 *Balart, P., M. Oosterveen and N. Webbink. 2018. Test scores, noncognitive skills and economic growth. *Economics of Education Review*, vol. 63, pp. 134-153	Balart et al. (2018) pp. 134-153
5 (Sept 8, 10)	**Human Capital and Growth** *Perkins et al, chapters 7, 8, 9 *Cruz, M. and S.A. Ahmed. 2018. On the impact of demographic change on economic growth and poverty. World Development, 105. Pp. 95-106	Cruz & Ahmed (2018) pp. 95-106

6 (Sept 15, 17)	**Inequality and Poverty** *Perkins et al., chapter 6	TBA
7 (Sept 22, 24)	**Big Push and Middle-Income Trap** *Todaro M. and S. Smith, *Economic Development*, 12th ed. ch. 4 (read sections on big push and growth diagnostic) *Ito, T. (2017). Growth convergence and the middle-income trap. *Asian Development Review*, *34*(1), 1-27. ADB (2014). *Cambodia: Diversifying Beyond Garments and Tourism* Country Diagnostic Study	Ito (2017) pp. 1-27
8	**MIDTERM:** **Tuesday, September 29, 2020, 12.00 - 14.00 hrs.**	
9 (Oct 6, 8)	**Investment and Savings** *Perkins et al., ch. 10 *P-C. Athukorala and S. Wagle. 2011. Foreign direct investment in Southeast Asia: Is Malaysia falling behind? *ASEAN Economic Bulletin* 28.2, pp. 115-133	Athukorala & Wagle (2011) pp. 115-131
10 (Oct 15)	**Financial Development and Inflation** *Perkins et al., ch. 12 *Jongwanich, J. and D. Park. 2011. Inflation in developing Asia: pass-through from global food and oil price shocks. *Asian-Pacific Economic Literature*, pp. 79-92	Jongwanich & Park (2011) pp. 79-92
11 (Oct 20, 22)	**Foreign Debt and Financial Crises** *Perkins et al., ch.13 *J. Charoenseang and P. Manakit. 2002. Financial crisis and restructuring in Thailand. *Journal of Asian Economics*. vol. 13, pp. 597-613 Radelet, D., & Sachs, J. (1998). The East Asian financial crisis: Diagnosis, remedies, prospects. *Brookings Papers on Economic Activity* 1, 1-90. (Downloadable from http://www.brookings.edu/~/media/Projects/BPEA/1998%201/1998a_bpea_radelet_sachs_cooper_bosworth.PDF)	Charonenseang& Manakit (2002), pp. 597-613

12 (Oct 3, 5)	**Foreign aid** *Perkins et al., ch. 14 *Young, A. and L. Sheehan. 2014. Foreign aid, institutional quality and growth. *European Journal of Political Economy*, no. 36, pp. 195-208 Clemens, M. A., Radelet, S., Bhavnani, R. R., & Bazzi, S. (2012). Counting Chickens when they Hatch: Timing and the Effects of Aid on Growth. *The Economic Journal*, *122*(561), 590-617.	Young & Sheehan (2014) pp. 195-208
13 (Nov 10, 12)	**Trade and Development** *Perkins et al., chapter 18 *Chang, H. J. (2003). Kicking away the ladder: Infant industry promotion in historical perspective. *Oxford Development Studies*, *31*(1), 21-32.	Chang (2003), 21-32
14 (Nov 17, 19)	**Managing Short-Run Crisis in an Open Economy** *Perkins et al. ch. 15 * Sangsubhan, K. and M. C. Basri. 2012. Global financial crisis and ASEAN: Fiscal policy response in the case of Thailand and Indonesia. *Asian Economic Policy Review*. 7, pp. 248-269. Wiboonchutikula, P. et al. 2011. An analysis of Thailand's net capital inflows surges after the 1997 crises. *ASEAN Economic Bulletin* 28(3), pp 281-314.	Sangsubhan & Basri (2012). pp. 248-269
15 (Nov 24, 26)	**Student Presentations**	None
	FINAL EXAM: **Monday, December 14, 2020, 09.00 – 12.00 hrs.**	

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

Assessment

Class participation (and attendance)	10 %
Joint paper and presentation	20 %
Mid-term exam	30 %
Final exam	40 %

Class Participation (and attendance)

Friday will be a discussion class based on assigned readings. Students should read before class and should bring a copy of the reading to the class. Students are encouraged to actively participate in the discussion by contributing answers, comments and questions. Attendance will be taken on Friday, but not on Wednesday. No marks are given for attendance but if a student is absent from 4 or more Friday classes, marks will be deducted from her or his participation mark.

Joint Paper and Presentation

Each group will consist of 2 students. Each group will research a topic and give a presentation of findings in November. After receiving comments from the instructor and classmates, the group will revise and finalize the paper and submit it 2 weeks after your presentation. Details about the topics and the format of the paper will be provided.

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE463 GLOBALIZATION AND INTERNATIONAL DEVELOPMENT

Semester 1/2025

Number of Credit: 3 (Three)

Prerequisites: EE211 and EE212; or EE213 and EE214

Course Description

This course discusses concepts and development of globalization in the context of post-World War II and the formation of the New International Economic Order. As countries move along their development trajectories, activities and linkages intensify, spurring complex interrelationships and interdependencies, thereby leading to a globalized world. These processes create not only new opportunities but challenges as well.

The course will be divided in three sections. The first section will provide an overview of economic development theories, how globalization and international economic development are linked together and compare economic development trends across low-, middle- and high-income countries. Thereafter it will look at the role of the state, market and civil society in economic development and how international organizations and cooperation agencies interact with domestic institutions in determining the economic outcome. It will further look at demographic trends and discusses poverty and inequality and their causes. The second section will highlight issues and policy dimensions of various key development sectors such as agriculture; education and health; urban and rural development; and international trade and capital flows; as well as cross-cutting areas such as environment, climate change, and gender. Other topics that will be discussed are foreign direct investments and international capital flows; the roles of international development organizations e.g. the United Nations, World Bank, International Monetary Fund IMF and bilateral development agencies in bridging the divide between the “north”, or developed countries, and the “south”, or developing countries, through official development assistance; and patterns, factors of success and failures of past international development assistance. In the third and final section, students will form groups to discuss development issues learned in class and discuss these in detail, which will be presented towards the end of the course.

Course Objective

The objective of this course is to understand the process of economic development; the contribution of key development sectors; roles of government, the private sector and other stakeholders; and how globalization affects and is affected by economic development along with the issues that arise and policy responses to the issues.

Main Text : Perkins, D., S. Radelet, D. Laindauer, & S. Block. 2013. *Economics of Development, 13th ed*. W.W. Norton & Co.: NY.

Additional Readings : Will be provided/announced through BE Moodle

Grading Criteria

The final grade will not rest on one or two activities, but rather, on how many points will be accumulated throughout the semester. Course requirements include participation (including virtual attendance, quizzes, and contribution to class discussions); group presentation on a particular topic learned in class; issue paper relating to coursework; and midterm and final exams. Details of each requirement will be discussed during class and announced in BE Moodle. Late submission of assignments/exam: up to 30 minutes a penalty of 10%, up to 60 minutes a penalty of 25%. The weights of each of these items are as follows, and will be factored in towards the final grade:

- Participation 15%
- Group presentation 15%
- Issue paper 15%
- Midterm exam 25%
- Final exam 30%

Grade conversion

Numerical grades will be converted to letter grades as follows:

- >85–100 A
- >80–85 B+
- >70–80 B
- >65–70 C+
- >60–65 C
- >55–60 D+
- >45–55 D
- 45 and below F

Class Policy and Expectations

In adherence with the latest Thammasat University Announcements (issued on Jun 1st 2021), all BE classes in semester 1/2021 will be conducted by remote learning. Zoom will be used as the online meeting platform, while communication, announcements and grade posting will be on BE Moodle. At the beginning of each class, some time will be spent using the lecture format highlighting the key issues, but students will spend the rest of the time of the time engaging in discussions that support or confront the materials extracted from the required reading, for which students are expected to read ahead and be prepared. To obtain attendance credit, students are required to turn on the computer screens for the first 15 minutes of class. For any further clarifications and/or queries, students may either e-mail or set up an appointment with the lecturer.

Expected Learning Outcomes:

It is expected that by the end of the course, students will have a good understanding of (i) how and why countries economically grow and develop; (ii) how globalization and development are linked and impact each other; (iii) key economic development sectors, their role in economic development and government policies to address the issues that arise; and (iv) the role of international aid organizations, financing institutions and private capital in shaping the economic development of a country.

Tentative Class Schedule

Date/Week	**Topic**	**Reading Materials**
9 August: Introduction	- Course objectives and requirements - Expectations of the course - Scope and coverage	Course syllabus
16 August: Globalization and Development	- What is economic growth? development? - Development & globalization: trends and linkages - Trajectories of low- middle- and high-income countries	Perkins, Ch 1, 2, 3
23 August: Theories of Economic Growth	- Linear stages-of-growth - Structural change - Neoclassical economic growth model	Perkins, Ch 4
30 August: States, Markets; Demographics	- Role of the state and the market - Market and command economies	Perkins, Ch 5 & 7

- Population trends and issues; demographic transition

6 September: Poverty and Inequality — Perkins, Ch 6

- Causes of poverty: structural and absolute
- Measurement of poverty and inequality
- Trends and issues
- Poverty reduction strategies

13 September: Agriculture and Development — Perkins, Ch 16 & 17

- Agricultural production, growth and structural transformation
- The Green Revolution
- Agriculture and poverty alleviation
- Issues: land reform, global food crisis

20 September: Human and Social Development — Perkins, Ch 8 & 9

- Human capital and productivity
- Issues. trends and policies in the education sector
- Issues, trends in global health; policies in the health sector

27 September: Midterm Exam

4 October: Urban and Rural Development — Steinberg and Hakim Ch 1 & 2

- Role of cities and rural areas
- Challenges of urbanization
- The rural transition
- Urban-rural linkages

11 October: Sustainable Development and Climate Change — Perkins, Ch 20

- Economic growth vs environmental sustainability
- Market failures and government policies
- Global warming and climate change
- Climate change adaptation and mitigation

18 October: Gender and Development — ADB: Gender and

- Why gender matters
  Development
- Gender inequality and mainstreaming

25 October: No Classes (substitution King Chulalongkorn's birthday)

1 November: International Trade and Development — Perkins, Ch 18 & 19

- Trends and patterns
- Tariffs, subsidies and trade barriers
- Improving balance of trade

8 November: Foreign Aid and Foreign Direct Investment — Perkins, Ch 13 & 14

- Multilateral organizations and financial institutions

- Bilateral institutions
- Foreign borrowing and debt repayments
- Multinational corporations and foreign direct investments
- Capital flows: issues and challenges

TBA: Group Presentations

TBA: Wrap up

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE471 LABOR ECONOMICS

Semester 1/2025

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

Prerequisite: **a) EE312 and EE211 (or EE213) or b) EE311 and EE212 (or EE214)**

Course Description: Studying the supply and demand of labor in the short-term and long-term, as well as improving labor quality. Types of labor markets, wage structures, and the role of labor unions. The role of government in the labor market as employer and regulator. Human capital, labor mobility and discrimination in the labor market, and the effect of globalization and integration on employment. The course pays special attention to how labor market works in developed and developing countries and their implications for public policy.

Course Objectives: The objective of this course is to provide you an understanding with models of how firms make decisions about their need for workers, how workers make labor supply decisions, and how wages and other benefits are determined. We will discuss important issues such as immigration, discrimination, and unions. Throughout the course, we will examine the effects of relevant public policies such as minimum wage, payroll tax, and employment subsidies on the labor market. Students will have an opportunity to apply these understanding and interest on specific labor topic on their research paper.

Main Text:

***Borjas, G. (2019). Labor Economics. 8th ed. McGraw-Hill, USA. (Main textbook)

Recommended Texts & Materials

Several articles from each topic reading list

Basic Econometrics textbook (optional)

Statistics and databases on employment, social, economic and other indicators:

International Labour Office: Statistics and databases

http://www.ilo.org/global/statistics-and-databases/lang--en/index.htm

International Labour Office: Key Indicators of the Labour Market (KILM):

http://www.ilo.org/global/statistics-and-databases/research-and-databases/kilm/lang--en/index.htm

World Bank: Database on employment

http://datatopics.worldbank.org/jobs/

World Bank: World Development Indicators (WDI)

http://data.worldbank.org/data-catalog/world-development-indicators

Asian Development Bank: Statistics and databases:

http://www.adb.org/data/statistics

Grading Criteria: The final grade of the course will be based on the following items:

Team/ Individual proposal paper + presentations	15 points
Team/ Individual News or Article Presentation (10 minutes)	5 points
Class attendance and participation	10 points
Midterm Exam	30 points
Final Exam	40 points

Note: Midterm and final exam dates are not changed due to the official schedule from BE program. Only physical condition with approval medical document is allowed for postponing the exam.

Paper and presentation

Students may select any topics related to Labor Economics. Report can be written in individual or group maximum of 2 students. The purpose of this paper is for students to develop a research topic. Students may select any topics related to Labor Economics. For example, minimum wages, wages differential between gender and race, return to schooling, international labor mobility, government pension fund, agricultural labor market, workplace environment and compensation etc. Empirical study or Theoretical works are equally preferred.

Students will be assigned to present your own topic after the midterm. The length of the presentation is approximately 10-15 minutes, followed by Q&A. After the presentation, students can get feedback from instructor and classmates to improve and make some changes before submitting the final version at the end of semester.

The paper must include introduction, literature review, conceptual/ theoretical framework, data description and empirical methodology and references. Lengthwise, the paper should be 10 double-spaced pages, excluding graphs and tables. The total score is based on completion of each section. Copy and plagiarize are prohibited, your score will be zero for plagiarism or copy without appropriate citation and reference (see MLA or APA citation style).

The examples of style are in website

MLA Style: http://www.liu.edu/CWIS/CWP/library/workshop/citmla.htm

APA Style: http://www.liu.edu/CWIS/CWP/library/workshop/citapa.htm

Chicago Style: http://www.liu.edu/cwis/cwp/library/workshop/citchi.htm

Academic Honesty

You are expected to be honest in all of your academic work. Copying is plagiarism and will be treated as an honor code violation. Potential sanctions include failure in the course and suspension from the university.

Conduct and Manner

Ethics is all above everything, far more valuable than merely subject knowledge. Accordingly, plagiarism and cheating, including any possible plagiarism and cheating, will be subject to penalties as stated in the University Regulations. More importantly, to achieve overall objectives of learning, it is strongly advised that all students of EE471 class behave in proper manner with socially acceptable and right conduct.

Below is advised code of conduct to be performed in EE471 class. Achieving and maintaining the code of conduct throughout the course will surely be awarded.

1. No mobile phones used. This includes silent mode, message sending, LINE, and all social network communication that would interfere teaching and learning.

2. Be punctual. Yet it is understood that students may have continuing classes that cause delay. It is acceptable if it is a few minutes late. But unnecessary delay should be avoided. Even if students are on time, they are advised not to leave the room without unnecessary purposes.

3. Behave. Other socially acceptable manner should be practiced here. For example, this is a classroom whereby food and drink is not allowed. This is the university whereby students wear proper dress.

Expected Learning Outcomes:

1. Morality and Ethics

Applicability	Learning Goals
●	1.51 Students demonstrate integrity.
O	1.52 Students prioritize social and public benefits over personal ones.
●	1.53 Students are punctual and comply with the code of conduct of the institution and society at large.
●	1.54 Students are responsible and accountable to society, the nation, and the subject of economics.
●	1.55 Students realize the cultural and environmental value of the sustenainable society.

2. Knowledge

Applicability	Learning Goals
●	2.51 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.52 Students know and understand Thai and global economic structure, and the importance of major international economic events.
●	2.53 Students know and understand instruments of economic analysis.
●	2.54 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.
●	2.55 Students are informed about related fields including sociology, business administration, education, law policy, and science.

3. Intellectual Development

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

4. Interpersonal Skills and Responsibilities

Applicability	Learning Goals
●	22.1 Students are responsible for assigned tasks and work in groups effectively.
●	22.2 Students have problem-solving skills.
●	22.3 Students show leadership skills and team spirit.
●	22.4 Students are always improving themselves.
●	22.5 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.

Tentative Class Schedule:

1. Introduction to labor economics

1.1 Data in Labor market

1.2 Empirical strategies in labor economics

Reading Lists:

*** Borjas (Chapter 1)

Angrist, Joshua, and Alan Krueger. "Empirical Strategies in Labor Economics." The Handbook of Labor Economics. Vol. 3A. 1999, chapter 23, sections 3 and 4, pp. 1278-1357.

Deaton, Angus. 1997. The Analysis of Household Surveys, The Johns Hopkins University Press, Chapters 1

2. Labor Supply

2.1 Measuring the Labor force

2.2 The Labor supply curve

2.3 Labor supply over the Life Cycle

2.4 Policy Application

2.5 Empirical Finding

Reading Lists:

*** Borjas (Chapter 2)

Ashenfelter, Orley. "Macroeconomic and Microeconomic Analyses of Labor Supply." Carnegie-Rochester Conference on Public Policy 21 (1984): 117-156.

Becker, Gary S. 1965. “A Theory of the Allocation of Time,” The Economic Journal, September, pp. 493-517.

Chiappori, Pierre-Andre. 1992. “Collective Labor Supply and Welfare,” Journal of Political Economy, Vol. 100, No.3, pp.437-467.

MaCurdy, Thomas. 1981. “An Empirical Model of Labor Supply in a Life-Cycle Setting,” Journal of Political Economy 89, pp. 1059-85.

3. Labor Demand

3.1 The Production Function

3.2 The Employment Decision in the Short Run and Long Run

3.3 Substitution and Income Effect Analysis

3.4 Elasticity Analysis

3.5 Minimum Wage

Reading Lists:

*** Borjas (Chapter 3)

Card, David, and Alan Kreuger. 1995. “Myth and Measurement: the New Economics of Minimum Wage”, selected chapters, (Princeton: Princeton University Press)

Hamermesh, Daniel. "The Demand for Labor in the Long Run." Chapter 8 in Handbook of Labor Economics. Vol. 1. Amsterdam, Netherlands: North-Holland, 1986.

Tito Boeri and Jan Van Ours (2008). The Economics of Imperfect Labor (Chapter 2 Minimum Wage). Princeton University Press.

4. Market Equilibrium

4.1 Equilibrium and Adjustment

4.2 Static and Dynamic Equilibrium

4.3 Market Structure

4.4 Policy Applications

4.5 Practical Wage Determination

Reading Lists:

*** Borjas (Chapter 4)

Tangtipongkul, K., & Srisuchart, S. (2018). The Decision to Retire Early: Evidence from Private Service Sector in Thailand. Journal of Population and Social Studies [JPSS], 26(2), 149 - 164. Retrieved from https://www.tcithaijo.org/index.php/jpss/article/view/117180

5. Compensating Wage Differentials

5.1 The Market for Risky Jobs

5.2 The Hedonic Wage Function

5.3 Compensating Differentials and Job Amenities

5.4 Policy Application: Safety and Health Regulations

Health Insurance and the Labor Market

Reading Lists:

*** Borjas (Chapter 5)

6. Human Capital

6.1 Education and Earnings

6.2 Estimating the rate of return to schooling

6.3 On the Job Training

6.4 On the Job Training and the Age-Earnings Profile

6.5 Policy Application

Reading Lists:

*** Borjas (Chapter 6)

Abraham, Katharine G., and Henry S. Farber. 1987. "Job Duration, Seniority, and Earnings," American Economic Review, 77(3), pp. 278-97.

Altonji, Joseph, and J. Shakotko. 1987. "Do Wages Rise with Seniority?" Review of Economic Studies, LIV, pp. 437-59.

Angrist, Joshua D., and Alan B. Krueger. 1991. "Does Compulsory School Attendance Affect Schooling and Earnings?" Quarterly Journal of Economics, CVI(4), p. 979-1014.

Becker, Gary S. 1993. Human Capital, Chicago: University of Chicago Press, Chapters II, III, IV, and V (section 2). (Mostly from his original book of 1964 NBER)

Bosworth et al. (Chapter 15, 16, 17)

Card, David. 1999. “The Causal Effect of Education and Earnings,” Handbook 3A, Ch. 30.

Card, David, and Alan B. Krueger. 1992. “Does School Quality Matter? Returns to Education and the Characteristics of Public Schools in the United States,” Journal of Political Economy 100: 1-40.

Korenman, Sanders, and David Neumark. 1991. "Does Marriage Really Make Men More Productive?" Journal of Human Resources 26(2): 282-307.

Tangtipongkul, K. (2015). Rate of return to schooling in Thailand. Asian Development Review, 32(2), pp. 38-64.

Punyasavatsut, C., Laovakul, D., Tangtipongkul, K., Warunsiri, S., & Srisuchart, S. (2016). National Education Accounts of Thailand 2008-2013 Methodology and Key Findings. Quality Learning Foundation and Health Promotion Foundation.

Tangtipongkul, K. (2016). Scale Economies in Public Vocational Education: Empirical Evidence from Thailand. Southeast Asian Journal of Economics, 4(2), July – December.

7. The Wage Structure

7.1 The Earnings Distribution

7.2 Measuring Inequality

7.3 The Wage Structure

7.4 Policy Application: Why Did Wage Inequality Increase?

7.5 The Earnings of Superstars

Reading Lists:

*** Borjas (Chapter 7)

8. Labor Mobility

8.1 Geographic Migration as a Human Capital Investment

8.2 Family Migration

8.3 The Decision to Immigrate

8.4 Job Turnover

8.5 Policy Applications

Reading Lists:

*** Borjas (Chapter 8)

Farber, Henry S. 1999. “Mobility and Stability: The Dynamics of Job Change in Labor Markets”, Handbook 3B, Ch. 37.

Farber, Henry S. 1994. “The Analysis of Interfirm Worker Mobility,” Journal of Labor Economics, Vol. 12 no. 4, pp. 554-93.

Topel, Robert H. and Michael P. Ward, 1992. “Job Mobility and the Careers of Young Men”, Quarterly Journal of Economics, vol. 107, 441-79.

Mortensen, D., and C. Pissarides. 1999. “New Developments in Models of Search in the Labor Market” Handbook 3B Chapter 39.

OECD/ILO (2017), How Immigrants Contribute to Thailand's Economy, ILO, Geneva 22/OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264287747-en

Tangtipongkul, K., & Khiev, V. (2019). The Effect of Remittance on Economic Growth in Cambodia. Journal of Population and Social Studies [JPSS], 27(3), 232 - 246. Retrieved from https://www.tci-thaijo.org/index.php/jpss/issue/view/13850

9. Labor Market Discrimination

9.1 Race and Gender in the Labor Market

9.2 Experimental and Empirical Studies

9.3 Policy Applications

Reading Lists:

*** Borjas (Chapter 9)

Altonji, Joseph G. and Rebecca Blank. 1999. “Race and Gender in the Labor Market.” Handbook 3C. Ch. 48.

Becker, Gary S. 1971. The Economics of Discrimination (Chicago, IL: The University of Chicago Press), Chapters 1-5.

Goldin, Claudia. and Cecila Rouse. 2000. “Orchestrating Impartiality: The Impact of "blind" Auditions on Female Musicians,” American Economic Review, 90:715-741.

10. Labor Unions

10.1 Efficient Bargaining

10.2 Strike

10.3 Union Wage Effect

Reading Lists:

*** Borjas (Chapter 10)

11. Incentive Pay

11.1 Piece Rates and Time Rates

11.2 Tournaments

11.3 Efficiency Wages

Reading Lists:

*** Borjas (Chapter 11)

Ehrenberg, Ronald G., and Michael L. Bognanno. 1990. "Do Tournaments Have Incentive Effects?" Journal of Political Economy, 98(6), pp. 1307-24.

12. Unemployment

12.1 Type of Unemployment

12.2 Job search

12.3 Efficiency Wages

12.4 Implicit Contracts

Reading Lists:

*** Borjas (Chapter 12)

Tangtipongkul, K. & Wangmo, D. (2017). Determinants of Unemployment: Characteristics and Policy Responses in Bhutan. Southeast Asian Journal of Economics, 5(2), December.

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE481 INDUSTRIAL ECONOMICS

Semester 1/2025

Number of Credit: 3

Prerequisite: EE 311

Course Description: study the behaviors of firms in imperfectly competitive markets on how to set the pricing and non-pricing strategies under different environments, such as different market structure, different technologies, and different government regulations. The methodology used mainly is based on the applied game theory under asymmetric information.

Course Objectives: Students should be able to set the optimal strategies of firms under different circumstances in the imperfectly competitive markets.

Main Text:

Carlton and Perloff, Modern Industrial Organization, fourth edition, Pearson Education Limited, 2015.

Drucker, P., Theory of the Business, Harvard Business Review Classics, 2017.

Rasmusen, Eric, Games & Information, third edition, Blackwell Publishers Ltd., 2001.

Tirole, Jean, Industrial Organization, The MIT Press, 1989.

Recommended Texts & Materials

Allen F., "Reputation and Product Quality", the Rand Journal of Economics, 15 No.3, pp.311-327,1984.

Dixit, A., "A Model of duopoly suggesting a theory of entry barriers", the Bell Journal of Economics, 10 No.1. pp. 20-32, 1979.

Kreps and Wilson, "Reputation and Imperfect Information", Journal of Economic Theory, 27, pp. 253-279, 1982.

Suggested Readings:

Harvard Business Review, various issues

Grading Criteria:

Mid-term examination	30
Term Paper	30
Final examination	40

Expected Learning Outcomes: Every student should understand the basic knowledge on business strategic planning

Tentative Class Schedule:

Week		Topics	
1		Introduction to industrial Economics: Methodology	
2		Drucker's Theory of Business	
3		M. Potter on "What is Strategy?"	
4		Market and Market Analysis	
5		Asymmetric Information Game Theory	
6		Oligopoly Models	
7		Product Quality and Price signaling	
8		Vertical and Horizontal Product Differentiation	
9		Advertising	
10		Entry and Accommodation	
11		Vertical integration and Vertical Restriction	
12		Horizontal Integration and Collusion	
13		Disruptive Technology and Intellectual Property Rights Protection	
14		Reputation, Limit Pricing, and Predation	
15		Government Regulation: Competition Policy	

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE482 INDUSTRIALIZATION: ROLE OF PUBLIC AND PRIVATE SECTORS

Semester 1/2025

Number of Credit: 3 credits

Prerequisites: EE312

COURSE DESCRIPTION AND OBJECTIVES: This class analyzes industrialization, focusing on the roles of public policy and other roles of public and private producers and consumers. The course will pay special attention to the causes and effects of industrialization in Asia's advanced (e.g., Japan, Korea, Taiwan) and developing economies (e.g., China, India, Indonesia, Malaysia, Thailand, Vietnam). The emphasis will be on reading and writing "surveys of the literature" that review and summarize major findings of previous studies on a topic to be chosen by the student. An important goal of the class is to help students to learn research and writing techniques necessary to write a good thesis or dissertation, and eventually publish academically. These analytical, statistical, and writing techniques will also be useful in non-academic careers (e.g, business or government).

COURSE EVALUATION: A term paper of 4000-5000-words will account for 70% of the course grade. Term papers will survey the economics' literature on the student's chosen research topic. Please see the "Term Paper Guidelines" on p. 7 and important principles for the constructing your list of references on pp. 8-10. Classes 9a and 9b are tentatively scheduled for student presentations of short, preliminary outlines of proposed term papers and related discussions. The purpose of the outline presentations is to help students refine their chosen topic, clearly state the core, analytical question(s) that their survey paper asks, and organize their papers so they become easier to write. Term papers should summarize related economic analyses (https://www.aeaweb.org/econlit/journal_list.php). All papers must include a from at least 5 papers published in the *Journal of Economic Literature*, the *Journal of Economic Perspectives*, or the *Journal of Economic Surveys*, plus an additional 5 refereed papers published in other journals indexed in EconLit comprehensive and detailed list of references used in the paper. The most important principles when writing the paper is for the author to make it easy for the reader to (1) understand the paper, (2) check all the references cited, and (3) evaluate the author's interpretation of those references.

WARNING: If you plagiarize or fail to cite sources appropriately, you will FAIL THIS CLASS and may be subject to suspension or expulsion from the University for academic dishonesty.

30% of class evaluation will be based on student presentations and class participation. Students will prepare short outlines of the structure of assigned course readings, write 1-2 paragraphs summarizing the main points of the readings, and present them in class in about 10-15 minutes.

All assignments are to be submitted in MS Word (docx) files by email to the instructor from students' assigned TU email addresses to the instructor's email listed at the top of this page. In the submissions, students should use only text and a simple font such as 12 point Times New Roman font on A4 paper in MS-Word format so the instructor can edit submissions, as appropriate.

CONSULTATIONS: The instructor will be available for student consultations before and after most classes. It is also possible to make appointments for other times. Please confirm the date and time of appointments by email at least 24 hours before the appointment. When emailing the instructor, please begin the email subject with "EE482" and use your assigned TU email address based on your student number.

COURSE MATERIALS: Course materials will be available from the instructor's Google Drive in two folders: (1) the "SyllabusAssignmentsReadings" folder will contain this syllabus, a list of reading assignments, and all readings; (2) the "Outlines" will contain all student outlines, which will be made available to all students in the class. Updates to these folders will be provided as necessary.

DETAILED SCHEDULE AND READING LIST (1/5)

Most classes are scheduled on Wednesdays or Fridays at 1400-1530. Two makeup classes are currently scheduled for 1530-1700 on 0922 and 1015 to make up for missed

classes on national holidays. Classes will be held on Zoom and links to classes will be emailed to all students from the instructor about 15-30 minutes before class begins.

01a-0811 Wed Introduction and syllabus explanation
01a1-Asian Development Bank (2015), *Thailand: Industrialization and Economic Catch-up*, Manila: Asian Development Bank.

Part 1: Industrialization, Economic Growth, and Economic Development

01b-03a Excerpts from Hayami, Yujiro, 2002, *Development Economics: From the Poverty to the Wealth of Nations*, Oxford and New York: Oxford University Publishers.

01b-0813 Fri
01b1-Ch01-A Theoretical Framework for Economic Development, 9-30
01b2-Ch02-A Comparative Perspective on Developing Economies, 31-58

02a-0818 Wed
02a1-Ch03-Population Growth and the Constraint of Natural Resources, 59-87
02a2-Ch04-Breaking the Resource Constraint, 88-118

02b-0820 Fri
02b1-Ch05-Capital Accumulation and Economic Development, 119-155
02b2-Ch06-Patterns and Sources of Technological Progress, 156-180

03a-0825 Wed
03a1-Ch07-Income Distribution and Environmental Problems, 181-220
03a2-Ch08-Market and State & Ch09-The Role of the Community in Economic Development, 221-320

03b-0827 Fri
03b1- Yeung, Henry Wai-chung, 2017, "State-led development reconsidered: the political economy of state transformation in East Asia since the 1990s", *Cambridge Journal of Regions Economy and Society*, 10(1), 83-98, doi:10.1093/cjres/rsw031.
03b2-Lee, Keun, Justin Y. Lin, and Ha-Joon Chang (2005), "Late Marketisation versus Late Industrialisation in East Asia", *Asia-Pacific Economic Literature*, 19(1), 42-59, https://doi.org/10.1111/j.1467-8411.2005.00157.x.

Part 2: Industrialization and Agriculture

04a1to05b2-Excerpts from Oshima, Harry T., 1987, *Economic Growth in Monsoon Asia*, Tokyo; University of Tokyo Press.

04a-0901 Wed
04a1-Ch01-The Nature of Asia's Monsoon Economy and Its Heritage of Poverty, 15-46.
04a2-Ch02-An Analytical Framework for Monsoon Development, 47-72.

04b-0903 Fri

04b1-Ch03-The Record of Postwar Economic Growth . . . in Monsoon Asia, 73-100.
04b2-Ch04-Contrasting the Economic Growth of Prewar and Postwar Japan, 101-136.

DETAILED SCHEDULE AND READING LIST (2/5)

05a-0908 Wed
05a1-Ch05-Similarities and Contrasts in the Rapid Transition of Taiwan and South Korea, 137-176.
05a2-Ch07-Thailand Catches Up with the Philippines, 199-234.

05b-0910 Fri
05b1-Ch09-Slow Growth with Unlimited Labor Supply: Heavy Industrialization in China and India, 263-290.
05b2-Ch11-The Demographic Transition and Industrial Transition: A Comparative Perspective, 315-342.

Part 3: Industrialization and Industrial Policy

06a1to06b1-Excerpts from Ozawa, Terutomo, 2005, *Institutions, Industrial Upgrading, and Economic Performance in Japan: The 'Flying-Geese' Paradigm of Catch-up Growth*, Cheltenham, UK and Northhampton, MA, USA: Edward Elgar.

06a-0915 Wed
06a1-Ch02-Labor-driven stage - and logic - of reconstruction & Ch03-Scale-driven stage - and logic - of modernizing heavy and chemical industries: a high growth period, 31-66.
06a2-Ch04-Assembly-driven stage - and logic - of industrial upgrading & Ch05-Knowledge-driven stage - and logic - of catch-up growth, 67-120.

06b-0917 Fri
06b1-Ch06-IT-driven stage - and logic - of new growth & Ch07-Analytics and stylized features of structural transformation: additional theoretical expositions, 121-163.
06b2- Aw, Bee Yan, Sukkyun Chung, and Mark J. Roberts, 2003, "Productivity, Output, and Failure: A Comparison of Taiwanese & Korean Manufacturers", *The Economic Journal*, 113, F485-510, https://doi.org/10.1046/j.0013-0133.2003.00166.x.

07a-0922 Wed
07a1-Trindade, Vitor (2005), "The big push, industrialization and international trade: The role of exports", *Journal of Development Economics*, 78, 22-48, doi:10.1016/j.jdeveco.2004.08.006.

07a2-Beason, Richard and David E. Weinstein (1996), "Growth, Economies of Scale,

and Targeting in Japan 1955-1990", *The Review of Economics and Statistics*, 78(2), 286-295, http://www.jstor.org/stable/2109930.

DETAILED SCHEDULE AND READING LIST (3/5)

Part 4: Industrialization and International Economic Policy

07b-0922 Wed 1530-1700 (makeup for 0924 Fri)

07b1-Yu, Miaojie (2015), "Processing Trade, Tariff Reductions and Firm Productivity: Evidence from Chinese Firms", *The Economic Journal*, 125 (June), 943-968, Doi: 10.1111/ecoj.12127.

07b2-Imbruno, Michele and Tobias D. Ketterer, 2018, "Energy efficiency gains from importing intermediate inputs: Firm-level evidence from Indonesia", *Journal of Development Economics*, 135, 117-141, https://doi.org/10.1016/j.jdeveco.2018.06.014.

08a-1006 Wed

08a1-Rasiah, Rajah (2014), "Crisis Effects on the Electronics Industry in Southeast Asia", *Journal*
of Contemporary Asia, 44(4), 645-663, DOI: 10.1080/00472336.2014.923637.

08a2-Chakraborty, Pavel, (2018), "The great trade collapse and Indian firms", *The World Economy*, 41, 100-125, DOI: 10.1111/twec.12517.

08b-1008 Fri

08b1-Kiyota, Kozo, Keita Oikawa, and Katsuhiro Yoshioka (2017), "The Global Value Chain and the Competitiveness of Asian Countries", *Asian Economic Papers*, 16(3), 257-281, doi:10.1162/ASEP_a_00573.

08b2-Blonigen, Bruce A. (2016), "Industrial Policy and Downstream Export Performance", *The Economic Journal*, 126 (September), 1635-1659, Doi: 10.1111/ecoj.12223.

Paper outlines

09a-1015 Fri Paper outlines

09b-1015 Fri 1530-1700 (make up for 1013) 1020 Wed Paper outlines

Part 5: Industrialization, Firms, and Ownership

10a-1020-Wed

10a1-Bernard, Andrew B., J. Bradford Jensen, Stephen J. Redding, and Peter K. Schott (2018), "Global Firms", *Journal of Economic Literature*, 56(2), 565-619, https://doi.org/10.1257/jel.20160792.

10a2-Wang, Jian and Xiao Wang (2015), "Benefits of foreign ownership, Evidence from foreign direct investment in China", *Journal of International Economics*, 97(2), 325-338, http://dx.doi.org/10.1016/j.jinteco.2015.07.006.

10b-1022-Fri

10b1-Jefferson, Gary H. and Miao Ouyang (2014), "FDI spillovers in China: why do the research findings differ so much?", *Journal of Chinese Economic and Business Studies*, 12(1), 1-27, http://dx.doi.org/10.1080/14765284.2013.875292.

10b2-Girma, Sourafel, Holger Görg, and Erasmus Kersting (2019), "Which boats are lifted by a foreign tide? Direct and indirect wage effects of foreign ownership", *Journal of International Business Studies*, 50(6), 923-947, https://doi.org/10.1057/s41267-019-00248-2.

DETAILED SCHEDULE AND READING LIST (4/5)

11a-1027-Wed

11a1-Nguyen, Kien Trung and Eric D. Ramstetter (2019), "Ownership-related Wage Differentials by Occupation in Vietnamese Manufacturing", *Singapore Economic Review*, 64(3), 625-645, DOI: 10.1142/S0217590818500303.

11a2-Swenson, Deborah L.and Huiya Chen (2014), "Multinational Exposure and the Quality of New Chinese Exports", *Oxford Bulletin of Economics and Statistics*, 76(1), 41-66, doi: 10.1111/j.1468-0084.2012.00726.x.

11b-1029 Fri

11b1-Yamashita, Nobuaki and Kyoji Fukao (2010), Expansion abroad and jobs at home: Evidence from Japanese multinational enterprises, *Japan and the World Economy*, 22, 88-97, http://dx.doi.org/10.1016/j.japwor.2009.10.001.

11b2-Baldwin, Richard and Toshihiro Okubo (2014), "Networked FDI: Sales and Sourcing Patterns of Japanese Foreign Affiliates", *The World Economy*, 37(8), 1051-1080, doi: 10.1111/twec.12116.

Part 6: Industrialization, Industrial Development, and Competition Policy

12a-1103 Wed

12a1-Aghion, Philippe, Jing Cai, Mathias Dewatripont, Luosha Du, Ann Harrison, and Patrick Legros (2015), "Industrial Policy and Competition", *American Economic Journal: Macroeconomics*, 7(4), 1-32, http://dx.doi.org/10.1257/mac.20120103.

12a2-Einav, Liran, and Jonathan Levin (2010), "Empirical Industrial Organization: A Progress Report." *Journal of Economic Perspectives* 24 (2): 145-162, doi=10.1257/jep.24.2.145.

12b-1105 Fri

12b1-Lamoreaux, Naomi R. (2019), "The Problem of Bigness: From Standard Oil to Google", *Journal of Economic Perspectives*, 33(3), 94-117, https://doi.org/10.1257/jep.33.3.94.

12b2-Schwerhoff, Gregor, Ottmar Edenhofer, and Marc Fleurbaey (2020), "Taxation of Economic Rents", *Journal of Economic Surveys*, 34(2), 398-423, doi: 10.1111/joes.12340.

13a-1110 Wed

13a1- Lee, Chang-Yang (2005), "A New Perspective on Industry R&D & Market Structure", *Journal of Industrial Economics*, 53(1), 101-122, https://doi.org/10.1111/j.0022-1821.2005.00247.x.

13a2-Aw, Bee Yan, Mark J. Roberts, and Daniel Xi Yu (2011), "R&D Investment, Exporting, and Productivity Dynamics", *American Economic Review*, 101(4), 1312-1344, DOI: 10.1257/aer.101.4.1312.

13b-1112 Fri

13b1-Rasiah, Rajah, Yap Xiao Shan and Yap Su Fei (2015), “Sticky Spots on Slippery Slopes: The Development of the Integrated Circuits Industry in Emerging Asia”, *Institutions and Economics*, 7(1), 52-79.
13b2-Amighini, Alessia and Sara Gorgon (2014), "The International Reorganisation of Auto Production", *The World Economy*, 37(7), 923-952, doi: 10.1111/twec.12091.

DETAILED SCHEDULE AND READING LIST (5/5)

Part 7: Industrialization and Environmental Policy

14a-1117 Wed
14a1-Nordhaus, William (2019), "Climate Change: The Ultimate Challenge for Economics", *American Economic Review*, 109(6), 1991-2014, https://doi.org/10.1257/aer.109.6.
14a2-Heal, Geoffrey (2017), "The Economics of the Climate", *Journal of Economic Literature*, 55(3), 1046-1063, https://doi.org/10.1257/jel.20151335.

14b-1119 Fri
14b1-Parry, Ian W.H., Margaret Walls, and Winston Harrington (2007), “Automobile Externalities and Policies”, *Journal of Economic Literature*, 45(2), 373-399, DOI: 10.1257/jel.45.2.373.
14b2-Libecap, Gary D. (2014), "Addressing Global Environmental Externalities: Transaction Costs Considerations", *Journal of Economic Literature*, 52(2), 424-479, http://dx.doi.org/10.1257/jel.52.2.424.

15a-1124 Wed
15a1-Lee, Myunghun (2008), "Environmental regulation and production structure for the Korean iron and steel industry", *Resource and Energy Economics*, 30, 1-11, doi:10.1016/j.reseneeco.2007.01.006.
15a2-Zheng, Siqi and Matthew E. Kahn (2017), “A New Era of Pollution Progress in Urban China”, *Journal of Economic Perspectives*, 31(1), 71-92, https://doi.org/10.1257/jep.31.1.71.

15b-1126 Fri
15b1-Auffhammer, Maximilian, Weizeng Sun, Jianfeng Wu, Siqi Zheng (2016), The Decomposition and Dynamics of Industrial Carbon Dioxide Emissions for 287 Chinese Cities in 1998-2009", *Journal of Economic Surveys*, 30(3), 460-481, doi: 10.1111/joes.12158.
15b2-Ebenstein, Avraham (2012), "The Consequences of Industrialization, Evidence from Water Pollution and Digestive Cancers in China", *The Review of Economics and Statistics*, 94(1), 186-201, https://doi.org/10.1162/REST_a_00150.

Term Paper Guidelines, submit to "ramstmnc [at] gmail.com" by 26 November 2021

1. Topic: Please choose a topic related to industrialization and narrow enough to be easily discussed in about 10 pages (or about 5000 words), but not so narrow as to be irrelevant or difficult to find research references about the topic. Most students first choose topics that are too broad, making it difficult to write a clear, concise paper. The instructor or other students may be able to offer good suggestions about how to revise a topic or analytical focus so the paper is easier to write. The instructor encourages students to choose a topic related to the subject students are considering for theses or dissertations, and perhaps eventual publication.

2. Structure: Please write a review of the academic economics literature on the topic you choose. I suggest a simple structure such as the following.

a. Introduction (about 1 page explaining the paper's analytical questions and structure)

b. Topic 1 (about 3 pages)

c. Topic 2 (about 3 pages)

d. Conclusion (about 1 page double-spaced)

e. References (about 1 page single-spaced, for about 15 references)

f. Tables and Figures (about 1-2 pages for 2-4 medium- or large-sized tables or figures)

NOTE: All paragraphs should consistent of 3-7 sentences and include clear topic sentences.

3. List of References: Please use the author (year) reference style similar to that in the list of class readings above. Term papers should summarize related economic analyses from at least 5 papers published in the *Journal of Economic Literature*, the *Journal of Economic Perspectives*, or the *Journal of Economic Surveys*, plus an additional 5 refereed papers published in other journals indexed in EconLit (https://www.aeaweb.org/econlit/journal_list.php). Other references can also be used, but your paper should focus primarily on summarizing the 10 academic papers you collect from the above journals. The papers in the reading list for this class and papers in their lists of references are good places to begin your literature search.

4. Citations: In the course of writing your literature review essay, you will have to refer to previous studies. It is important to cite those sources clearly so you can avoid plagiarism and so the reader can easily verify the validity of your statements. Statistical

sources should be cited in a similar way as academic papers. The simplest method of citation is to the author (year) system. If paraphrasing someone, you would say something like Keynes (1936, p. 250) emphasized the volatility of investment flows and their effects on economic cycles. If making a direct quote, please be use quotation marks: Keynes (1936, p. 250) emphasized how economists often failed to understand the implications of the “animal spirits of investors” for economic cycles.

5. Paper length: 5000 words or less, including tables, references, notes, etc.; ideally about 10 A4 pages, using Times Roman 12 point font, spacing =double (2) for the text, and spacing =single (1) tables and reference lists. Please do not use figures; rather please use tables to present your information more compactly. Length may vary as necessary to cover your topic, but papers should be no more than 15-20pp. including tables and references. Shorter papers are generally better papers.

6. Format: Please submit the paper in one file in Microsoft Word format (*.docx, *.doc) format.

Term Paper: Important Principles for the List of References (1/3)

1. The most important principle is to provide sufficient information about every publication or reference cited and clear indications of when and where and how they are used in text.

2. For easy citation of references in a text, it is often easiest to use an author-date system. For example, if the publication below is cited in a paper the easiest way to cite it is to call it Bernard and Jensen (2004) in your text; i.e., you could say that Bernard and Jensen (2004) analyze the determinants of determinants of firm exporting.

3. Correspondingly, when listing publications in your bibliography it is common to use “author-year” styles similar to the style in the syllabuses for my courses. In other words, author(s) name(s) are listed first, followed by the year of publication, and then other publication details. The goal is to create a 1-to-1 correspondence between text citations and the list of references (e.g., the reference Nguyen and Ramstetter (2019) clearly corresponds to the publication listed under 3a1 below. If there are 2 publications by the same author(s) in the same year, you can distinguish them by adding a, b, c, ..., etc. to the end of the year number (e.g., listing one as Nguyen and Ramstetter (2019a) and another as Nguyen and Ramstetter (2019b).

3a. Required details in academic papers differ depending on the type of publication. I provide some examples of the styles I usually use below. Styles differ among publishers, but the details included are standard. Including internet URLs can be very helpful, but many internet links change or disappear over time. A site called "doi.org" assigns fixed doi numbers to "good" publications that should be tracked on the internet when their URLs change. Because doi numbers are more useful than internet URLs, please USE doi numbers whenever possible (e.g., for refereed journal papers).

3a1. Articles in academic journals (journal articles are considered to be the "highest quality" of academic publications, particularly if the journal is refereed and ranked highly.

Items: Authors (year), "article title", *journal title*, VolumeNo(IssueNo), pages, doinumber

Examples:

Bernard, Andrew B. and J. Bradford Jensen (2004), "Why Some Firms Export", *Review of Economics and Statistics*, 86(2), 561-569, https://doi.org/10.1162/003465304323031111.

Nguyen, Kien Trung and Eric D. Ramstetter (2019), "Ownership-related Wage Differentials by Occupation in Vietnamese Manufacturing", *Singapore Economic Review*, 64(3), 625-645, https://doi.org/10.1142/S0217590818500303.

3a2. Books

Items: Authors (year), *book title*, city or cities of publication: publisher

Examples:

Hayami, Yujiro, 2002, *Development Economics: From the Poverty to the Wealth of Nations*, Oxford and New York: Oxford University Publishers.

Caves, Richard E. (2007) *Multinational enterprise and economic analysis* (3rd ed.).

Cambridge, UK: Cambridge University Press.

Term Paper: Important Principles for the List of References (2/3)

3a3. Articles in books

Items: Authors (year), "article title", in book editors, *book title*, city or cities of publication: publisher, pages of the article, URL if relevant.

Examples:

Sjöholm, Fredrik and Sadayuki Takii (2006), "Multinational Companies and Exports in Indonesian Manufacturing Exports" in Eric D. Ramstetter and Fredrik Sjöholm, eds., *Multinationals in Indonesia and Thailand: Wages, Productivity and Exports*. Hampshire, UK: Palgrave-Macmillan, 173-193.

Tham, Siew Yean and Liew Chei Siang (2014), "The Impact of Foreign Labor on Labor Productivity and Wages in Malaysian Manufacturing, 2000-2006", in Adams, Richard H. Jr and Ahmad Ahsan, eds. (2014), *Managing International Migration for Development in East Asia*, Washington, D.C.: World Bank, 136-158, http://documents.worldbank.org/curated/en/2014/06/23036792/managing-international-migration-development-east-asia

3a4. Working Papers, Government Documents, and Other Non-refereed publications

Items: Author (year), "document title", document publication location: document publisher, other relevant details (e.g., working paper series name and number).

Examples:

Ottaviano, Gianmarco I.P. and Giovanni Peri (2008), "Immigration and National Wages: Clarifying the Theory and the Empirics", NBER Working Paper 14188, Cambridge, MA: National Bureau of Economic Research, http://www.nber.org/papers/w14188.

Ramstetter, Eric D. and Kien Trung Nguyen (2016), "Multinational Enterprise Growth and Vietnam's Employment and Wages in Manufacturing and Trade Industries: Did Takeovers Play a Role?", Working Paper 2016-05, Kitakyushu: Asian Growth Research Institute.

3a5. Internet or Electronic ONLY resources: for this category does NOT include publications with a printed version and should be a very small category. If you cite 15

publications in your paper, no more than 2 or 3 should fall into this category. Please concentrate on reading academic papers in refereed journals (see 3a1 above).

As illustrated under 3a3 above, for publications available in print AND on the internet, the PRINT DETAILS must be provided, in addition to the URL, because they do not change like internet information often does. In these cases, the "standard style" should include all of the following:

Document Author, YearPublished, "Title", City of Publisher, Name of Publisher, URL

Examples:

Bank of Thailand (2018), "Total Value and Quantity of Exports Classified by Product Group", Bangkok: Bank of Thailand Table EC_XT_008_S2, downloaded 23 February from https://www.bot.or.th/English/Statistics/EconomicAndFinancial/Pages/StatInternationalTrade.aspx

Term Paper: Important Principles for the List of References (3/3)

Central Institute for Economic Management (CIEM), General Statistics Office, and Development Economics Research Group, University of Copenhagen (2015), "Firm-level Technology and Competitiveness in Vietnam, Evidence from 2010-2014 Surveys", Copenhagen: University of Copenhagen http://www.econ.ku.dk/ftarp/Publications/Docs/Sacnned%20Pubs/Tech%20report%202009-2013%20April%202015.pdf.

National Economic and Social Development Board (2012), Gross output and value added data for manufacturing by 4-digit TSIC, 1995-2010, Bangkok: National Economic and Social Development Board, data provided by email in December.

National Statistical Office (2009), *The 2007 Industrial Census Whole Kingdom*, Bangkok: National Statistical Office, publication tables downloaded from http://service.nso.go.th/nso/nso_center/project/search_center/23project-en.htm (link as of 11 May 2018) and underlying plant-level data.

United Nations COMTRADE (2016), SITC revision 3 data downloaded from the COMTRADE database, July 2016, New York: United Nations, http://comtrade.un.org/db/dqBasicQuery.aspx.

General note about name order for the first author in multiple author citations:

I prefer to list the first author's name with the family name first (Chinese/Korean/Japanese style) as follows:

FamilyNameAuthor1, GivenNamesAuthor1 and GivenNamesAuthor2 FamilyNameAuthor2 (YEAR), other details depend on the type of publication
I use this style because I think it corresponds more directly to citations in the text, which use only family names. To illustrate, the reference example given under 3a1 above would NEVER be referred to as Kien and Eric (2019) but always rather Nguyen and Ramstetter (2019).

However, some journals will list the first author as “Kien Trung Nguyen” (English order), not Nguyen, Kien Trung) as I do. The alternative style is less confusing for some.
GivenNamesAuthor1 FamilyNameAuthor1 and GivenNamesAuthor2 FamilyNameAuthor2 (YEAR), other details depend on the type of publication
The choice of which order to list the first author’s name is somewhat arbitrary but I do think English order is probably more common these days.

The important point is NOT if the family name comes first or last in your list of references. However, please DO be sure to list BOTH family and given names in your citations and list of references (=bibliographies) and to use a consistent format in order to help your readers.

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

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 with the lecturer's guidance.

Course Objectives:

1. To develop research skills including of identifying research questions and its significance, reviewing literature related to the research topic, designing research methodologies and conducting research, analyzing and discussing research results together with reviewing and criticizing peers' research works. This course also aims to develop communication skills in both writing and oral presentation.

2. To learn to conduct a systematic and original research on students' topic of interest and to develop economic analysis skills and critical thinking needed for future self-learning and development.

Textbooks & Materials:

Economic Theories:

Church, J. & Ware, R. (2000). Industrial organization: A strategic approach. Boston: McGraw Hill.

Laffont, J.J. & Tirole J. (1993). A theory of incentives in procurement and regulation. Massachusetts: The MIT Press.

Motta, M. (2004). Competition Policy. Theory and Practice. Cambridge: Cambridge University Press

Pepall, L., Richards, D.J. & Norman. G. (2004). Industrial Organization: Contemporary Theory and Practice. South-Western College Publishing.

Shy, O. (1995). Industrial Organization. Massachusetts: The MIT Press.

Tirole, J. (1990). The Theory of Industrial Organization. Massachusetts: The MIT Press.

Handbook of Industrial Organization, Volumes I, II, and III, North-Holland.

Econometrics:

Davis, P. & Garcés , E. (2009). Quantitative Techniques for Competition and Antitrust Analysis. Princeton University Press.

Greene, W.H. (2018). Econometric Analysis. New Jersey: Pearson Education.

Gujarati, D.N. (2015). Econometrics by Example, Red Globe Press.

Shum, M. (2016). Econometric Models for Industrial Organization. World Scientific Lecture Notes in Economics.

Train, K.E. (2009). Discrete Choice Methods with Simulation. Cambridge: Cambridge University Press,.

Wooldridge, J. (2010). Econometric Analysis of Cross-Section and Panel Data. Massachusetts: The MIT Press.

Note: Students will be given some suggested readings and materials on how to do a successful research project throughout this course.

Teaching and Learning Approach:

1. Lectures

The objectives of classroom lectures are to equip the students with a good research practice, to provide step-by-step guidance to conduct their research projects in topics of interest, to highlight contentious aspects of research process and to effectively manage a research project. Lecturing also includes training session for citation, referencing and checking plagiarism.

2. Research

Since this course focuses on industrial economic issues, research topic of student's interest should be related to industrial economics and/or industrial policies.

Students will conduct research project and submit research report or article, of which the elements are:

0. Abstract

1. Introduction

    1.1 Significance of Problem

    1.2 Research Objective

    1.3 Research Scope

2. Literature Review (Theories and/or Empirical Studies)

3. Analytical Framework and/or Research Methodology

    3.1 Analytical or Conceptual Framework

    3.2 Research Methodology and Data Sources

4. Result of Study

5. Conclusion and Policy Implications

    5.1 Conclusion

    5.2 Policy Implications

    5.3 Limitation of Study

    5.4 Future Study

6. References

0. Appendix (if available)

To write a clear and original research paper, students will practice reviewing and summarizing related literature concisely, citing the previous research papers carefully in students' research report and in a list of references and using footnote where necessary. Students have to follow the 6th edition of American Psychological Association style (APA) Style 6th Edition) for referencing.

Throughout the semester, students will be assigned tasks as following.

Task 1: Students will choose any topics of interest, identify its significance and refine research objectives and scopes. Students will conduct a survey of previous studies and review literature. To accomplish this task, students will submit "Introduction and Literature Review" in no more than 10 A4 pages together with a list of reference.

Task 2: Students develop analytical framework and research methodology and submit “Research Proposal” composing of element 1-3 in no more than 15 A4 pages together with a list of reference. Approval of research topic and proposal by instructors is required before conducting research.

Task 3: Students conduct research independently under instructor’s supervision and consultation. Students will apply the statistical techniques or econometric methods with data available and will analyze results of study. Submission of “Draft Final Report (or Article)” will be composed of element 1-6 in no more than 30 A4 pages.

Task 4: Students improve the report from comments and discussion in their seminar. Submission of “Final Report (or Article)” will be composed of element 0-6 in no more than 35 A4 pages with the aim of publishing the paper in academic journal.

Note: Paper length includes text, tables, figures, notes and etc. Date of submission of each task will be announced in the class.

Task 1-4 shall be submitted in electronic files both in Word Document and PDF format via Google Classroom.

According to code of ethics of “Thailand and The World Economy” journal, in this course students must

- ensure that the submitted report comprises original work by the students, with proper citations and sufficient details.

- ensure the report does not plagiarize other works, contain data fabrication and/or falsification, have duplicate submissions, ghost authors or contain citation manipulation.

Any violation of code of ethics will result in no assessment of any kind in that task.

3. Seminar

Student presentations are required along with submission of Task 1-3. Students will learn how to present their research works in seminar and conference within time limit and to discuss their works with the instructor and other students. Students will develop communication and presentation skills. All students must attend and participate in every seminar to exchange contributive and constructive idea, comment and advice.

Presentation 1: Introduction and Literature Review (10 minutes)

Presentation 2: Research Proposal (15 minutes)

Presentation 3: Draft Final Report or Article (20 minutes)

Note: Students must prepare their presentations in advance. They are free to choose the presentation software. However, they have to submit electronic file in PDF format to the instructor before their seminar via Google Classroom. Date and time slot of each presentation shall be scheduled and announced in the class.

Students will be assigned to play a discussant's role and to practice writing up discussion report.

Grading:

	Score (%)
Task 1 and Presentation 1	15
Task 2 and Presentation 2	20
Task 3 and Presentation 3	25
Task 4	30
Class participation and discussion	10
Total	100

Note: Deadline of submission of each task and presentation is 14.00 pm on the specified dates. Any late submission will result in deduction of 2% of final score a day.

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 in Thailand. 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.

Tentative Class Schedule:

Week	Activities	Submission
1	Lecture: - Introduction to EE489 - Frontier research in industrial economics and policy Research: Task 1 Training session: Citation, referencing and checking plagiarism	-
2	Lecture: - How to develop research question and objectives from topics of interest. - Literature search and review techniques - Journal of Economic Literature (JEL) classification Research: Task 1	Topics of Interest
3	Research: Task 1 (Cont.) Seminar: Presentation 1	Presentation 1
4	Lecture: - Developing analytical framework - Selecting research methodology - Data source and usage Research: Task 2	Introduction and Literature Review
5	Lecture: - Reporting results of study Research: Task 2 (Cont.)	-
6	Research: Task 2 (Cont.) Seminar: Presentation 2	Presentation 2
7	Research: Task 2 (Cont.) and Task 3 (Data collection) with Consultation	Research Proposal
8	**Midterm Week** Research: Task 3 (Data collection and conduct research)	-
9	Research: Task 3 with Consultation	-
10	Lecture: - Writing a concise conclusion and giving policy recommendation	-

Week	Activities	Submission
	- Identifying limitation of study and suggesting future study - How to write an abstract Research: Task 3 with Consultation	
11, 12	Research: Task 3 with Consultation	-
13	Lecture: - Role of discussant - Writing discussion report Research: Task 3 with Consultation	Draft Final Report
14	Seminar: Presentation 3 Research: Task 4 with Consultation	Presentation 3 Discussion Report
15	Seminar: Presentation 3 Research: Task 4 with Consultation	-
16	Research: Task 4 with Consultation	-
Submission of Final Report or Article		

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE521 SELECTED TOPICS IN QUANTITATIVE ECONOMICS 1:

(MATHEMATICAL ANALYSIS FOR ECONOMISTS)

Semester 1/2025

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

Prerequisites: With the consent of the lecturer.

Course Description:

Mathematical analysis in modern economic theory including set theory, real number system, metric space and topology, sequence of real numbers, real valued function, continuity, differentiability, and sequence of functions. Application of mathematical analysis to modern economic theory.

Useful Materials:

[Rudin] Walter Rudin, *Principles of Mathematical Analysis*, 3rd ed., McGraw-Hill, Inc.

[Ok] Efe A. Ok, *Real Analysis with Economic Applications*, Princeton University Press.

[CSZ] Dean Corbae, Maxwell B. Stinchcombe, Juraj Zeman, *An Introduction to Mathematical Analysis for Economic Theory and Econometrics*, Princeton University Press.

Evaluation:

Your grade will be based on exams (50%), problem sets (50%).

Midterm exam (20%)

Final exam (30%)

Things to cover:

Week	Topic	Read
1-3	Set Theory, Real Number System, Countability	Rudin (ch.1), Ok (ch.A.1,A.2,B), CSZ (ch.1,2,3)
4-6	Metric Spaces and Topology	Rudin (ch.2), Ok (ch.C), CSZ (ch.4)
7-9	Sequence of Real Numbers	Rudin (ch.3), Ok (ch.A.3), CSZ (ch.3)
10-11	Real Valued Function and Continuity	Rudin (ch.4), Ok (ch.A.4,D), CSZ (ch.4)
12-13	Differentiability and Integration	Rudin (ch.5,6), Ok (ch.A.4)
14-15	Sequence of Functions	Rudin (ch.7), Ok (ch.C,D)

Remarks:

1) The instructor retains his right to give a final grade basing on his criteria.

2) There are many mathematical economics textbooks available, feel free to substitute another book if it suits you more.

3) There will not be any supplementary exams.

Expected Learning Outcomes:

6. Morality and Ethics

Applicability	Learning Goals
●	1.56 Students demonstrate integrity.
O	1.57 Students prioritize social and public benefits over personal ones.
●	1.58 Students are punctual and comply with the code of conduct of the institution and society at large.
O	1.59 Students are responsible and accountable to society, the nation, and the subject of economics.
O	1.60 Students realize the cultural and environmental value of the sustenainable society.

7. Knowledge

Applicability	Learning Goals
●	2.56 Students know and understand modern economics principles and theories, and are up to date with new developments.
●	2.57 Students know and understand Thai and global economic structure, and the importance of major international economic events.
●	2.58 Students know and understand instruments of economic analysis.
●	2.59 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.
O	2.60 Students are informed about related fields including sociology, business administration, education, law policy, and science.

8. Intellectual Development

Applicability	Learning Goals
●	3.34 Students have developed individual critical thinking.
●	3.35 Students are sufficiently trained in research skills.

●	3.36 Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand causes of current economic problems in Thailand. Based on analsyis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.

9. Interpersonal Skills and Responsibilities

Applicability	Learning Goals
●	24.1 Students are responsible for assigned tasks and work in groups effectively.
●	24.2 Students have problem-solving skills.
O	24.3 Students show leadership skills and team spirit.
●	24.4 Students are always improving themselves.
O	24.5 Students have good interpersonal skills, adapting and working under different conditions.

10. 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.
O	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.

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE200 DATA SCIENCE FOR ECONOMIC ANALYSIS

Semester 1/2025

Number of credits: 3 credits

Prerequisite: 2nd year student or above.

(have taken at least 34 credits)

Course description

Learning to work with data. Topics include (1) data sampling and cleaning (2) data storage and management (3) exploratory data analysis (4) prediction based on statistical tools such as regression, classification and clustering (5) communication of results through visualization and summary statistics. Students learn through real--world examples using programs such as advanced MS Excel, Python or R..

Course objective:

In this course, students will learn to conduct data analysis and project on their topic of interest. Since this course focuses on economic issues, your topic and group project should be related to either microeconomics or macroeconomics. What the course will do is to stimulate an active-learning environment. Unlike most of the other classes you have attended, there won't be that many lectures. My role in this class will be a coach and conductor, rather than a lecturer.

This course divides into two significant parts. In the first part, I hope to introduce you to essential elements of a proper idea about the data and data science. To do this, we will discuss how to come up with meaningful linkages between business, economics, and data. We will then discuss different components of standard data (your team paper). This part includes an introduction, literature review, theoretical framework, data acquisition, data management, prediction, and visualization of findings. You will be assigned to read and practice on data science projects as well as past seminar papers. The students will work on the suggested data and coding project.

In the second part, you will gradually take more roles in class. Each of you and your time will take a turn to present your topic, related literature, theoretical framework, methodology, and findings. Other students will pay close attention to your presentation. They will then come up with constructive comments and suggestions to improve your data science project. Occasionally, we will turn the class into individual meetings and team meetings. The course is where you discuss specific questions regarding your data science project and data skill with me.

Textbooks:

There is no textbook for this course. However, I will post some useful articles on Google Classroom. There is also a list of readings that will be in Google classroom

Suggested readings by topics will be available after knowing you guys:

1. **Data Science: business, computer, and statistics and mathematics**

   Data Literacy, Fact, and Truth.
   Talk to me.
   Design Thinking:
   OKRs:
   Designing Your Life:
   The Book of Why:
   3 Dimensions of Data Science, Statistics, and Econometrics.
   https://clevertap.com/blog/data-science/
   https://www.vox.com/the-highlight/2019/5/14/18520783/harvard-economics-chetty
   Data Science (MIT Press Essential Knowledge series)
   Data for the People: How to Make Our Post-Privacy Economy Work for You
   by Andreas Weigend
   Everybody Lies: Big Data, New Data, and What the Internet Can Tell Us About Who We Really Are
   by Seth Stephens-Davidowitz
   https://datarockie.com/free-data-science-books/
   Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy
   https://www.businessinsider.com/netflix-facebook-cambridge-analytica-documentary-trailer-great-hack-2019-7

2. **Data Sampling and Cleaning**
   https://towardsdatascience.com/sampling-techniques-a4e34111d808
   http://siteresources.worldbank.org/INTPOVRES/Resources/477227-1142020443961/2311843-1142870725726/2337154-1328041661816/8405489-1342716080957/12-StataforSampling2012(KristenHimelein).pdf
   https://www.tableau.com/learn/whitepapers/data-prep-best-practices

3. **Data Storage and Management**
   http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.661.538&rep=rep1&type=pdf
   https://www.bmc.com/blogs/data-lake-vs-data-warehouse-vs-database-whats-the-difference/

4. **Exploratory Data Analysis: Describe or Explain**
   - Tabulation
   - Excel
   - Pivot
   - Power BI
   - Stata®
   - R
   - Python
   - Orange

   Book of Why
   Causal Inference in Statistics
   Angrist, Joshua D., and Jörn-Steffen Pischke. Mastering 'Metrics: The Path from Cause to Effect. Princeton: Princeton University Press, 2015.

5. **Prediction**

- Machine Learning basic form.

https://bruegel.org/2018/11/machine-learning-and-economics/

Criteria for prediction

- Is it about causation?

http://www.equality-of-opportunity.org/bigdatacourse_stanford/

Mullainathan, Sendhil, and Jan Spiess. 2017. "Machine Learning: An Applied Econometric Approach." Journal of Economic Perspectives 31 (2): 87-106.

Stock, James H. and Mark W. Watson. Introduction to Econometrics. 4th Edition. Boston: Pearson, 2018. Note: earlier editions and all international editions printed in English are acceptable.

6. **Communication and Visualization**
   - Storytelling with data
   - Show and Tell
   - Draw to Win
   - Dashboard White Paper from Tableau
   - Ted Talk by Han Rosling
   - Ted Talk by Simon Sinek

Other teaching materials:

If there is any PowerPoint presentation, the file(s) will be on Google Classroom.

Evaluation:

1.	Group Review of Literature AKA book review	10%
2.	Group Presentations on software and coding comparison on Gartner 10%	
3.	Group presentations of project and coding requirement	10%
4.	Group work on data visualization or dashboard:	20%
5.	Group work on Python or R replication	10%
6.	Final data science project and Communication	40%

Data Science Projects: A vital element of the course will be five small data projects, and final data science project, which will give students hands-on experience in working with data. We recommend and will support using the statistical software program like Stata® and Excel® for these projects, but students are welcome to use other applications (e.g., Power BI, R, Python, Tableau, RapidMiner, Alteryx), provided that their code and workflow are clear. The group projects are designed to be more substantial than traditional problem sets and will include significant coding, reading, and writing elements that will give students a sense of how data scientists work.

Collaboration Policy: Discussion and the exchange of ideas and works are essential to data science work. You and your teams are encouraged to consult and discuss with your classmates on the data projects and to share resources and codes. However, you should ensure that any work you submit for evaluation is the result of your work and that it reflects your integrity. You should also understand and practice the standard citation practices, and please cite any books, articles, websites, lectures, etc. that have helped you with your work. If you received any help with your work (e.g., feedback on drafts, help with code, or programming), you must also acknowledge and give credit to this assistance.

Your final Data Science Project

The project should be between 20-25 pages long presentation, including graphs, tables, dashboards, and figures (excluding bibliography and appendices). The paper should be composed of 5 main parts: 1) introduction 2) literature review 3) theoretical framework and methodology, and 4) findings 5) conclusion. We will discuss each section in more detail in class.

(This schedule is subject to change. Please see Google Classroom for changes to dates, etc.)

Class	Topics
9 Aug	Introduction - Review of Course and Data Science Resource. Identification of your project and install your tools. Conduct Group Meetings to identify your topics, relevant literature, and Data Science Tool.
16 Aug	Introduction - Review of Course and Data Science Resource. Identification of your project and install your tools. Conduct Group Meetings to identify your topics, relevant literature, and Data Science Tool.
23 Aug	*Book or Paper Review presentation*
30 Aug	*Workshop on Excel or PowerBI*
6 Sep	*Group presentation of Dashboard.*
13 Sep	*Workshop on Tableau or Power BI*
20 Sep	*Midterm Week and Review of Python or R*
---- Midterm Exam: Submission of Data Science Project Interim Report	
4 Oct	*Workshop - R or Python*
11 Oct	*Workshop - R or Python*
18 Oct	*Workshop - R or Python*
25 Oct	*Workshop - R or Python*
1 Nov	*Machine Learning on Python*
8 Nov	*Orange for Machine Learning*
15 Nov	*Orange for Machine Learning*
22 Nov	*Presentation of Machine Learning*

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:

This course aims to provide a comprehensive understanding of key demographic concepts, including fertility, mortality, migration, and population growth. Students will understand the determinants and consequences of population changes; evaluate the economic effects of population aging, urbanization, and migration; and explore economic theories related to family formation, household decision-making, and intergenerational transfers. Additionally, students will understand the role of economic factors in influencing population trends and family structures and analyze the economic implications of marriage, divorce, and fertility choices.

Expected Learning Outcomes

1. Morality and Ethics EE472

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students demonstrate integrity.	Quizzes and assignments
●	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.	Quizzes, assignments, and exam
●	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.	Group project
●	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.	Group project
●	2. Students have problem-solving skills.	
O	3. Students show leadership skills and team spirit.	
●	4. Students are always improving themselves.	
O	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
O	1. Students select and apply appropriate statistical and mathematical methods for data processing, interpretation, conclusions, and recommendations to resolve problems.	Assignments
O	2. Students communicate effectively and select appropriate presentation methods.	Group project
O	3. Students use information and communication technologies appropriately to gather data as well as process, interpret, and present results.	

Remark: ● Primary expected outcome O Secondary expected

Lecture Schedule

Date	Topics
1	The First Lecture: Introduction to Population and Family Economics
2	Demographic Data; Sex and Identity
3	Calculating Life Expectancy
4	Interpretation and Use of the Life Table
5	Measuring Mortality, Determinants of Mortality, and Mortality Reduction
6	Measuring Fertility, and Determinants of Fertility
7	Fertility Policies and Selection

Date	Topics
	Midterm
8	Forecasting Population Size and Age Structure
9	Demographic Transition and Changes in Dependency
10	Aging and Intergenerational Fairness
11	Population Size, Growth, and Sustainability
12	Voluntary Migration – Theory, Experience and Policy
13	Involuntary Relocation
14	Family Structure, Son Preference and Dowry
15	Models of Demographic and Economic Change
	Final exam

Evaluation

Midterm Examination	35%
Final Examination	35%
Group project or reports	15%
Quizzes, Assignments, and participation	15%

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE476 ENVIRONMENTAL ECONOMICS

Semester 1/2025

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

Prerequisites: EE311

Course Description:

The concepts of sustainable development, efficient production, efficient consumption and market failure. The concepts of efficiency and effectiveness of policies, measures, and tools to control and solve environmental problems. Environmental risk assessment. Economic valuation and environmental impact assessment of development projects. Concept of environmental justice. Issues related to international environmental cooperation and agreements, including the effects on trade and investment and current issues in environment.

BACHELOR OF ECONOMICS
THAMMASAT UNIVERSITY

Course Outline

EE483 ECONOMICS OF REGULATION AND COMPETITION

Semester 1/2025

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

Prerequisites: 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.