



**(Tentative) Course Syllabus
for
Economics Courses
Semester 2/2013**

COURSE OUTLINE

EE 212 PRINCIPLES OF MACROECONOMICS

Number of credits: 3 credits

Office Hours: By appointment

Course Description:

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

Evaluation:

Midterm exam (Thursday, February 28, 2013, 9.30 a.m. - 11.00 a.m.)	40%
Final exam (Tuesday, May 7, 2013, 1.30 p.m. – 4.30 p.m.)	60%

Main Text:

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

Recommended Texts:

Case, Karl E. and Ray C. Fair (2009), *Principles of Macroeconomics* (9th ed.): Prentice Hall.
Froyen, Richard T. (2009), *Macroeconomics, Theories and Policies* (9th ed.): Prentice Hall.
Mankiw, N.G., *Principles of Macroeconomics* (2009): South-Western Cengage Learning

Course Outline:

1. Introduction to Macroeconomics (3 hours)

- 1.1 Meanings, objectives, and macroeconomic policy
- 1.2 Basic concepts
 - 1.2.1 Stock vs flow variables
 - 1.2.2 Real vs nominal variables
- 1.3 Macroeconomic objectors and indicators
 - 1.3.1 Output/Input
 - 1.3.2 Employment/Unemployment
 - 1.3.3 Price level/Inflation
 - 1.3.4 Interest rate
 - 1.3.5 Exchange rate

Read: Case & Fair, ch. 5, 7; LCR, ch. 21

2. National Income and National Product (6 hours)

- 2.1 Introduction
- 2.2 Circular flow of production and expenditure
- 2.3 Meaning and significance of national income accounting
- 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 Some remarks on the applications

Read: Case & Fair, ch. 6; LCR, ch.3, 22

3. National Income and Equilibrium Determination (7.5 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 Business fixed investment
 - 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
 - 3.3.2.3 Adjustment to equilibrium
- 3.4 Changes in equilibrium national income and the multipliers
 - 3.4.1 Constant price level
 - 3.4.2 Price level varies
- 3.5 Paradox of Thrift
- 3.6 Inflationary and deflationary gap

Read: Case & Fair, ch. 8; LCR, ch. 23-24

4. The AD-AS Model and Inflation (7.5 hours)

- 4.1 Introduction
- 4.2 The derivation of aggregate demand (AD)
- 4.3 Aggregate supply
 - 4.3.1 Short-run AS
 - 4.3.1.1 Classical school
 - 4.3.1.2 Keynes
 - 4.3.1.3 Non-Keynes and Non-Classics
 - 4.3.2 Long-run AS
- 4.4 Determination of equilibrium, change in equilibrium, and multipliers
- 4.5 The equilibrium price level and inflation
 - 4.5.1 Definition
 - 4.5.2 Causes of inflation
 - 4.5.2.1 Demand-pull inflation
 - 4.5.2.2 Cost-push inflation

Read: Case & Fair, ch. 13; Froyen, ch. 9, LCR, ch. 25-26, 30

5. Fiscal Policy at work (4.5 hours)

- 5.1 Meaning, objectives and tools of fiscal policy
- 5.2 Effects of fiscal policy on equilibrium national income
 - 5.2.1 The government spending multiplier
 - 5.2.2 The tax multiplier
 - 5.2.3 The balanced-budget multiplier
- 5.3 Fiscal policy and its effectiveness in solving macroeconomics problems

Read: Case & Fair, ch. 9; LCR, ch. 26

6. The Money Market and Monetary Policy (6 hours)

- 6.1 Introduction
- 6.2 Demand for money
 - 6.2.1 Transaction demand for money
 - 6.2.2 Precautionary demand for money
 - 6.2.3 Speculative demand for money
- 6.3 Supply of money
 - 6.3.1 The banking system and money creation
 - 6.3.2 Money multiplier and the size of money supply (including introduction of monetary base)
- 6.4 Equilibrium in money market
- 6.5 Monetary policy
 - 6.5.1 The role of the central bank
 - 6.5.2 Controlling the quantity of money

Read: Case & Fair, ch. 10-11; LCR, ch. 27-29, Froyen p.335-339

7. Policy effectiveness (3 hours)

- 7.1 Monetary policy and its effectiveness in solving macroeconomics problems
- 7.2 Fiscal policy and its effectiveness in solving macroeconomics problems

Read: Handouts

8. International Economics (6 hours)

- 8.1 International Trade
- 8.2 The Balance of Payment
- 8.3 The market for foreign exchanges
 - 8.3.1 Demand for foreign exchanges
 - 8.3.2 Supply of foreign exchanges
 - 8.3.3 Equilibrium exchange rate
- 8.4 The effects of exchange rates on the economy

Read: Case & Fair, ch. 21; LCR, ch. 35-37

9. Introduction to the general equilibrium model (IS-LM model) (1.5 hours)

- 9.1 The derivation of IS schedule
- 9.2 The derivation of LM schedule
- 9.3 The IS-LM combined

Read: Froyen, ch. 7

Course Outline

EE 311 Microeconomics Theory

Course Description: Demand and supply analysis, consumer behavior 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.

Prerequisites: EE 211 and MA 216

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:

Class participation and quizzes	5%
Mid-term examination	35%
Final examination	60%

I.1.1) Main Textbooks

There are several textbooks that cover similar material. 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 material 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) Pindyck, Robert S. and Daniel E. Rubinfeld. *Microeconomics*, (7th ed.), New Jersey: Prentice -Hall, 2008.
- 2) Besanko, David, and Ronald R. Braeutigam, *Microeconomics: An Integrated Approach*, New York:John Wiley& Sons, 2002.
- 3) Salvatore, Dominick, *Microeconomics*, (4th ed.), New York: Oxford University Press. 2003.
- 4) Frank, Robert H. (6th ed.). *Microeconomics and Behavior*, New York: McGraw-Hill, 2005.
- 5) Perloff, *Microeconomics*, (3rd ed.) Boston: Addison-Wesley, 2004.
- 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, 1996.
- 9) Nicholson, Walter, *Intermediate Microeconomics and Its Application*, (8th ed.), Dryden Press, 2002.
- 10) Varian, Hal *Intermediate Microeconomics*, (5th ed.) New York: Norton, 1999.

Note: additional readings will be assigned during the semester, and readings on specific topics are given in the “boxes” under “Teaching Plan”.

Supplementary Reading (for fun):

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

II. 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.

Movies:

Interactive Excel Exercises:

There are 11 Interactive Excel Exercises located
in <ftp://econ.tu.ac.th/class/archan/CHAYUNT/EC311/>

Each exercise contains a mathematical model in which the user can change some parameters that determine the behavior of model to change the equilibrium results and answer accompanies questions. Each exercise also includes a short explanation worksheet to help the user to understand the underlying theory related to the exercise. Where available, the name of the relevant interactive excel exercise will be given in “boxes” under “Teaching Plan”.

Teaching Plan:

“A Beautiful Mind” Universal Studios, 2001.
“An Inconvenient Truth”, 2006.
“Inside Job”, 2010.

1. Introduction

1.1 Why Study Microeconomics? (6 hours)
Application of Demand and Supply concepts: government intervention

<p>Review: Concepts of consumer and producer surplus. Read: Pindyck & Rubinfeld Chs. 2 and 9, Frank Ch. 2, Salvatore Ch.2, Perloff Chs.2,3,9, Miller & Fische Ch. 3, Besanko & Braeutigam Chs. 2 & 9, and newspaper articles! Do: The Interactive Excel Exercise in “01Tax&Subsidy.xls” file.</p>
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2. Consumer Behavior and Demand Theory

2.1 Indifference Curve Analysis (1.5 hours)
▪ assumptions
▪ analysis of goods, bads, neuters

<p>Review: Properties of indifference curves. Read: Pindyck & Rubinfeld Ch. 3, Salvatore Ch.3 (3.1-3.2), Perloff Ch.4 & App. 4A, Frank Ch.3, Hirshleifer Ch. 3(pp.70-73), Miller & Fische Ch.5, Besanko & Braeutigam Ch. 3 & 4. Griffiths & Wall Ch.1 (pp.-33)</p>
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2.2 Consumption equilibrium and changes in equilibrium (7.5 hours)

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

Do: The Interactive Excel Exercise in “02IncomeSubstitutionEffect.xls” and “03IndexNumber.xls” files.

2.3 Intertemporal consumption (consumption overtime) (4 hours)

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

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

Do: The Interactive Excel Exercise in “04Intertemp.xls” file.

2.4 Consumption under uncertainty (3 hours)

- expected utility
- preference toward risk
- gambling and insurance

Read: Pindyck & Rubinfeld Ch.5, Salvatore Ch.6, Perloff Ch.17 (17.1-17.2), Frank Ch.6 (pp.198-210) Miller & Fische Ch.5 (pp.644-649), Griffiths & Wall Ch.3 (pp.102-113) Besanko & Braeutigam Ch. 15 (15.1-15.4), Varian Ch. 12

3. Transactions Costs and Institutional Economics (3 hours)

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

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

4. Production and Costs

(3 hours)

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: Pindyck & Rubinfeld Chs.6-7, Salvatore Chs. 7-8, Perloff Ch.6-7, Frank Chs.9-10
Miller & Fishe Chs.8-9, Griffiths & Wall Ch.4, Besanko & Braeutigam Ch. 6-8

Do: The Interactive Excel Exercise in "05Prod&Cost.xls" file.

5.Product Markets

5.1 Perfectly competitive markets

(1 hour)

- long-run equilibrium and efficiency

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

Read: Pindyck & Rubinfeld 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, Perloff Ch. 8, Besanko & Braeutigam Ch. 9.

Do: The Interactive Excel Exercise in "06Competitive.xls" file.

5.2 Monopoly

(6.5 hours)

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

Review: Simple monopoly

Read: Pindyck & Rubinfeld Ch.10 (10.1-10.4 and 10.7) & Ch.11, Perloff Ch.11,12;
Salvatore Ch.10 & Ch.13, Frank Ch.12, Miller & Fishe Ch.11-12,
Hirshleifer Ch.8, Griffiths and Wall Ch.7, Besanko & Braeutigam Ch. 11.1-11.6 & 12.

Do: The Interactive Excel Exercise in "07Price Discrim.xls" file.

5.3 Monopolistic competition

(1.5 hours)

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

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

5.4 Oligopoly

(9 hours)

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

Read: Pindyck and Rubinfeld Ch.12.2-12.6 & Ch.13, Hirshleifer Ch.10, Salvatore Ch.11 (11.3-11.8) Ch. 12, Frank Ch.13, Miller & Fiske Ch.13 (pp.526-557), Perloff Ch. 13,14; Besanko & Braeutigam Ch. 13.1-13.4 & 14
Chiang, Fundamental Methods of Mathematical Economics, Ch. 21.
Do: The Interactive Excel Exercise in "08Duopoly.xls" file.
Watch: "A Beautiful Mind"

6. Factor Markets

6.1 Competitive factor markets

(3 hours)

- 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, Hirsheifer Ch.11, Salvatore Ch. 14, Frank Ch.14, Miller & Fiske Ch.14 (pp.565-592), Griffiths & Wall Ch.9 (pp.379-383), Perloff Ch.5 (5.5), 15 (15.1).

6.2 Factor Markets with Monopoly and Monopsony Power

(2 hours)

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

Read: Pindyck and Rubinfeld Ch. 10.5-10.6 & Ch.14.3, Hirshleifer Ch.11 (pp.333-341), Frank Ch.14, Miller & Fiske Ch.14 (pp.595-599), Griffiths & Wall Ch.9 (pp.383-385), Salvatore Ch.15, Perloff Ch. 15 (15.2, 15.3); Besanko & Braeutigam Ch. 11.7.
Do: The Interactive Excel Exercise in "10Monopsony.xls" file.

6.3 Factor Markets with Monopoly Power of Seller of Input

(2 hours)

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

6.4 Economic Rent

(1 hour)

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

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

7. General Equilibrium Analysis and Welfare Economics

7.1 General Equilibrium: consumption, production, and exchange (3 hours)

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

<p>Read: Pindyck & Rubinfeld Ch.16 (16.1-16.4, 16.6), Hirshleifer Ch.15 (15.2), Miller & Fiske Ch.16, Salvatore Ch.17, Frank Ch.16, Griffiths & Wall Ch.9 (pp.421-433), Perloff Ch. 10; Besanko & Braeutigam Ch. 16.1-16.4.</p> <p>Do: The Interactive Excel Exercise in “11EdgeworthBox.xls” file.</p>

7.2 Market Failure and Imperfections (5 hours)

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

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

EE 312 MACROECONOMIC THEORY (Section 046401)

Number of credits 4 credits

Prerequisites: *EE 211 and EE 212*

I. Course Description

Analysis of the relationship between product, money, securities and labour markets and the foreign sector in determining the general economic stability with emphasis on their effects on income, employment and the general price level. Study of the influence of Classical and Keynesian theories on the analysis of economic problems and their policy implications.

II. Objective of the Course

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.

III. Evaluation

Exercises	10	points
Mid-term exam	30	points
Final exam	<u>60</u>	points
Total	<u>100</u>	points

IV. Textbooks

Williamson, Stephen D. 2013. *Macroeconomics*. 5th ed., New York: Pearson Addison-Wesley.

V. Lecture Outline

1. Introduction

- 1.1. The subject of macroeconomics
- 1.2. Gross Domestic Product
- 1.3. Economic growth and business cycles
- 1.4. Macroeconomic models
- 1.5. Micro-based macroeconomic theory

Read: Williamson, Ch1.

2. Macroeconomic Measurement

- 2.1. Review on GDP measurement
- 2.2. Real GDP and nominal GDP
- 2.3. Chain-value measure GDP
- 2.4. Price indices and inflation measurement
- 2.5. Labor market measurement

Read: Williamson, Ch. 2.

3. A Closed-Economy One-Period Macroeconomic Model

- 3.1. Consumer: work-leisure decision and labor supply
- 3.2. Firm: profit maximization and labor demand
- 3.3. Government sector
- 3.4. Competitive equilibrium and Pareto optimality
- 3.5. Model application: Changes in government spending and total factor productivity.

Read: Williamson, Ch. 4, 5.

4. Economic Growth

- 4.1. Solow growth model
- 4.2. Growth accounting
- 4.3. Income disparity among countries
- 4.4. Endogenous growth: human capital accumulation

Read: Williamson, Ch. 6, 7.

5. A Two-Period Model: the Consumption-Savings Decision

- 5.1. Consumer: present and future consumption and the real interest rate
- 5.2. Effect of permanent and temporary increases in income.
- 5.3. Government sector and competitive equilibrium
- 5.4. The Ricardian Equivalent Theorem

Read: Williamson, Ch. 8.

6. A Real Intertemporal Model with Investment

- 6.1. Consumer: current labor supply and demand for consumption goods
- 6.2. Firm: current labor demand and investment decision
- 6.3. Government sector and competitive equilibrium
- 6.4. Current labor market and current goods market
- 6.5. Model applications: changes in government spending, capital stock, total factor productivity

Read: Williamson, Ch. 10.

7. A Monetary Intertemporal Model: the Neutrality of Money

- 7.1. Market for credit card balances and the demand for money
- 7.2. Government sector and competitive equilibrium
- 7.3. Monetary neutrality
- 7.4. Applications: changes in total factor productivity, shifts in money demand
- 7.5. Monetary policy and rules

Read: Williamson, Ch. 11.

8. Market-Clearing Models of the Business Cycle

- 8.1. The real business cycle model
- 8.2. The segmented markets model

Read: Williamson, Ch. 12.

9. Keynesian Business Cycle Theory

- 9.1. The sticky wage model
- 9.2. The IS-LM, AD-AS model
- 9.3. The non-neutrality of money
- 9.4. Fiscal and monetary policies in the Keynesian model.

Read: Williamson, Ch.13.

10. International Macroeconomics

- 10.1. A two-period model of a small open economy
- 10.2. Changes in the world real interest rate, government spending, total factor productivity
- 10.3. Exchange rates and Purchasing Power Parity
- 10.4. A small open economy with a flexible exchange rate
- 10.5. A small open economy with a fixed exchange rate
- 10.6. The capital account

Read: Williamson, Ch.14, 15.

11. Inflation and unemployment

- 11.1. Long-run inflation in the monetary intertemporal model
- 11.2. Unemployment: search and efficiency wages
- 11.3. The Phillips Curve and monetary policy

Course Outline

EE 320 Introductory Mathematical Economics (Section 046402)

Number of credits 3 credits

Course description

Study of mathematical concepts and tools such as functions, matrices and higher-order derivatives in cases of single and multiple independent variables. Emphasis is on the application of optimization, both with and without constraints, and introductory integral, for understanding relationships of various economic variables and concepts, such as the relationship of aggregate, average and marginal functions. Other topic covered analyses of elasticities, market equilibrium, impacts of taxation and input-output models.

Prerequisites: EE 211, EE 212 and MA 216

Students may take EE421 as a compulsory course in substitution of EE320 (Credit will not be awarded to students who are taking or have taken EE 421).

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 analysing economic problems.

Main Text:

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

III. Other Recommended Books:

Dowling, E. T. (2001) *Schaum's Outline of Theory and Problem of Introduction to Mathematical Economics*, 3rd edition, The McGraw-Hill Companies, Inc.

Holden, K. and Pearson, A.W. (1992) *Introductory Mathematics for Economics and Business* Second edition, The Macmillan Press Ltd.

Sydsaeter, K. and P. Hammond. (2006) *Essential Mathematics for Economic Analysis*, 2nd edition, Prentice Hall.

Course Outline:

Date	Topics	
	1. Introduction <ul style="list-style-type: none"> - Importance and needs to use mathematics in economics. - The nature of theory, economic model and mathematics. 	CW. Ch. 1
	2. Mathematics and Economic Relations <ul style="list-style-type: none"> - Relations and functions - Types of functions 	CW. Ch.2
	3. Static and Comparative Static Equilibrium Analysis <ul style="list-style-type: none"> - Linear models in economics - Simultaneous system of equations - Linear equation and graph - Breakeven analysis - Individual and market demand - Individual and market supply - Partial market equilibrium - Excise tax and market equilibrium - Elasticity concept - Simple macroeconomic model - IS-LM model 	CW. Ch. 3
	4. Linear Model, Basic Matrix Algebra and Applications <ul style="list-style-type: none"> - Terminology (Type of matrix) - Matrix operations (Add, Subtract, multiply) - Representation of system of equation by matrix notation - Matrix inversion by determinants - Determinant and singularity of matrix - Cramer's rule - Matrix applications in <ul style="list-style-type: none"> - Partial market equilibrium - Excise tax and market equilibrium - Simple macroeconomic model - IS-LM model 	CW. Ch. 4, 5
	5. Nonlinear Model and Differential Calculus in Economic Theory <ul style="list-style-type: none"> - Quadratic theory - Other nonlinear functions - Slope and derivatives of a function - Rule of differentiation - Non differentiable functions - Examples in Economics <ul style="list-style-type: none"> - Derivative and marginality - Relations among the total, the average and the marginal functions - Elasticity, total revenue and marginal revenue 	CW. Ch. 6, 7, 8

	<p>6. Optimization without Constraints : One Independent Variable Case</p> <ul style="list-style-type: none"> - Maxima, minima and inflection point - Convexity and concavity - Maximize profits <ul style="list-style-type: none"> - Competitive market case - Monopoly case - Effects of taxes <ul style="list-style-type: none"> - Lump-sum tax - Profit tax - Excise tax - Maximization of tax revenue 	CW. Ch. 9
	MIDTERM	
	<p>6. Derivatives of More-Than-One Independent Variable Function</p> <ul style="list-style-type: none"> - First-order partial derivatives - Second-order partial derivatives - Differential - Total differential - Total derivatives - Implicit function and its derivative - Examples in economics <ul style="list-style-type: none"> - Partial market equilibrium - Multipliers in macro models - Utility function - Production function - Etc. 	CW. Ch. 7, 8
	<p>8. Optimization without Constraint : More-Than-One Independent Variable Cases</p> <ul style="list-style-type: none"> - Conditions for maximum or minimum - Third degree price discrimination - Multiplant-firm - Multiproduct-firm 	CW. Ch. 11
	<p>9. Optimization under Equality Constraint</p> <ul style="list-style-type: none"> - Lagrange multiplier - Conditions for optimization - Maximize output level subject to cost constraint - Minimize cost subject to output constraint - Minimize utility subject to fixed budget 	CW. Ch. 12

	<p>10. Integration and Its Application</p> <ul style="list-style-type: none"> - Terminology in Integration - Rules of Integration - Definite Integration - Applications: <ul style="list-style-type: none"> - Total revenue function from marginal revenue function - Total cost function from marginal cost function - Profit function from MR-MC - Utility function from marginal utility function - Consumption and saving functions from marginal propensity functions - Capital formation and investment functions - Consumer surplus, producer surplus and total surplus - First degree price discrimination - Differential equation (if time allows) 	<p>CW. Ch. 14</p>
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Note: The class schedule shown above may be adjusted during the semester as needed.

Assessment:

- | | |
|------------------------|-------------|
| 1. Homework | 10 % |
| 2. Quizzes | 10 % |
| 3. Midterm Exam | 30 % |
| 4. Final Exam | 50 % |

Course Outline

EE 325 Introductory Econometrics

Number of credits: 3 credits

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.

Prerequisites: *EE211, EE212, MA216 (or MA211), and ST216 (or ST211).*

(Credits will not be awarded to students who are taking or have completed EE 425)

Aims and 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 (either Eviews or STATA) to do the homework. Homework assignments are expected to be handed on time. 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.

Assessment:

Quizzes	15 points
Homework Assignments	5 points
Midterm Exam	30 points
Final Exam	50 points

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.

Quizzes

There will be altogether four quizzes, two before midterm and another two before final exam. The date for quizzes will be announced in advance. Absence from any quizzes is presumably resulted in earning zero in such quiz. There will be no make-up examination in any circumstances unless the absence is caused by *force majeure* and the instructor is willing to make a new quiz.

Required Textbooks:

- *Gujarati, Damodar.N. and Porter, Down C. (2009) *Basic Econometrics*. 5th ed.
Singapore, McGraw-Hill/Irwin. (HB139 .G8 2009a)
- Wooldridge, Jeffrey M. (2009) *Introductory Econometrics: A Modern Approach*. 4th ed.
Mason, Ohio : South-Western Cengage Learning. (HB139 .W66 2009)
- *main textbook

Recommended Texts for Further Study

- Jame H. Stock and Mark W. Watson, *Introduction to Econometrics*, 3rd Edition, Boston: Pearson Addison Wesley (2010)
- Studenmund, A. H. *Using Econometrics: A Practical Guide*, Harper Collins Publishers (2006 or Latest Edition)
- William E. Griffiths, R. Carter Hill and George G. Judge, *Learning and Practicing Econometrics*, John Willey & Sons (1993 or latest edition)
- Jeffrey M. Wooldridge, *Econometric Analysis of Cross Section and Panel Data*, MIT Press; 2nd edition (2010)
- Marno Verbeek, *A Guide to Modern Econometrics*, Wiley (May 27, 2008)
- Joshua D. Angrist and Jörn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press (2009)

Course Outline

Part I Single-Equation Regression Models

1. Introduction and the Nature of Regression Analysis (1.5 hrs)

- 1.1 What is Econometrics?
- 1.2 Methodology of Econometrics
- 1.3 Regression, Causation and Correlation
- 1.4 Types of Data

Read: Gujarati: Introduction and Ch. 1; Woodridge: Ch.1

2. Review of Some Statistical Concepts (4.5 hrs)

- 2.1 Summation and Product Operators
- 2.2 Sample Space, Sample Points, and Events
- 2.3 Probability and Random Variables
- 2.4 Probability Density Function (PDF)
- 2.5 Characteristics of Probability Distributions
- 2.6 Some Important Theoretical Probability Distributions
- 2.7 Estimators and Desirable Properties of Estimators

Read: Gujarati: Appendix A; Woodridge: Appendices A, B, C

3. Simple Linear Regression Model (10.5 hrs)

- 3.1 Two-variable Regression Analysis: Some Basic Idea
 - 3.1.1 The Concept of Population Regression Function (PRF)
 - 3.1.2 The Meaning of the Term Linear
 - 3.1.3 Stochastic Specification of PRF
 - 3.1.4 The Significance of the Stochastic Disturbance Term
 - 3.1.5 The Sample Regression Function (SRF)
- 3.2 Two-Variable Regression Model: The Problem of Estimation
 - 3.2.1 The Method of Ordinary Least Squares
 - 3.2.2 The Classical Linear Regression Model: The assumptions
 - 3.2.3 Underlying the Method of Least Square
 - 3.2.4 Precision of Standard Errors of Least-Squares Estimates
 - 3.2.5 The Coefficient of Determination r^2 : A Measure of “Goodness of Fit”
- 3.3 Classical Normal Linear Regression Model (CNLRM)
 - 3.3.1 The Probability Distribution of Disturbances u_i

- 3.3.2 The Normality Assumption for u_i : Why the Normality Assumption?
- 3.3.3 Properties of OLS Estimators under the Normality Assumption
- 3.4 Two-Variable Regression: Interval Estimation and Hypothesis Testing
 - 3.4.1 Statistical Prerequisites
 - 3.4.2 Interval Estimation: Some Basic Ideas
 - 3.4.3 Confidence Intervals for Regression Coefficients
 - 3.4.4 Confidence Interval for σ^2
 - 3.4.5 Hypothesis Testing: The Confidence Interval Approach
 - 3.4.6 Hypothesis testing: The Test-of-Significance Approach
 - 3.4.7 Hypothesis Testing: Some Practical Aspects
 - 3.4.8 Regression Analysis and Analysis of Variance (ANOVA)
 - 3.4.9 Application of Regression Analysis: The Problem of Prediction

Read: Gujarati: Chs.2-5; Woodridge: Ch. 2

- 3.5 Extensions of the Two-Variable Linear Regression Model
 - 3.5.1 Regression through the origin
 - 3.5.2 Scaling and units of measurement
 - 3.5.3 Functional forms of regression model

Read: Gujarati: Ch.6

4. Multiple Regression Analysis (9 hrs)

- 4.1 Multiple Regression Analysis: The Problem of Estimation
 - 4.1.1 The Three-Variable Model: Notion and Assumptions
 - 4.1.2 Interpretation of Multiple Regression Equation
 - 4.1.3 The Meaning of Partial Regression Coefficients
 - 4.1.4 OLS Estimation of the Partial Regression Coefficients
 - 4.1.5 The multiple coefficient of determination R^2 and Multiple Coefficient of Correlation
 - 4.1.6 Simple Regression in the context of Multiple Regression: Introduction to Specification Bias
 - 4.1.7 R^2 and Adjusted R^2

Read: Gujarati: Ch. 7; Woodridge: Ch. 3

- 4.2 Multiple Regression Analysis: The Problem of Inference
 - 4.2.1 The Normality Assumption Once Again

- 4.2.2 Hypothesis Testing in Multiple Regression: General Comments
- 4.2.3 Hypothesis Testing about Individual Regression Coefficients
- 4.2.4 Testing the Overall Significance of the Sample Regression
- 4.2.5 Testing the Equality of Two Regression Coefficients
- 4.2.6 Restricted Least Squares: Testing Linear Equality Restrictions
- 4.2.7 The Chow Test

Read: Gujarati: Ch. 8; Woodridge: Ch. 4, 6

***** Econometric Program (1.5 hrs) *****

5. Dummy Variable Regression Models (3 hrs)

- 5.1 The Nature of Dummy Variables
- 5.2 ANOVA Models
- 5.3 ANOVA Models with Two Qualitative Variables
- 5.4 ANOVA Models with a Mixture of Quantitative and Qualitative Regressors
- 5.5 Dummy Variable Alternative to Chow test
- 5.6 Interaction Effects Using Dummy Variables
- 5.7 Use of dummy variable in time series data
 - 5.7.1 Effect on intercept and slope
 - 5.7.2 Seasonal analysis
- 5.8 Piecewise linear regression

Read: Gujarati: Ch. 9; Woodridge: Ch. 7
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Part II Relaxing the Assumptions of the Classical Linear Regression Model

6. Multicollinearity: What Happens if the Regressors Are Correlated? (3 hrs)

- 6.1 The Nature of Multicollinearity
- 6.2 Estimation in the Presence of Perfect Multicollinearity
- 6.3 Estimation in the Presence of “High” but “Imperfect” Multicollinearity
- 6.4 Multicollinearity: Much Ado about Nothing?
- 6.5 Practical Consequences of Multicollinearity
- 6.6 Detection of Multicollinearity
- 6.7 Remedial Measures

6.8 Is Multicollinearity Necessarily Bad?

Read: Gujarati: Ch. 10; Wooldridge: Ch. 3

7. Heteroscedasticity: What Happens If the Error Variance Is Nonconstant? (4.5 hrs)

- 7.1 The Nature of Heteroskedasticity
- 7.2 OLS Estimation in the Presence of Heteroskedasticity
- 7.3 The Method of Generalized Least Squares (GLS)
- 7.4 Consequences of Using OLS in the Presence of Heteroskedasticity
- 7.5 Detection of Heteroskedasticity
- 7.6 Remedial Measures
- 7.7 A Caution about Overreacting to Heteroskedasticity

Read: Gujarati: Ch. 11 and Appendix 11A; Wooldridge: Ch. 4

8. Autocorrelation: What Happens If the Error Terms Are Correlated? (4.5 hrs)

- 8.1 The Nature of the Problem
- 8.2 OLS Estimation in the Presence of Autocorrelation
- 8.3 The BLUE Estimator in the Presence of Autocorrelation
- 8.4 Consequences of Using OLS in the Presence of Autocorrelation
- 8.5 Detecting Autocorrelation
- 8.6 Remedial Measures
- 8.7 Model Mis-Specification Versus Pure Autocorrelation
- 8.8 Correcting for (Pure) Autocorrelation: The Method of Generalized Least Squares (GLS)
- 8.9 The Newey-West Method of Correcting the OLS Standard Errors

Read: Gujarati: Ch. 12; Wooldridge: Ch. 8

9. Model Specification and Diagnostic Testing (3 hrs)

- 9.1 Model Selection Criteria
- 9.2 Types of Specification Errors
- 9.3 Consequences of Model Specification Errors
- 9.4 Test of Specification Errors
- 9.5 Errors of Measurement
- 9.6 Model Selection Criteria

Read: Gujarati: Ch. 13; Wooldridge: Ch. 12

Course Outline
EE 401 Political Economics

Number of credits: 3 credits

I. Course Description

Study classical political economy of Adam Smith on the economic impact of self-interest, competition and market efficiency. Study Malthus's population theory and its economic implications.

Study Karl Marx's political economy on the exploitation of surplus value, capital accumulation, the reserve army of the unemployed, the impoverishment of the working class, the falling long-term profit rate tendency and the economic crisis. Also study Marxian development in the 20th century and the dependency theory.

The Austrian economic analysis of the market process. Introduction to the new political economy and its analysis of market failures and government failures; monopoly and rent-seeking and political economy of globalization.

Prerequisites: a) EE210 or
b) EE211 and EE212 or
c) EE213 and EE214 or
d) by lecturer's consent

Evaluation

One short essay	40	points
Final examination	60	points

Course Readings

There is no single textbook to cover all material in this course.

- Brewer, A. 1995. *Marxist Theories of Imperialism*. 2nd edn., New York: Routledge & Kegan Paul.
- Ebeling, Richard M. 2003. *Austrian Economics and the Political Economy of Freedom*. Northampton, MA: Edward Elgar Publishing.
- R.B.Ekelund and R.F.Hebert. *A History of Economic Theory and Method*, 4th edition. Singapore: McGraw-Hill International Book Company, 1997.
- Mitchell, W.C. and R.T. Simmons. 1994. *Beyond Politics: Market, Welfare, and the Failure of Bureaucracy*. Boulder, Co: Westview Press.
- Stevens, J. B. 1993. *The Economics of Collective Choice*. Boulder, Co: Westview Press.
- Wolf, M. 2004. *Why Globalization Works*. New Haven: Yale University Press.

Yergin, D. and J. Stanislaw, 2002. *The Commanding Heights: the Battle for the World Economy*. New York: Simon & Schuster.

Lecture Outlines

1. Introduction to political economy
 - a. What is political economy?
 - b. The characteristics of capitalism
 - c. The main questions of political economy

2. Economic ideas before Adam Smith
 - a. Mercantilism
 - b. The physiocrats
Reading: Ekelund and Hebert, Ch. 3-4.

3. Political economy of Adam Smith
 - a. Theory of moral sentiments
 - b. Self interest and the division of labor
 - c. Theory of economic growth
 - d. Theory of value and price
 - e. Competition and the invisible hand
 - f. Public policies
Reading: Ekelund and Hebert, Ch. 5.

4. Political economy of Thomas Robert Malthus
 - a. Theory of population
 - b. Neo-Malthusianism and modern environmentalism
Reading: Ekelund and Hebert, Ch.6.

5. Political economy of Karl Marx
 - a. The materialist conception of history
 - b. Theory of surplus value and capital accumulation
 - c. The reserve army of the unemployed
 - d. The tendency of the average profit rate to fall
Reading: Ekelund and Hebert, Ch. 10.

6. Heterodox Political economy after Marx
 - a. Finance Capital by Rudolf Hilferding
 - b. Imperialism by Lenin and Bukharin
 - c. Monopoly capital by the neo-Marxists
 - d. The dependency theory and the world system.
Reading: Brewer 1995.

7. Austrian economics and the market process
 - a. Ludwig von Mises and Friedrich A. Hayek
 - b. Debate on the economic calculation under socialism
 - c. Value, money, credit and business cycles
Reading: Ekelund and Hebert, Ch.20.
Ebeling 2003.

8. Post-war experience of government intervention
 - a. Mixed economy in Europe
 - b. Regulatory capitalism in the US.
 - c. Socialism and import substitution in the Third World
 - d. The crisis of the 1970s and 1980s.
Reading: Yergin and Stanislaw, Ch. 1-3, 5.

 9. The New Political Economy: government failure
 - a. The assumptions of welfare economics
 - b. Potential Pareto improvement or Kaldor-Hicks Efficiency
 - c. Failure of market and government intervention
 - d. Nature and causes of government failure
Read: Stevens, Ch.2-3.
Mitchell and Simmons, Ch. 3, 4.

 10. The New Political Economy: monopoly and rent-seeking
 - a. Monopoly and causes
 - b. Intervention and monopoly by the state
 - c. Rent-seeking behavior and the capture model
 - d. Trade protectionism and the infant industry
Reading: Mitchell and Simmons, Ch. 6, 8.

 11. Political economy of globalization
 - a. The second age of globalization
 - b. Economic restructuring programs
 - c. Multi-lateral and bilateral economic integration
 - d. Structural changes in the Thai economy
Reading: Yergin and Stanislaw, Ch. 13; Wolf, Ch. 3-6.
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Course Outline

EE 412: Macroeconomic Analysis

Number of credits: 3 credits

The course is designed for undergraduate students who are capable of doing advanced economic analysis. Topics include dynamic macroeconomic analysis, asset price theory, economic growth and related policy issues.

Prerequisite: EE 312 and EE320 (or EE421)

Textbooks

Romer, David. *Advanced Macroeconomics*, McGraw-Hill, Singapore, 2000.

Mankiw, Gregory, N., *Macroeconomics*, Worth Publishers, New York, 2006.

Blanchard, Olivier, J., and Stanley Fischer, *Lectures on Macroeconomics*, (Fourth Printing) the MIT Press, Cambridge, 1990.

Sargent, Thomas J., *Dynamic Macroeconomic Theory*, Harvard University Press, Cambridge, 1987.

Supplementary Textbooks in Macroeconomics and Mathematics

Chiang, Alpha E., *Elements of Dynamic Optimization*. McGraw-Hill, Singapore, 1992

Duffie, Darrell. *Dynamic Asset Pricing Theory*, (Second Edition) Princeton University Press, New Jersey, 1996

Milne, Frank. *Finance Theory and Asset Pricing*, (Second Edition) Oxford University Press, New York, 2003

1. Dynamic Macroeconomic Framework

- Introduction:
 - Static analysis
 - Dynamic analysis
- Solving a dynamic problem
 - Traditional method: system of simultaneous equations
 - Backward recursive method
- The Bellman's equations and time consistent optimal policies
- Applications:
 - Optimal consumption plan
 - Optimal growth

Readings:

- * Prescott, Edward C., (2006) "Nobel Lecture: The Transformation of Macroeconomic Policy and Research" *Journal of Political Economy*, 114 (2), 203-235.
- * Chapter 1 in Thomas Sargent's *Dynamic Macroeconomic Theory*
- * Chapter 1, 2, 5, 6 and 10 in Olivier Blanchard and Stanley Fischer's *Lectures on Macroeconomics*

2. Asset Price and Consumption

- Hall's random walk of theory of consumption
- The random walk theory of stock prices
- Lucas's model of asset prices
- Applications:
 - The term structure of interest rate
 - The value of a firm
 - Government debt: the Ricardian Proposition

Readings:

- * Chapter 3 in Thomas Sargent's *Dynamic Macroeconomic Theory*
- Chapter 1-4 in Darrell Duffie's *Dynamic Asset Pricing Theory*
- * Cox, Ingersoll, and Ross (1985), "An Intertemporal General Equilibrium Model of Asset Prices" *Econometrica* 53, 363-384.
- * Lucas, Robert E., (1978) "Asset Prices in an Exchange Economy" *Econometrica*, 46(6): 1426-1445.
- Lucas, Robert E., (1980) "Equilibrium in a Pure Currency Economy" *Economic Inquiry*, 18(2): 203-220

3. Economic Growth

- Neoclassical Growth Model and the balanced growth path
- The Ramsey-Cass-Koopmans Model
- The phase diagram:
 - The saddle path
 - Competitive equilibrium and Pareto efficiency

Readings:

- * Chapter 2 and 3 in David Romer's *Advance Macroeconomics*
- * Chapter 1 in Barro and Martin's *Economic Growth*
- * Chapter 3 in Olivier Blanchard and Stanley Fischer's *Lectures on Macroeconomics*
- Lucas, Robert E., (1988), "On the Mechanics of Economic Development". *Journal of Monetary Economics*

Course Requirements

- | | |
|--|-----|
| • Homework | 10% |
| • Midterm Examination
(February 28, 2013; 09.30-11.00 a.m.) | 40% |
| • Final Examination
(May 3, 2013; 09.00-12.00 a.m.) | 50% |

Course Outline

EE 421 Mathematical Economics I

Semester 2/2012 (January 7 – April 28, 2013)

Number of credits: 3 credits

Course description

The application of matrices, Jacobian determinants, derivatives, partial derivatives and optimization, both with and without constraints, to explain both microeconomic and macroeconomic theories, such as theory of consumer behavior, theory of production, the equilibrium in goods and factor markets, equilibrium of national income in product and money markets, international trade, comparative static equilibrium analysis, the input-output model, the determination of maximum-minimum point and duality of linear programming.

Prerequisites: MA217 (or MA212) and having completed or currently taking EE311

Text: Jeffrey Baldani, et. al., *Mathematical Economics*, 2nd edition, Dryden 2004.

Lecture Notes: Thanet Makjamroen, *Lecture Notes for EE421 Mathematical Economics I*, May 2008.

References:

Gale [1960], *The Theory of Linear Economic Models*, McGraw-Hill.

Jehle [1991], *Advanced Microeconomics Theory*, Prentice-Hall.

Sundaram [1996], *A First Course in Optimization Theory*, Cambridge University Press.

Simon and Blume [1994], *Mathematics for Economics*, Norton.

Sydsaeter and Hammond [1995], *Mathematics for Economic Analysis*, Prentice-Hall.

Evaluation:

Midterm Exam 45%

Final Exam 50%

Topics:

Chapter 1 Introduction

- 1.1 Mathematical Economic Model
- 1.2 Use of Economic Model
- 1.3 An Example of Mathematical Models

Chapter 2 Calculus of Single Variable

- 2.1 Derivative
- 2.2 Examples of Derivatives in Economics
- 2.3 Derivatives and Increasing Functions
- 2.4 Second- and Higher-Order Derivatives

- 2.5 Optimization: Single Variable
 - 2.5.1 Necessary Conditions
 - 2.5.2 Sufficient Conditions
- 2.6 Concave and Convex Functions
- 2.7 Differentials

Chapter 3 Calculus of Single Variable: Applications

- 3.1 Labor Union
- 3.2 Profit Maximization in Perfect Competition
- 3.3 Profit Maximization of a Monopoly
- 3.4 Taxation on Monopoly
- 3.5 Profit Maximization of Duopoly (Cournot Model)
- 3.6 Balanced-Budget Multiplier

Chapter 4 Multivariate Calculus

- 4.1 Partial Derivatives
- 4.2 Second-Order Partial Derivatives and Cross Partial Derivatives
- 4.3 Total Differentials
- 4.4 Conventions of Matrix Notations for Derivatives of Functions of Several Variables
- 4.5 Chain Rules of Composite Functions of Several Variables
- 4.6 Directional Derivatives
 - 4.6.1 First-order Directional Derivatives
 - 4.6.2 Directional Derivatives and Optimization
 - 4.6.3 Second-order Directional Derivatives
- 4.7 Mean-Value Theorem
- 4.8 Taylor's Polynomials and Taylor's Approximation in R^n
- 4.9 Implicit Functions and Implicit Function Theorem
- 4.10 LevelSets, Tangents and Gradients
- 4.11 Homogeneity

Chapter 5 Multivariate Calculus: Applications

- 5.1 Balanced-Budget Multipliers in Closed Economy
 - 5.1.1 Simple Keynesian Model
 - 5.1.2 IS-LM Model
 - 5.1.3 Aggregate Demand-Aggregate Supply Model
- 5.2 Monetary Policy Effectiveness
 - 5.2.1 IS-LM Model
 - 5.2.2 Mundell-Fleming Model with Flexible Exchange Rate
- 5.3 Tax Incidence in Supply-Demand Model

Chapter 6 Multivariable Optimization without Constraints

- 6.1 Definitions of Extreme Points
- 6.2 2-Variable Optimization
- 6.3 First-Order Necessary Condition
- 6.4 Second-Order Necessary Condition
- 6.5 Sufficient Conditions
- 6.6 Multivariable Optimization without Constraints
- 6.7 First-Order Necessary Condition
- 6.8 Second-Order Necessary Condition
- 6.9 Sufficient Conditions

- 6.10 Test of Definiteness of the Hessian
- 6.11 Concavity, Convexity and Optimization
- 6.12 Comparative Statics Analysis

- Chapter 7 Multivariable Unconstrained Optimization: Applications**
- 7.1 Competitive Firm Input Choices: Cobb-Douglas Technology
 - 7.2 Competitive Firm Input Choices: General Production Technology
 - 7.3 Multiplant Firm
 - 7.4 Multi-Market Monopology
 - 7.5 Statistical Estimation: Linear Regression
- Chapter 8 Constrained Optimization: Equality**
- 8.1 The Lagrangian Method
 - 8.2 Graphical Interpretation
 - 8.3 Optimization with k Equality Constraints
 - 8.4 Second-order Sufficient Conditions
 - 8.4.1 Bordered Hessian for Single Equality Constraint
 - 8.4.2 Bordered Hessian for k Equality Constraints
 - 8.4.3 Test of Bordered Matrix
 - 8.5 Comparative Static Analysis: Sensitivity Analysis
- Chapter 9 Equality Constrained Optimization: Applications**
- 9.1 Cost Minimization and Conditional Input Demand
 - 9.1.1 Sufficient Conditions
 - 9.1.2 comparative Static Analysis
 - 9.2 Utility Maximization: Log Utility Function
 - 9.3 Utility Maximization Subject to Budget and Time Constraints
 - 9.3.1 Sufficient Conditions
 - 9.3.2 Sensitivity analysis
 - 9.4 Intertemporal Consumption
 - 9.4.1 2-Period Case
 - 9.4.2 n -Period Case
- Chapter 10 Inequality Constraints Optimization**
- 10.1 First-Order Sufficient Conditions: One Inequality Constraint
 - 10.2 First-Order Sufficient Conditions: Several Inequality Constraints
 - 10.3 First-Order Sufficient Conditions: Mixed Constraints
 - 10.4 First-Order Sufficient Conditions: Minimization under Mixed Constraints
 - 10.5 Second-Order Sufficient Conditions: Mixed Constraints
 - 10.6 Second-Order Necessary Conditions
 - 10.7 Comparative Static analysis: Sensitivity Analysis
 - 10.8 Kuhn-Tucker Formulation
- Chapter 11 Inequality Constrained Optimization: Applications**
- 11.1 Utility Maximization with Two Goods
 - 11.2 Two Goods Diet Problem: Linear Programming and its Duality
 - 11.3 Sales Maximization
 - 11.4 Intertemporal Consumption with Liquidity Constraint
- Chapter 12 Sensitivity Analysis and Envelope Theorems**
- 12.1 The Meaning of the Multipliers
 - 12.2 The Meaning of Lagrange Multiplier: One Equality Constraint Case
 - 12.3 The Meaning of Lagrange Multiplier: Several Equality Constraint Case

- 12.4 The Meaning of Lagrange Multiplier: Inequality Constraint Case
 - 12.5 Envelope Theorems
 - 12.6 Envelope theorem: Unconstrained Case
 - 12.7 Envelope Theorem: Equality Constraints Case
 - 12.8 Applications: Shephard's Lemma, Roy's Identity and Demand Function
 - 12.9 Envelope Theorem: Inequality Constraints Case
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Course Syllabus
EE426: Econometrics II

Number of credits: 3 credits

Course Objective:

This course is designed to provide advanced econometrics techniques and enable students to apply econometric tools for economic analysis. Materials in this course will be balanced between theoretical concept and practices with the actual data and econometric software.

Pre-requisite: EE425 and MA217 (or MA212)

Evaluation:	Mid-term examination	40 %
	Final examination	50 %
	Assignment	10 %

Computer Software: STATA

Course Content:

1. Review Basic Econometrics Concept

Diagnostic Tests

- Its Relative Importance
- Key Diagnostic Tests
 - (a) Heteroskedasticity
 - (b) Residual Normality
 - (c) Functional Form Misspecification Tests
 - (d) Multicollinearity
- Functional Forms of Regression Model
 - (a) Types of Specification Errors
 - (b) Test for Functional Form Misspecification (RESET, and Non-nested tests)

2. Estimation methods

- 2.1 Least Squares
- 2.2 System Estimation Methods
- 2.3 MLE
- 2.4 GMM

3. Limited Dependent Variable Models

4. Panel Data Estimation

5. Time-series Econometrics

Required Texts:

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

Heij, C., deBoer, P., Franses, P.H., Kloek, T., & van Dijk, H.K. (2004). *Econometric Methods with Applications in Business and Economics*. New York: Oxford University Press. (Chapter 4)

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

Reference Texts:

Enders, W. (2004), *Applied Econometric Time Series*, New York: John Wiley & Sons.
 Greene, W.H. (2003) *Econometric Analysis*. 5th ed. Upper Saddle River, NJ: Prentice Hall.
 Wooldridge, J.M. (2006). *Introductory Econometrics: A Modern Approach*. 3rd ed. Mason, OH: Thomson-South-Western.

Course Schedule

Week	Content	Chapter	Assign
1	Review	1-13	
	Review	1-13	
2	Estimation Method – GLS		
	Estimation Method – GLS		
3	Estimation Method – System Estimation	18-20	
	Estimation Method – System Estimation (Cont.)	18-20	
4	Estimation Method – System Estimation (Cont.)	18-20	
	Estimation Method – System Estimation (Cont.)	18-20	
5	Estimation Method – MLE	Heij 4	
	Estimation Method – MLE (Cont.)	Heij 4	
6	Estimation Method – MLE (Cont.)	Heij 4	
	Estimation Method – GMM	Heij 4	
7	Estimation Method – GMM (Cont.)	Heij 4	
	Estimation Method – GMM (Cont.)	Heij 4	
	Mid-term week		
8	Limited Dependent Variables Model	15	
	Limited Dependent Variables Model (Cont.)	15	
9	Limited Dependent Variables Model (Cont.)	15	
	Limited Dependent Variables Model (Cont.)	15	
10	Panel Data Model	16	
	Panel Data Model (Cont.)	16	
11	Panel Data Model (Cont.)	16	
	Panel Data Model (Cont.)	16	
12	Time Series Models – Properties	21-22	
	Time Series Models – Unit Root Test	21-22	
13	Time Series Models – ARIMA Models	21-22	
	Time Series Models – GARCH Models	21-22	
14	Time Series Models – VARs Models	21-22	
	Time Series Models – VARs Models	21-22	
15	Time Series Models – VARs Models	21-22	
	Time Series Models – Cointegration Test	21-22	
	III.1) Final Exam		

Course Outline

EE 431 Economics of Financial Markets and Institutions

Number of credits 3 credits

1. 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.

Prerequisite: EE311

2. Required Text:

- 2.1 Frederic Mishkin, The Economics of Money, Banking and Financial Markets 9th Edition (Pearson, 2009)
- 2.2 Peter D Spencer, The Structure and Regulation of Financial Market (Oxford University Press, 2000)
- 2.3 Copeland, Thomas E. and J. Fred Weston, Financial Theory and Corporate Policy, 4th edition, (Addison-Wesley, 2005)
- 2.4 Diamond(2007), Bank and Liquidity Creation: A Simple Exposition of the Diamond-Dybvig Model, Federal Reserve Bank of Richmond Economic Quarterly.
- 2.5 Diamond(1996) Financial Intermediation and Delegated Monitoring: A Simple Example, Federal Reserve Bank of Richmond Economic Quarterly.

Handouts or related materials (if any) will be uploaded on BE moodle at least two days before each lecture.

3. Topics and Readings

Part I : Economic Analysis of Asset Prices	
Topics	Textbook
Topic 1. Financial assets and the overview of financial market (1 time)	FM2009 Ch. 1-3
Topic 2. Debt Market and Structure of interest rates (9 times)	FM2009 Ch.4-6
Topic 3. Mean-Variance Analysis (3 times)	Copeland2005 Ch.5
Topic 4: Capital asset pricing model (CAPM) and Arbitrage Pricing Theory (APT) (4 times)	Copeland2005 Ch.6
Part II : Financial Institution, Financial Market and Asymmetric Information	

Topics	Textbook
Topic 5. Financial institutions (2 times)	FM2009 Ch.9 -11
Topic 6. Theory of financial intermediation (4 times)	PS2000 Ch.8 Diamond (1996)
Topic 7. Convexity, excessive risk, and bank regulation (3 times)	PS2000 Ch.9
Topic 8. Bank runs, systemic risk and deposit insurance (5 times)	Diamond (2007)

4. Detailed Topics Outline

Part I : Economic Analysis of Asset Prices

Topic 1. . Financial assets and the overview of financial market

- 1.1 Money and functions of money
- 1.2 Money, Wealth and Income
- 1.3 Financial Market and Financial Assets
- 1.4 Financial Assets Classified by Information Theory
- 1.5 Flows of Funds in The Financial Market
- 1.6 Structure of Financial Market

Reading: Frederic Mishkin, The Economics of Money, Banking and Financial Markets 9th Edition (Pearson, 2009), Chapter 1 – 3.

Topic 2. Debt Market and Structure of interest rates

- 2.1 Measuring Interest Rates
- 2.2 Nominal Interest Rates and Real Interest Rates
- 2.3 The Behavior of Interest Rates
- 2.4 Risk and Term Structure of Interest Rates

Reading: Frederic Mishkin, The Economics of Money, Banking and Financial Markets 9th Edition (Pearson, 2009), Chapter 4 – 6.

Topic 3. Mean-Variance Analysis

- 3.1 Measuring Risk and Returns for a Single Asset
- 3.2. Measuring Portfolio Risk and Returns
- 3.3. Efficient Frontier with Two Risky Assets
- 3.4. Efficient Frontier with One Risky and One Risk Free Asset
- 3.5. Optimal Portfolio Choice N Risky asset
- 3.6. Optimal Portfolio Choice N Risky asset and One Risk Free Asset

Reading: Copeland, Thomas E. and J. Fred Weston, Financial Theory and Corporate Policy, 4th edition, (Addison-Wesley, 2005), Chapter 5.

Topic 4. Capital asset pricing model (CAPM) and Arbitrage Pricing Theory (APT)

4.1 Capital Asset Pricing Model

- Portfolio Diversification and Individual Asset Risk
- Assumptions
- The Efficiency of Market Portfolio
- Derivation of CAPM
- Properties of CAPM

4.2 Arbitrage Pricing Theory

- Arbitrage Opportunity
- Replicating Portfolio
- Derivation of Arbitrage Pricing Theory

Part II : Financial Institution, Financial Market and Asymmetric Information

Topic 5. Financial Institutions

5.1 Introduction

5.2 Major risks faced by banks

5.3 Liquidity Management and The Role of Reserve

5.4 Interest Rate Risk Management

5.5 Credit Risk Management

5.6 Capital Adequacy Management

Reading: Frederic Mishkin, The Economics of Money, Banking and Financial Markets 9th Edition (Pearson, 2009), Chapter 9 – 11.

Topic 6. Theory of financial intermediation

6.1 Introduction

6.2 Shortcomings of direct finance

6.3 How banks help to resolve the problem?

(a) Confidentiality and The Banking Relationship

(b) Economies of Scale and Role of Diversification in Banking : Financial Intermediation as Delegated Monitoring

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

Peter D Spencer, The Structure and Regulation of Financial Market (Oxford University Press, 2000), Chapter 8.

Topic 7. Convexity, excessive risk, and bank regulation

7.1 Decision Under Uncertainty

7.2 Agency Cost of Debt Finance : Conflict between a firm's bondholders and stockholders

7.3 Asset Substitutions Problem

7.4 How to solve asset substitution problem?

Topic 8. Bank runs, systemic risk and deposit insurance

8.1 Introduction

8.2 Demand for Liquidity

8.3 Bank Liquidity Creation

8.4 Bank Runs

8.5 Suspension of Convertibility and Deposit Insurance

8.6. Note on the optimal level of liquidity

5. Evaluation:

Mid-term exam	40% (Topic 1 – Topic 3)
Final exam	50% (Topic 4 – Topic 8)
Problem sets	10%

6. Grading Policy:

Students are graded on a curve. There is no permanent letter grade for any exam. Thammasat grading system which appears on the back of students' transcript are follows.

A = 4.0 (85 – 100)	Excellent
B+ = 3.5 (75 – 84)	Very Good
B = 3.0 (70 – 74)	Good
C+ = 2.5 (65 – 69)	Fair
C = 2.0 (60 – 64)	Adequate
D+ = 1.5 (50 – 59)	Poor
D = 1.0 (40 – 49)	Very Poor
F = 0 (< 49)	Fail

The above criteria can be considered as an approximate guideline. The lecturer reserves the right to modify the grading criteria.

A student cannot ask a special letter grade other than the grade assigned. Otherwise, the rights of other students are violated and a student has no right to ask for such a violation.

7. Other Policies:

Any changes to the course outline (if any) **will be announced in the class or uploaded on BE moodle.**

It is the responsibility of the students to obtain any information announced in the class. Ignorance of such information due to absence of class is not a valid defense.

If a student has any question about the lecture, please do not hesitate to consult the lecturer during office hours. The lecturer would be pleased to assist.

Course Outline

EE 432 Monetary Theory and Policy

Number of credits 3 credits

Prerequisite *EE312*

Course Description:

Money demand and money supply; The role of financial system at the macro level; The study of monetary policy in terms of its goals, tools, policy implementation, and transmission mechanism to the real economy with the emphasis on the role of monetary policy to business cycle, and the inflation targeting monetary policy; The role of central bank; The relationship between monetary and fiscal policies; The role of monetary policy in open economy by considering the linkage between foreign exchange rate policy and changes in macroeconomic and financial environment.

Course Objectives

This course aims to explore both the theoretical and practical aspects of monetary economics to provide an insight into real-life monetary policy-making. The course starts with the basic background knowledge about the notions in the monetary economics. Then the theoretical frameworks pertaining to money, monetary policy and exchange rate are discussed to serve as a solid background for empirical parts. The course offers the mixture between the theory and the practical aspects to encourage students to discuss and comment in an analytical way and to serve as a background for further education. In the practical analysis part of the lecture, monetary policy implementation in Thailand along with exchange rate policy will be thoroughly discussed. The course will also look into financial crises to draw some lessons from policy-making aspects, which will include a review of unconventional monetary policy as crisis response measures and a practical example of the fiscal and monetary interaction. After completing this course, students are expected to understand the behavior of financial markets and rationale for the policy actions of the central banks and finally to be able to draw some policy recommendations.

Recommend Readings:

Mishkin, F.S. 2013. **The Economics of Money, Banking, and Financial Markets**, tenth edition, PEARSON Addison Wesley.

Lecture notes and references

Course Outline:

Materials in the lectures based mainly on the textbook. The lecture topics with the relevant textbook chapters are written below. For the lecture on practical aspects, supplementary notes and handouts will be provided.

Note that topics below may be adjusted if necessary.

Part I Basic background knowledge

Meaning and function of money (CH3)

Nature and Behavior of interest rates (CH4-6)

Stock markets (CH7)

Part II Central Banking and the Conduct of Monetary Policy

The money supply process (CH15)

The tools of monetary policy CH16)

Monetary Policy Strategy and Tactics (CH17)

Practical Aspects: Monetary Policy in Thailand

Part III International Finance and Monetary Policy

The foreign exchange market (CH18)

The International financial system (CH19)

Practical Aspects: The role of the exchange rate policy and the impossible trinity

Practical Aspects: Exchange rate targeting versus inflation targeting

Part IV Monetary Theory

Quantity Theory, Inflation, and the Demand for Money (CH20)

The IS curve (CH21)

The Monetary Policy and Aggregate Demand Curves (CH22)

Aggregate Demand and Supply Analysis (CH23)

The Phillips Curve and the Short-Run Aggregate Supply Curve (CH23)

Monetary Policy Theory (CH24)

The Role of Expectations in Monetary Policy (CH25)

Transmission Mechanisms of Monetary Policy (CH26)

Practical Aspects: Evidence of Transmission Mechanism in case of Thailand

Part V Understanding Financial Crises and Unconventional Monetary Policy

The Asian financial crises of 1997-99

The subprime crisis and unconventional monetary policy

The euro debt crisis: fiscal and monetary interaction

The key challenge for the Monetary Policy going forward

Grading Policy: Mid-Term Examination 40%, Final Examination 60%
(Lecturer retains her right to give a final grade basing on her criteria.)

Course Outline

EE439 Seminar in Monetary and Financial Economics

Number of credits: 3 credits

Description:

Seminar and research on specific topics in monetary economics under supervision and guidance of the lecturer.

Prerequisites: EE 431 and EE 432

Objective:

The main objective of this course is to get students to think critically about the current issues in monetary economics, which may include banks' behaviors, central banking, capital flows and its management, and selected topics on financial crises. Students are expected to proactively read on current issues, dynamically participate in class discussion, and conduct your own independent research. The course is designed such that students would apply economic theories and quantitative analyses to real-world questions of modern-day monetary economics. The ultimate goal of the course is to effectively transition students into a role of an active monetary economist.

We assume that students possess the minimum prerequisites above and that students have strong interest in doing research in the area of monetary economics. Students should have no trouble with basic calculus (differentiating, maximizing a function with and without constraint, etc.) and no trouble understanding regressions (e.g. multivariable OLS).

Seminar and Leading the Discussions:

In class, we will discuss readings on selected current issues in monetary economics from journals and newspapers. Each student must also understand the theoretical underpinnings of the paper, which may require backward researching from the reference provided in the paper. Each student must also *take turn in leading one of the weekly class discussions* on the topics of student's interest. For each topic, (***) will be assigned to the most challenging to read paper on the topic. Bonus points will be awarded to the *lead student* who successfully read and lead the seminar in class on the paper (bonus points are discussed further below).

Research Paper:

Students are required to independently write a research paper by employing appropriate economic tools. The research paper will be graded at three different stages: on the proposal, on a presentation of results, and on the first draft. Evaluation of the research paper is based on originality, effort, preparedness, cohesiveness of ideas, and analytical ability. In addition, your discussion of peers' works during their presentation will count towards your participation score.

Assessment:

Since this is a seminar class, your participation in class discussion is mandatory. The grade distribution is as follows:

Seminar	35% (+10%)
Leading discussion	15%
Participating in discussion	20%
*** (Bonus for challengin papers	10%***

Research Paper	65%
Proposal	10%
Presentation	20%
Final Draft	35%

Contact Information:

The easiest way to get in contact with us if you have any questions is via e-mail. Aj. Benjarong's address is: bensuwankiri@gmail.com, while Aj. Pimnara's address is pim.hirankasi@gmail.com. Although Aj. Benjarong is the primary contact for this course, please feel free to contact us both on any class matters. On all correspondences, *begin the subject of your email with "EE439:"*, otherwise your email could easily slip our eyes into the junk mail folder. We will also allocate 30 mins every week to discuss papers individually with students. Sign-up sheet will be provided in class.

Topics and Readings:

The following is a preliminary list of topics for the course (not necessarily in this order). A full reading list will be distributed on the first day of the course. Please note that some adjustment might be made along the way according to time limitation and class interest.

1. Central Bank Independence and Price Stability
2. Monetary Policy Regimes and Inflation Targeting
3. Transmission Channels of Monetary Policy
4. Banking Industry: Competition and Stability
5. Role of Government Banks
6. Financial Crises
7. Capital Flows, Liquidity and Management
8. Monetary Policy and Exchange Rate
9. Macroprudential Policy & Stress Testing

Disclaimer: *By registering for this class, you agree to accept all course requirements, deadlines, and other procedures outlined in this syllabus, and in class discussions. There will be no discussions, pleas, or arguments about these aspects of the administration of the course under any circumstances.*

Course Outline

EE 442 Economics of Public Revenue

Number of credits: 3 credits

Course Description : The analysis of the structure and composition of government revenues; Theory of taxation; Tax burden; Tax incidence; Taxation and efficiency; Taxation and equity; The effects of taxation on individual decision to perform economic activities, such as working, saving, investment and risk bearing. The difference between tax avoidance and tax evasion; The definition and effects of public debts on fiscal decentralization to local government; The study and analysis of the revenue structure; Subsidies allocation criteria and the effects of subsidies given to local governments on economic activities and social welfare; The analysis of tax reform and comparative studies of international experiences in tax reform

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

Main Textbook:

The course will require two main textbooks,

Rosen, Harvey, and Gayer, Ted, *Public Finance*, 9th edition, 2010.

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

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.

Other Readings:

(I will post links to some of these, or the articles, on my website) These readings may be referred to in class, I will announce before the class.

Vito Tanzi, and Howell H. Zee, Tax Policy for Emerging Market: Developing Countries, IMF Working Paper, March 2000.

Roy Bahl, and Richard Bird, Tax Policy in Developing Countries: looking Back and Forward, Working Paper Series, Joseph L. Rotman, School of Management, University of Toronto, May 2008.

Alan J. Auerbach, and James R. Hines Jr., Taxation and Economic Efficiency, NBER, February 2001.

Richard Bird, and Eric M. Zolt, Introduction to Tax Policy Design and Development, World Bank, May 2003.

Varunyuwattana, Sakon and Duangmanee Laovakul, "Progress of Fiscal Decentralization in Thailand," in *Impacts & Challenges of Decentralization Policy towards Democratization and Development (A Comparative Perspective between Thailand and Indonesia)*, Proceeding in International Joint Seminar, Yogyakarta, Indonesia: Laboratory of Governmental Studies, University of Muhammadiyah, 2010.

Moodle Code: The course Moodle Code is 8321.

Teaching Plan and Class Schedule:

Date	Topic	Readings
	Section I	Stiglitz, chapter 1 Rosen and Gayer, chapter 1
	Section 2 (Tools of Positive and Normative Analysis)	Rosen and Gayer, chapter 2-3
	Section 3 (Introduction to Taxation)	Stiglitz, chapter 17
	Section 4 (Thailand Revenue Structure)	
	Section 5 (Tax Incidence)	Rosen and Gayer, chapter 14 Stiglitz, chapter 18 and 23, p. 648-659
	Section 6 (Taxation and Economic Efficiency)	Rosen and Gayer, chapter 15 Stiglitz, chapter 19 and 23, p. 518-532
	Section 7 (Optimal Taxation)	Rosen and Gayer, chapter 16
	Midterm Exam	
	Section 8 (Personal Income Tax)	Rosen and Gayer, chapter 17 Stiglitz, chapter 22
	Section 9	Rosen and Gayer, chapter 18
	Section 10 (Corporate Income Tax)	Rosen and Gayer, chapter 19 Stiglitz, chapter 23 6
	Section 11 (Tax Avoidance)	Stiglitz, chapter 24 Rosen and Gayer, chapter 14, p.

		349-354.
	Section 12 (Public Debt)	Stiglitz, chapter 28
	Section 13 (Tax Reform)	Rosen and Gayer, chapter 21 Stiglitz, chapter 25
	Section 14: Final Thoughts	Rosen and Gayer, chapter 22.
	Section 15: Western Applications	TBA
	Final Exam	

Course Evaluation:

Type of evaluation	Evaluation Method	Evaluation date
Midterm Exam	40%	
Final Exam	50%	
Class Attendance/Discussion	10%	

Course Outline

EE 451 International Trade Theory and Policy

Number of credits: 3 credits

Prerequisite: EE311

Course Description

International trade theories; Basic factors for international trade; Outcomes from trade, such as production outcome, commodities price, resource allocation, and factors of production price; The analysis of the policies and regulations in international trade; The economic integration; Foreign investments.

Main text:

Feenstra, R.C.; and A.M. Taylor (2008) *International Economics*. Worth Publisher: New York. (FT)

Alternative texts:

Appleyard, D.R.; A.J. Field, Jr.; and S.L. Cobb (2006) *International Economics*, 5th ed., McGraw-Hill: Singapore. (AF)

Krugman, P.R. and Obstfeld, M. (1997) *International Economics, Theory and Policy*, 4th edition, Harper Collins Publishers, New York. (KO)

Markusen, J.R.; James R. Melvin; William H. Kaempfer and Keith E. Maskus (1995) *International Trade: Theory and Evidence*, McGraw-Hill, New York. (MMKM)

van Marrewijk, Charles (2002). *International Trade and the World Economy*. Oxford University Press: Oxford. (M)

Salvatore, Dominick (1995) *International Economics*, 5th ed., Prentice Hall International Editions, London. (S)

Other supplements as assigned in class

Interactive Excel Exercises:

There will be 10 Interactive Excel Exercises located in <ftp://econ.tu.ac.th/class/archan/Chayunt> Each exercise contains a mathematical model in which the user can change some parameters that determine the behavior of model to change the equilibrium results and answer accompanies questions. Each exercise also includes a short explanation worksheet to help the user to understand the underlying theory related to the exercise.

Topics:

1. Introduction 1.5 hr.
 - 1.1. Merchandise Trade and Trade in Services
 - 1.2. The Purpose of International Economic Theories and PoliciesRead: FT ch.1, AF ch. 1, M ch. 1, KO ch. 1, MMKM ch. 1, S ch. 1

2. Early Trade Theories and The Classical Trade Theory 6 hr.
 - 2.1. Mercantilism
 - 2.2. Adam Smith and Absolute Advantage
 - 2.3. David Ricardo and 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: FT ch 2-5, AF ch. 2-4, M ch. 2-3, KO ch 2, MMKM ch. 7 and 14.3, S ch. 2
 - P. Krugman, "Ricardo's difficult idea"
at <http://web.mit.edu/krugman/www/ricardo.htm>
3. Neoclassical Trade Theory 4 hr.
- 3.1. Basic Tools
 - (a) The Theory of Consumer Behavior
 - (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
 - 3.3. Offer Curves and Terms of Trade [Chacholiades, M. (1990) *International Economics*, ch. 6]
- Read: AF ch. 5-7, M ch. 4-6, KO ch 3, MMKM ch. 2-5, S ch.3-4
4. Factor Endowments and the Heckscher-Olin Model 8 hr.
- 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. Stolper-Samuelson Theorem
 - 4.7. Rybczynski Theorem
 - 4.8. Empirical Tests of the Heckscher-Olin Theorem
 - (a) The Leontief Paradox
 - (b) Suggested Explanations for The Leontief Paradox
- Read: FT ch. 4, AF ch. 8-9, M ch. 7, KO ch 4, MMKM ch. 8-9 and 14.4, S ch. 5
5. International Factor Movement 3 hr.
- 5.1. Capital Movement
 - 5.2. Labor Movement
- Read: FT ch. 5, AF ch. 12, KO ch 7, S ch.12
- +++++ Midterm +++++
6. Alternative Theories and Intra-Industry Trade 6 hr.
- 6.1. Specific-Factors Model
 - 6.2. Intra-Industry Trade
 - 6.3. The Imitation Lag Hypothesis and The Product Cycle Theory
 - 6.4. The Kemp Model and External Economies of Scale
 - 6.5. Internal Economies of Scale with Imperfect Competition
- Read: ST ch. 3 and 6, AF ch. 10, M ch. 9-10 and 15, KO ch 6, MMKM ch. 11-13, S ch.6
7. Foreign Outsourcing of Goods and Services 1.5 hr.
- Read: ST ch.7
8. Trade Policy 9 hr.

- 8.1. Arguments for Protection
- 8.2. Import Tariffs and quotas under perfect competition
 - (a) Measurement of Tariffs and Effective rate of protection
 - (b) Import tariff for a small country
 - (c) Import tariff for a large country
 - (d) Import quotas
- 8.3. Import Tariffs and quotas under imperfect competition
- 8.4. Production Subsidy
- 8.5. Export Taxes and Subsidies
 Read: FT ch. 8-10, AF ch. 13-16, M ch. 8 and 11, KO ch 8, MMKM ch. 8.5, 15-16, S ch. 8-9
- 8.6 Trade and Environment
 Read: FT ch. 11

- 9. International Trade Institution and Economic Integration 4.5 hr.
 - 9.1. World Trade Organization
 - 9.2. Types of Economic Integration
 - 9.3. The Static Effects
 - (a) Trade Creation and Trade Diversion
 - (b) The Second Best Theory
 - 9.4. The Dynamic Effect
 - 9.5. Regional Agreements: ASEAN, APEC, ASEM
 - 9.6. Bilateral Agreements
 Read: ST ch. 11, AF ch. 18, M ch. 12-13, S ch. 9-10, KO ch 9 and 11, MMKM ch.18

- 10. Economic Growth and International Trade 3 hr.
 - 10.1. Classifying the Trade Effects of Economic Growth
 - 10.2. Sources of Growth and the Production-Possibilities Frontier
 - 10.3. Factor Growth, Trade and Welfare
 - (a) The Small-Country Case and the Rybczynski Theorem
 - (b) The Large-Country Case
 - Read: AF ch. 11, M ch. 16, KO ch 5, MMKM ch. 8.5 and 23, S ch.7

Evaluation:

Quizzes	5%
Group report	10%
Midterm Exam	35%
Final Exam	50%

Course Outline
EE452 International Monetary Economics

Number of credits: 3 credits

Prerequisite: EE312 Macroeconomic Theory

Course Description:

This course provides fundamental basis for understanding international financial economics and its application to the real world analysis. Major topics covered 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 Bank of Thailand, current financial crises and macroeconomic issues will also be discussed.

Assessment:

Midterm Exam	30%
Final Exam	50%
Homework/Classwork/Short papers	20%

Main Text:

Pugel, T. A. (2012) *International Economics*. 5th Edition, New York: McGraw-Hill

Alternative Texts*:

Daniels, J. P. and D. D. Van Hoose (2014) *International Monetary and Financial Economics*.
New Jersey: Pearson Education

Feenstra, R. and A. Taylor (2008) *International Economics*. 1st Edition, New York: Worth
Publishers

*Additional readings will be assigned during the course.

Useful Sources of Information:

The Economist, *The Financial Times*, *Bloomberg Newsweek*, *Businessweek*, *Time*, *Harvard Business Review*, www.bot.or.th; www.fpo.go.th; www.rd.go.th; www.imf.org; www.worldbank.org; www.wto.org

Topics

1. Payments among Nations

- 1.1 Overview of International Finance
- 1.2 Balance of Payments
- 1.3 Accounting Principles
- 1.4 Components of the Balance of Payments
- 1.4 Current Account Balance
- 1.5 Current Account Balance and Capital and Financial Account Balance
- 1.6 Overall Balance
- 1.7 International Investment Position

Main Texts: Pugel Ch 16

Alternative Texts: Daniels & Van Hoose Ch 1, 7; Feenstra & Taylor Ch.16

2. Foreign Exchange Market

- 2.1 Fundamentals and Basis of Foreign Exchange Market
- 2.2 Exchange Rate Systems
- 2.3 Arbitrage and Spot Exchange Market
- 2.4 Exchange Rate Risk
- 2.5 Fundamentals of Forward Foreign Exchange
 - Hedging
 - Speculation
- 2.6 International Financial Investment
- 2.7 International Investment with Cover
 - Covered Interest Arbitrage
 - Covered Interest Parity
- 2.8 International Investment without Cover)
 - Expected Uncovered Interest Differential (EUD)
 - Uncovered Interest Parity (International Fisher Effect)
- 2.9 Empirical Evidence of Interest Parity

Main Text: Pugel Ch 17, 18

Alternative Texts: Daniels & Van Hoose Ch 2, 3, 4, 5; Feenstra & Taylor Ch 13

3. Exchange Rate Determination

- 3.1 Exchange Rate in the Short-run: The Asset Market Approach
 - The Role of Interest Rates
 - The Role of the Expected Future Spot Exchange Rate
- 3.2 Exchange Rate in the Short-run: Purchasing Power Parity (PPP)
 - The Law of One Price
 - Absolute Purchasing Power Parity
 - Relative Purchasing Power Parity
- 3.3 Exchange Rate in the Long-run: The Monetary Approach
 - Money, Price Levels and Inflation
 - Money and PPP Combined
 - The Effect of Money Supplies on an Exchange Rate
 - The Effect of Real Incomes on an Exchange Rate
- 3.4 Exchange Rate Overshooting/ Dornbusch Sticky-Price)

Main Text: Pugel Ch 19

Alternative Texts: Daniels & Van Hoose Ch 8, 14; Feenstra & Taylor Ch.14, 15, 22

4. Government Policy toward Foreign Exchange Market

- 4.1 Rate Flexibility VS Restrictions on Use
- 4.2 Floating Exchange Rate
- 4.3 Fixed Exchange Rate
- 4.4 Foreign Exchange Market Intervention
- 4.5 Exchange Control
- 4.6 Experiences
 - The Gold Standard Era
 - Interwar Instability
 - The Bretton Woods Era
 - The Worldwide Current Systems

Main Text: Pugel Ch 20

Alternative Texts: Daniels & Van Hoose Ch 6; Feenstra & Taylor Ch 19

5. Macroeconomy, Internal Balance and External Balance under Fixed Exchange Regime

- 5.1 Revision of Framework for Macroeconomic Analysis
- 5.2 Revision of Mundell-Fleming Model
 - Domestic Product Market (IS)
 - Money Market (LM)
 - Foreign Exchange Market (Balance of Payments)
- 5.3 Relationship between International Reserves and Money Supply: Implications on the Macroeconomy
- 5.4 Sterilization
- 5.5 Monetary and Fiscal Policy under Fixed Exchange Regime
- 5.6 Perfect Capital Mobility
- 5.7 Shocks to the Economy
 - Internal Shocks
 - International Capital-Flow Shocks
 - International Trade Shocks
- 5.8 Imbalances and Policy Responses
 - Monetary-Fiscal Mix
 - Changing the Exchange Rate
 - Timing: The J-Curve Effect

Main Texts: Pugel Ch 22, 23

Alternative Texts: Daniels & Van Hoose Ch 8, 9, 10, 11; Feenstra & Taylor Ch 18

6. Floating Exchange Rates and Internal Balance

- 6.1 Monetary Policy under Floating Exchange Regime
- 6.2 Fiscal Policy under Floating Exchange Regime
- 6.3 Shocks to the Economy
 - Internal Shocks
 - International Capital-Flow Shocks
 - International Trade Shocks
- 6.4 Internal Imbalance and Policy Response
- 6.5 International Macroeconomic Policy Coordination

Main Text: Pugel Ch 24

Alternative Texts: Daniels & Van Hoose Ch 12, 15; Feenstra & Taylor Ch 21

7. Financial Crises

- 7.1 International Lendings: Benefits and costs ผลได้และผลเสีย
- 7.2 International Lending Experiences
 - The Debt Crisis of 1982
 - The Mexican Crisis, 1994-1995
 - The Asian Crisis, 1997
 - The Russian Crisis, 1998
 - Argentina's Crisis, 2001-2002
 - Subprime Mortgage Crisis, 2008
- 7.3 Elements of Financial Crises
- 7.4 Rescue Packages and Moral Hazard
- 7.5 Debt Restructuring
- 7.6 Bank Regulation and Supervision
- 7.7 Capital Controls
- 7.8 Impossible Trinity Dilemma ("Trilemma")

Main Text: Pugel Ch 21

Alternative Texts: Daniels & Van Hoose Ch 7; Feenstra & Taylor Ch 22;

Jarsulic, M. (2010) *Anatomy of a Financial Crisis*. New York: Palgrave Macmillan

Course Outline

EE 459 Seminar in International Trade Theory and Policy

Number of credits: 3 credits

Course Description:

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.

Prerequisite: EE451 and EE452

Evaluation:

Case analysis I	15%
Case analysis II	15%
First draft of research paper	25%
Final version of research paper	35%
Class participation	10%

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 summary 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 8 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.

Course Outline:

Week 1 : 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 : 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 2007/8 Statistical Analysis of Science, Technology and Industry, Organisation for Economic Co-operation and Development (OECD)
- Yamano N., and Meng B. (2011) Measuring Global Fragmentation using Harmonized International Input-Output Database (http://www.iioa.org/files/conference-2/588_20110512061_yamano-mengIIOA2011.pdf)

Week 3 : Review of Global Trade Policy 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.](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 : Case Analysis I & Guest Speaker

September 4: Current Issues in International Finance and Economics

Guest Speaker – Dr.Soraphol Tulayasathien

(Director of Economic Stability Analysis Division, Fiscal Policy Office, Ministry of Finance)

September 6: Students' Presentation - Case Analysis I

Week 5: 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](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 World Economy,” Asian Economic Policy Review 1, pp.73-101, (http://www.aeaweb.org/annual_mtg_papers/2006/0106_1430_1702.pdf)

Week 6: Guest Speaker, Regional Cooperation

Regional Cooperation

Guest Speaker – Dr. Athipong Hirunraengchok
(Policy & Planning Analyst, NESDB)

September 20: 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 : Guest Speaker, Global Trade and Economic Development

Current Issues in Trade Negotiation and Cooperation

Guest Speaker – Dr. Charosporn Chalermtiarana
(Fiscal Policy Office, Ministry of Finance)

Global Trade and Economic Development

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

Week 8: Case Analysis II & Guest Speaker

October 9: Students’ Presentation - Case Analysis II

October 11 : Current Issues in International Relations and Economics

Guest Speaker – Arjarn Jittipat Poonkham
(Faculty of Political Science, Thammasat University)

Week 9 (October 16, October 18) : International Finance – Empirical Evidences

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 (October 25) : International Finance – 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>)

Week 11 (October 30, November 1) : Guest Speaker & Financial Liberalization and Economic Development

October 30 : Current Issues in International Finance

Guest Speaker – Dr. Benjarong Suwankiri
(First Vice President and Team Head of TMB Analytics , TMB Bank)

November 1 : International Finance – Financial Liberalization and Economic Development

- 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 12

[NOTE: November 6 is the submission date for assignment #3 (the first draft of research paper)]

November 6: Students’ Presentation - First Draft of Research Paper

November 8 : International Finance – Capital Flows and Global Imbalance

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 Papers No. 346 (www.bis.org/publ/work346.pdf)

Week 13: 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 14– Students’ Presentation – Final Paper
Week 15– Students’ Presentation – Final Paper

Course Outline

EE460 THAI ECONOMY

Course Description

Thailand's economic structure has changed since the 1960s in terms of economic development and growth. The intricate relationships between poverty, income distribution, and globalization are discussed. The process of economic policies formulation, implementation of monetary, exchange rate, and fiscal policies are reviewed. The course analytically reviews strategic policies reinforcing economic and social development, especially development of industrial and agricultural sectors, as well as the complex relationship between the Thai economy and the World economy.

Prerequisites: *EE 311 and EE 312*

Course Objectives

The objective of this course is to provide students deep understanding of the Thai economy through utilizing economic theories, based on lessons learned from the past. Market mechanism and government intervention will be examined to highlight policy issues relating to efficiency and socio-economic impacts. It is expected that students would be able to analyze controversial issues relating to the Thai economy.

Course Evaluation

Grading is based on homework and class participation (10%), midterm exam (30%), and final exam (60%). Class attendance will count at the margin to help those who are on the border of two grades. Plagiarism and dishonesty will not be tolerated.

Lecture 1: Historical Perspective

What make Siam and Japan experienced diversion in economic development pattern despite sharing the same time of trade opening. What are fundamental determinants of growth. Do good institutions matter for rapid development?

J.C. Ingram (1971) *Economic Change in Thailand, 1850-1970*, Stanford University Press
Chapters 1-2

Yasuba, Yasukichi and Likhit Dhiravekin (1985) "Initial conditions, institutional changes, Policy, and their consequences: Siam and Japan, 1850-1914." Chapter 2, *Japan and the Developing Countries*, Kzushi Ohkawa and Gustav Ranis, Oxford: Basil Blackwell

Lecture 2: Rethinking Growth Strategy

Rodrik, Dani (2004) “What do we learn from countries narratives?” In search of Prosperity
www.pupress.princeton.edu/chapters/s7518.pdf

Lecture 3: Early Economic Development--The first three decades: 1961-1990

What can we learn from the historical path of Thailand’s economic development? What were factors contributing to the rapid growth in the first three decades of Thailand’s development planning?

P.G. Warr (1993) *The Thai Economy in Transition*, Cambridge University Press

“Thailand” in *Asia Rising*, Hal Hill and Maria Socorro Gochoco-Bautista (eds.) Cheltenham: Edward Elgar and ADB, pp. 345-384. 2013.

Lecture 4: Resilience of the Thai economy: 1991-2005

Adjustment through various shocks

There appears to be some structural mechanisms that would lessen the impact of economic crisis, whether shocks are internal or external. It is impossible to rule out various future shocks such as oil price hikes, realignments of major currency values, or crisis contagion. Is the Thai economy resilient enough to regain its pre-shock growth path in a V-shaped recovery?

P. G. Warr (2005) “Boom, bust and beyond” in *Thailand Beyond the Crisis*, Chapter 1, London: RoutledgeCurzon

Nidhiprabha, B. (2006) “Resilience of the Thai economy” in *Thailand’s Economic Recovery* Cavan Hogue (ed.), Institute of South East Asian Studies, Singapore, 2006.

Lecture 5-6

The Thai economy after the coup: 2006-2009

In 2007, Thai economy grew at the lowest pace among countries in the region. How has the 2006 coup changed the Thai economy?

Nidhiprabha, B. (2009) “The Thai economy after the coup”, in John Funston (ed.) *Divided over Thaksin*, Institute of Southeast Asian Studies.

Nidhiprabha, B. (2009) “The hard road ahead for Thailand’s economic recovery,” *Asian Economic Papers* 8(3), 113-137.

Lecture 7-9

Dynamism of Thai Agriculture

What are factors contributing to Thailand's agricultural productivity over the past four decades? Can dynamism of the Thai agriculture enable Thailand to cope with new challenges? How did the agricultural sector cope with external shocks and fluctuations in the terms of trade?

Siamwalla, Ammar (1996) "Thai Agriculture: From engine of growth to sunset status" *TDRI Quarterly Review*, Vol. 11, no. 4, December, 3-10.

Coxhead, Ian and Jiraporn Plangprapha (1999) "Economic boom, financial burst, and the decline of Thai agriculture: Was growth in the 1990s too fast?" *Chulalongkorn Journal of Economics*, Vol. 11, January.

Nidhiprabha, B. (2005) "Dynamism of the Thai Agriculture" *East Asian Economic Perspectives*, Vol. 12, No. 2, August.

P.G. Warr (2007) "Trade policy and the structure of incentives in Thai agriculture" *ASEAN Economic Bulletin*, 25(3), 249-70.

Lecture 10-14

Challenges of the manufacturing sector

We explore four major industries: processed food, information technology, textile, and automobile. While facing non-tariff barriers imposed by developed countries, these industries are still leading exporters of Thailand. Does the success of these industries bode well for the resilience and dynamism of the Thai manufacturing sector?

Nidhiprabha, B. and Chalermopol Chamchan (2005) "SPS and Thailand's Exports of Processed Food" in *Food Safety Regulation Concerns: The Developing Country Perspective*, in Rajesh Mehtha and J George (eds.) Delhi: Macmillan India.

Archanun Kohpaiboon (2006) "A cross-industry analysis of Thai manufactures" *World Development*, Vol. 34, no.3, 541-556.

Lecture 15-16

Export growth engine and new regionalism

How important is the export sector as an engine of growth? What are factors contributing to high degree of trade openness? The globalization process in Thailand has been ongoing for the last three decades. What are prospects and problems of Thailand's attempt to comply with the globalization trend via regional and cross-regional free trade agreements?

Nidhiprabha, B. (2007) "Thailand and New Regionalism" in *Regional Integration in East Asia*, Masahisa Fujita (ed.) New York: Palgrave Macmillan,

Lecture 17

Tourism industry: vulnerable but resilient

A background of tourism industry in Thailand is presented. We investigate how the industry was adversely affected by shocks such as the tsunami and political unrest. The tourism industry, which accounts for 6 percent of GDP, is quite vulnerable to all types of shocks. The tourism industry is resilient, as it has undergone various external shocks in the past. What factors were responsible for the fast recovery after the airport shutdown in 2007 and the riots in May 2010?

Nidhiprabha, B. (2010) "Thailand" in *The Asian Tsunami: Aid and Reconstruction after a disaster*, Jayasuriya, Sisira and Peter McCawley (eds.) Cheltenham: Edward Elgar, 2010. Available on the web at www.adbi.org/discussion/paper/2007/08/02/2344.thailand.tsunami.adjustment.recovery

Lecture 18

Adjustments of external imbalances

We discuss the determinants of current account, which is intricately related to internal imbalances. There are various channels of disequilibrium adjustment. Adjustments in output, prices, interest rates, and exchange rates would restore the equilibrium in the long run. The speed of the adjustment depends on how quickly those equilibrating variables are allowed to freely adjust. If some variables are not permitted to perform its equilibrating role, the burden of the adjustment would fall on other uncontrolled variables. What would happen if fundamental adjustments are prolonged?

Nidhiprabha, B.(1998) "Adverse consequences of capital flows and Thailand's optimum policy mix" in *Capital Flows in Asian Countries*, Kwan, C.H., Donna Vandenbrink, and Chia SiowYue (eds.), Nomura Research Institute and Institute of Southeast Asian Studies.

Nidhiprabha, B. (2010) "Effectiveness of Thailand's macroeconomic policy response to the global financial crisis," *ASEAN Economic Bulletin*, 27(1) 121-135.

Lecture 19-20

Exchange rate policy, capital controls, and the stock market

To what extent that growth of exports depends on weak currency? Intervention in the foreign exchange markets is ineffective, because the baht/dollar exchange rate is dictated by the weakening dollar and short-term capital flows into asset markets. What were consequences of the capital control imposed in 2006?

Nidhiprabha, B. (2005) "Implication of a flexible exchange rate" in Peter G. Warr, *Thailand boom, bust, and beyond*. London: Routledge.

Nidhiprabha, B. (2008) “Contractionary devaluation revisited” Can appreciation be expansionary?” in Chapter 10, East Asian Economies and New Regionalism, Abe Shigeyuki and Bhanupong Nidhiprabha (eds.) Kyoto University, Press.

Lecture 21-22

Resilience of the banking sector

Performance of financial institutions is examined. Thai financial sector has emerged from the 1998 crisis become stronger and resilient, thanks to foreign capital injection, good governance, and strengthened financial regulations. What are consequences of banking consolidation and penetration of foreign banks? What factors are responsible for the resilience of Thaibanks during the subprime mortgage crisis and the subsequent global recession?

Nidhiprabha, B. (2003) “Premature liberalization and economic crisis in Thailand” in Financial liberalization and the economic crisis in Asia edited by Chung Lee, London: RoutledgeCurzon.

Nidhiprabha, B. (2002) “Risks of financial liberalization and reform for financial stability” Chapter 9 in Kyung Tae Lee, Globalization and the Asian Pacific Economy, London: Routledge

Okuda, Hidenobu and Fumiharu Mieno (1999) “What happened to Thai commercial banks in the pre-Asian Crisis period: Microeconomic analysis of Thai banking industry” Hitosubashi Journal of Economics, 40, 97-121.

Nidhiprabha, B. (2006) “Good Governance in the Thai banking System” in Corporate Governance in Thailand, Sukulrat Montreevat (ed.) Institute of Southeast Asian Studies, Singapore, 2006.

Nidhiprabha, B. (2006) “The Thai financial sector in transition: Can the bond market prevent a future currency crisis?” in A New Financial Market Structure for East Asia, Yung Chul Park, Takatoshi Ito, and Yunjong Wang (eds.) Cheltenham: Edward Elgar, 2006.

Nidhiprabha, B. (2007) “Asian Bond Markets: Development and Implications in Emerging Developments” in East Asia FTA/EPAs, Shigeyuki, Abe and Bhanupong Nidhiprabha (eds.) Kyoto University, Center for South East Asian Studies

Lecture 23-24

Monetary policy strategy

We outline the role of monetary policy in stabilizing growth and price stability. The trade-off between inflation and output is discussed. Monetary policy response of the Bank of Thailand is analyzed in relation to inflation target, changes in the federal funds rate, and asset price bubbles. Should the Bank of Thailand tighten its credit policy to cool down inflation? Did monetary expansion stimulate growth in Thailand during the global recession 2007-2009?

How should monetary policy be conducted during the debt crisis in Europe and USA? How does monetary policy affect productive employment?

Nidhiprabha, B. (2006) "The buffeting of Thailand by the unholy trinity of Avian Influenza, tsunami, and the oil price shock" Asian Economic Papers, Vol. 5, no.2,

Nidhiprabha, B. (1998) "Economic crises and debt-deflation episode in Thailand, Asian Economic Bulletin, December.

Nidhiprabha, B. (1999) "Cyclical excess and financial instability in Thailand" Thammasat Review, Vol. 4, December, 89-113

Lecture 25-26

Fiscal policy and fiscal sustainability

The role of fiscal policy as a tool for stabilization is discussed. Can fiscal expansion leads to sustainable growth? How sustainable is Thailand's fiscal deficit? What is the role of institutions in shaping the country's financial stability? What would be the consequences of fiscal populism policy in 2011? What is the appropriate level of public debt? How is the long-term growth path affected by fiscal structure and fiscal space?

P.G. Warr and B. Nidhiprabha (1996) "The role of fiscal policy" in Thailand's Macroeconomics Miracle: Stable and Sustained Growth Washington D.C: The World Bank and Oxford University Press.

Nidhiprabha, B. (2003) "Thailand's macroeconomic policy after July 1997" Asian Economic Papers, Vol.2, no.1

Lecture 27-28

Income distribution and poverty

The nexus between income distribution, growth, and poverty are discussed. How was income distribution and external liberalization connected? What is the impact of social policy on poverty and distribution? How do productivity differentials among sectors lead to wage differentials and income inequality? What is the trend of income disparity between urban and rural areas? How did agricultural pricing and income policies affect poverty? What are likely consequences of raising the minimum wage to 300 baht per day?

P.G. Warr, (2004) "Globalization, growth, and poverty reduction in Thailand," ASEAN Economic Bulletin Vol. 21(1) April, 1-18.

Nidhiprabha, B. (2006) "The Distributive and Macroeconomic Impact of Liberalization in Thailand" in Taylor, Lance (ed.) External Liberalization In Asia, Post-Socialist Europe, and Brazil, New York: Oxford University Press

Lecture 29-30

Urbanization and environment

What is the relationship between urbanization and output growth in Thailand? We discuss the declining primacy of Bangkok and the importance of its satellite cities. Negative consequences of urbanization are explored. Is Thailand a good example of sustainable urbanization? Does rapid economic growth imply unsustainable urbanization?

C.J. Dixon (1999) *The Thai economy: Uneven development and internationalization*

Routledge.

Webster, Douglas (2005) "Urbanization: new drivers, new outcomes" in Thailand

Mingsarn Kaosa-ard (2005) "Natural resources and the environment" in Thailand Beyond the crisis, Chapter 11

Course Syllabus
EE 468 Integrated Public Economics,
Development and Political Economics

Number of credits: 3 credits

Course Descriptions:

The integration of public economics development and political economics concepts, through case studies or current situations; Enhancing student ability to link and apply the economic theories in this subject area to analyze the situations and problems arising in Thailand or in the world economy; Encouraging student learning through current situations, with the emphases on causes, nature, and effects of the problems using economic theories as tools to explain as well as analyze the roles of the market, public sector and community in problems solving with consideration of institutional factors underlying the economic and political structure, culture, and history.

Prerequisite: EE311 and having completed at least 60 credits

Theme (for 2012-course): Globalization

The class will discuss various issues, both pros and cons, surrounding situations, public concerns, and academic discussion on globalization. The discussion will start from exploring the meaning of globalization, regionalization, international movement of capital, labor, culture and technology through trade in goods and services and investment. Then, the class will discuss public concerns on the impacts of globalization such as poverty and inequality, fiscal structure, social welfare, environment and rural/urban poor. Lastly, the class will discuss the roles of public sector to promote globalization or to reduce the negative impacts of globalization.

Class Arrangement:

Due to the nature of the course, it would be arranged based on discussions of raised issues. The participation of students is crucial in order to achieve a fruitful discussion. The class arrangement is as follows:

i) Both lecturers do join the class together and one of them is responsible for a particular topic/issue of the corresponding week.

ii) A main responsibility of lecturers is not lecturing but facilitating the discussion. Principally, a student (or a group of students) who is responsible for each topic shall present the key issues of the topic and leads class discussion. Lecturers and non-presenting students shall participate by asking, adding, arguing, exchanging facts and information, and summarising relevant and important matters resulting from the discussion.

iii) A student who is responsible for a particular topic is the host of the discussion. Prior to the presentation, a student shall extensively study, research, and analyses that topic before presenting it to the class. The presentation shall include (a) the background of that topic, (b) important details on the topic, (c) relevant arguments on the topic, and (d) policy recommendation. The written summary shall be submitted by the presenter. Non-presenting students are obliged to submit reflection on the discussion.

iv) An expert in particular topics/issues may be invited as a guest lecturer and to participate in the discussion.

Assessments:

Hosting the discussion	20	percent
Participation (during discussion and writing reflections)	20	percent
Book Review	20	percent
Term Paper on Self-selected Topic	20	percent
<i>(This requires students to make the actual field observation and the topic shall not be the same as in classes. The paper shall not exceed 15 pages A4.)</i>		
Final Examination	20	percent

**** No midterm examination****

Readings

Joseph E. Stiglitz. *Globalization and Its Discontents*. W. W. Norton. 2003.****

Nick Bisley. *Rethinking Globalization*. Palgrave Macmillan. 2007

Wayne Ellwood. *The No-Nonsense guide to Globalization*. London: Verso. 2003

Walden Bello. *Deglobalization: Ideas for a New World Economy*. White Lotus. 2004

****** Review: Globalization and Its Discontents**

Chris - Goodreads

While at points it could be dull and hard to read, the book accurately and fairly discusses both sides of the globalization issue, and then discusses reasons why both sides are right and wrong



Topics:

<u>Week 1</u>	8 Jan	Introduction
<u>Week 2</u>	15 Jan	What is globalization?
<u>Week 3</u>	22 Jan	<i>Globalization from different perspectives (by Guest Lecturers)</i>
<u>Week 4</u>	29 Jan	Regionalization
<u>Week 5</u>	5 Feb	Trade, investment, International Production Network*
<u>Week 6</u>	12 Feb	International labor migration*
<u>Week 7</u>	19 Feb	<i>Site visit***</i>
	26 Feb	Midterm Week
<u>Week 8</u>	5 Mar	Book review: Globalization and Its Discontents by Joseph E. Stiglitz
<u>Week 9</u>	12 Mar	Poverty and inequality**
<u>Week 10</u>	19 Mar	Social Welfare**
<u>Week 11</u>	26 Mar	<i>Environment, Rural and Agricultural Sector (by Guest Lecturer)</i>
<u>Week 12</u>	2 Apr	Globalization and Culture*
<u>Week 13</u>	9 Apr	Decentralization**
<u>Week 14</u>	16 Apr	Fiscal Structure**
<u>Week 15</u>	23 Apr	Wrap-up: Globalization: Opportunity and Threat

* Student-led class discussion under the guidance of Aj. Patamawadee

** Student-led class discussion under the guidance of Aj. Duangmanee

*** Site visit: Toyota Motor Thailand, Co.Ltd

Guest Lecturers

22 Jan : Dr. Kirida Poaphijit, the World Bank (Thailand)

26 Mar: Dr. Thanphuying Suthawan Sathirathai, GSEI

Course Outline

EE471 Labor Economics

Number of credits: 3 credits

COURSE DESCRIPTION:

Study demand and supply of labor, both in short and long run, wage structure, role of labor union, role of government as an employer and as monitoring body of social security of labor, discrimination in labor market and effects of globalization on employment

PREREQUISITES: a) EE 211 (or EE213) and EE 312 or b) EE 212 (or EE 214) and EE311

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.

TEXTBOOKS AND OTHER DOCUMENT MATERIALS:

***Bojas, G. (2012). Labor Economics. 6th ed. McGraw-Hill, USA. (Main textbook)

Several articles from each topic reading list

Basic Econometrics textbook (optional)

*** **Main Textbook**

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

- | | |
|---|-----|
| 1. Mid-term exam | 30% |
| 2. Individual paper, presentation and class participation | 15% |
| 3. Quizzes | 10% |
| 4. Team article presentation | 5% |
| 5. Final exam | 40% |

Note: The mid-term and final exams are closed books and closed notes. 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. 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 one week after the midterm. The length of the presentation is approximately 10- 15 minutes. 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 due date of paper is April 25th, 2013 in class.

The report must include introduction, literature review, methodology (if applicable), data, analysis result, conclusion and references. 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>

Quizzes: There will be 5 random equally weighted quizzes. The lowest quizzes score may be dropped. There are no make-up quizzes.

TENTATIVE COURSE OUTLINE

1. Introduction to labor economics

1.1 Data in Labor market

1.2 Empirical strategies in labor economics

Reading Lists:

*** Bojas (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:

*** Bojas (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:

*** Bojas (Chapter 3)

Card, David, and Alan Krueger. 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:

*** Bojas (Chapter 4)

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:

*** Bojas (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:

*** Bojas (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.

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:

*** Bojas (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:

*** Bojas (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.

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:

*** Bojas (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 Cecilia 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:

*** Bojas (Chapter 10)

11. Incentive Pay

- 11.1 Piece Rates and Time Rates
- 11.2 Tournaments
- 11.3 Efficiency Wages

Reading Lists:

*** Bojas (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:

*** Bojas (Chapter 12)

Course Outline

EE 482 Public Policy and Industrialization

Number of credits: 3 credits

Course description

Industrial development strategy theories, the importance of industrial sector and industrial development on Thailand economic system, the evolution of industrial policy in Thailand, the role of government in industrial sector, laws related to industrial sector.

Prerequisites: EE312

Texts

1. Akira Suehiro (2008), Catching-up Industrialization: The Trajectory and Prospects East-Asian. (Translation by Tom Gill), University of Hawaii Press.
2. John Weiss (2011), The Economics of Industrial Development
3. Laurids S. Lauridsen (2003). State, institutions and industrial development: industrial deepening and upgrading policies in Taiwan and Thailand compared /

Evaluation

- | | |
|---|-----|
| 1. Seminar presentation (6 times) | 60% |
| 2. Class Participation (20 response papers) | 20% |
| 3. Final Examination | 20% |

Seminar presentation (45 minutes)

Seminar on Industrial Policies: International Experiences (USA; China; India; Malaysia; NIEs)

→ Show how these countries promote their industrial development?

Seminar on Thai Industrial Policies: (300 Baht minimum wage; AEC; corporate tax revision etc.)

→ Show how Thai government's current policies affect industrial sector?

Seminar on Industrial Policies: (Automotive; Electronics; Food processing; Energy etc.)

→ Show the nature of each industry and how public policies affect their development

Class Discussion

To encourage discussions in the class, 3-4 students will be called upon to ask questions or to discuss any course material in every class. Students will be asked to select and submit a typed-out *response paper* of the reading assignments (A4 1 page using single-spaced and 11" Times New Roman) assigned in the course outline. The response paper must be submitted to the instructor before the class start.

Date	Topics
	Introduction: John Weiss (Ch1) <i>Industry and Development</i>
	Ha-joon Chang: (Ch4) <i>The Political Economy of Industrial Policy</i>
	(G1) Laurids S. Lauridsen <i>Strategic Industrial Policy and Latecomer Development</i>
	(G2) Akira Suehiro: (Ch2) <i>Latecomer, Flying Geese, and Competitive Advantages</i>
	(G3) Akira Suehiro: (Ch6) <i>Import Substitution, Export Promotion, and Industrial Policy</i>
	(G4) Sanjaya Lall: <i>Understanding Technology Development</i>
	(G5) Stiglitz Joseph: <i>Some Lesson from the East Asian Miracle</i>
	(G6) Sanjaya Lall: <i>Market-Stimulating” Technology Policies in Developing Countries: A Framework with Examples from East Asia</i>
	Seminar on Industrial Policies: International Experiences I (group 1 & 2)
	Seminar on Industrial Policies: International Experiences II (group 3 & 4)
	Seminar on Industrial Policies: International Experiences III (group 5 & 6)
	Seminar on Industrial Policies: Sector I (group 1 & 2)
	Seminar on Industrial Policies: Sector II (group 3 & 4)
	Seminar on Industrial Policies: Sector III (group 5 & 6)
Mid-term Week	
	(G1) Hajoong Chang: <i>Industrial Policy: Can We Go Beyond an Unproductive Confrontation?</i>
	(G2) Justin Lin: <i>New Structural Economics: A Framework for Rethinking Development</i>
	(G3) Dani Rodrik: <i>Industrial Policy for the 21st Century</i>
	(G4) Sanjaya Lall: <i>The Technological Structure and Performance of Developing Country Manufactured Exports, 1985-98</i>
	(G5) Prema Chandra: <i>Product Fragmentation and Trade Patterns in East Asia</i>
	(G6) McKinsey: <i>Trading myths: Addressing misconceptions about trade, jobs, and competitiveness</i>
	(G1) Somboon Siriprachai: <i>Industrialisation and Inequality in Thailand</i>
	(G2) Nipon Puapongsakorn: <i>Industrial Restructuring in Thailand</i>
	(G3) Laurids S. Lauridsen: <i>The Policies and Politics of Industrial Upgrading in Thailand during the Thaksin Era</i>
	(G4) Patarapong Intarakumnerd: <i>National innovation system in less successful developing countries: the case of Thailand</i>
	(G5) Akira Suehiro: <i>“Industrial Restructuring Policies in Thailand: Japanese or American Approach”</i>
	(G6) Richard Doner: <i>Political Challenges of Innovation in the Developing World</i>
	Seminar on Thai Industrial Policies I (group 1 & 2)
	Seminar on Thai Industrial Policies II (group 3 & 4)
	Seminar on Thai Industrial Sectors III (group 5 & 6)
	(Class) McKinsey: <i>Manufacturing the future: The next era of global growth and innovation</i>

Course Outline

EE488: Integrated Business Economics

Number of credits: 3 credits

Prerequisite: EE311, EE312 and EE325 (or EE425)

Course Description:

Economic theories and tools used to analyze business problems and business situations. The analysis includes understanding competition and financial strategies adopted by firms in different industries, as well as forecasting economic and industrial conditions in the future.

Textbooks:

There is no textbook for this class. Readings will be assigned class-by-class and are drawn from various sources such as textbooks, books, business magazine, business journals and academic journals.

Grading:

Case Presentations	30% (3 presentations, 10% each)
Business Plan	30% (report (20%), presentation (10%))
Final Exam	30%
Class Participation	10% (can miss 1 class, after that -1% every time you miss)
Total	100%

Topics

Part1: Lecture

Week 1: Introduction: Business Economics, SCP and Business Plan

Week 2: Macroeconomic Analysis/Globalization

Week 3: Economics of Strategy/Marketing

Week 4: Industrial Analysis/Competition Policy and Regulation

Week 5: Economics of Production/Organization/ and HRM

Week 6: Finance and Economics

Part1: Case Studies

Week 7: Case studies on the manufacturing sector (3 group presentations)

Industry: select from Automobile, Electronics, Food, Fashion

Week 8: Case studies on the non-financial service sector (3 group presentations)

Industry: select from Tourism, Airline, Hotel

Week 9: Case studies on the financial sector (3 group presentations)

Industry: select from Banking, Security Broker, Non-Bank Financial Institutions

Week 10: Case studies on the retail sector (3 group presentations)

Industry: Any form of retail business, i.e. grocery stores, modern trade, online shopping.

Week 11: Case studies on globalization and international business (3 group presentations)

Topic: MNCs, out-sourcing, Google, IBM, etc.

Week 12: Case studies on regulated industries (3 group presentations)
Industry: Telecom, Energy, Mining, etc.

Part3: Business Plan

Week 13: Business Plan (3 group presentations)

Week 14: Business Plan (3 group presentations)

Week 15: Conclude

Week 16: Final Exam

Course Syllabus

EE 390 Economics of Agricultural and Rural Development

Number of credits: 3 credits

Course Description:

Dynamics and forms of agricultural and rural development since post World War II up until now. Factors affecting the dynamics including the effects from macroeconomic policies, agricultural policies, policies on social welfare and populism. The role of market and global trade, potentials and limitation of communities and the formation of economic groups. The relationship between agriculture, rural area, environment and alternative development.

Prerequisites: EE210 or EE211 (or EE213) and EE212 (or EE214)

Evaluation

Midterm exam	30 points
Final exam	30 points
Poster presentation	15 points
Group project	15 points
Article summary	5 points
Excursion essay	5 points

Poster presentation (15 points)

Each student produces an academic poster with any topic upon the student's interest but within the scope of this course. It is recommended that the poster should mention some debating issues and its title should be stated as a question sentence to challenge the audiences' thought. Some examples are;

- Doornbosch, Richard and steenblik, Ronald (2008). **Biofuels: Is the cure worse than the disease?**. *Revista Virtual REDESMA*, July 2008, vol.2, no.2, p.63-100. ISSN 1995-1078.
- Phillips, Peter and Grant Isaac. (1998). **GMO labeling: Threat or opportunity?**. *AgBioForum*, 1(1), 25-30.
- Buch-Hansen, M. (2001). **Is sustainable agriculture in Thailand feasible?**. *Journal of Sustainable Agriculture*, (2-3).

However, the contents should be designed and researched by the student's own, not just being copied from an original paper. The evaluation criteria are given by the contents' creativeness, student's analytical skills, and the audience's friendliness of the poster. The verbal presentation would be held on the last two weeks of the course and take around 10 minutes each.

Group project (15 points)

The students form two teams with two different projects:

- **Project 1:** “Rice pledging policy in Thailand: pros and cons”
 - Collecting some information and data of this policy and underlying conflicting thoughts.
- **Project 2:** “Rural migrants in Bangkok”
 - Making in-depth interviews with some rural migrants in Bangkok from different occupations, explains their backgrounds and current living conditions, analyzes their motivations and expectation from migrations, problems and policy recommendations.

Design a free-formed creative (and cost-effective) 15-minutes presentation.

Article summary (5 points)

Each student selects one article from the assigned reading list (those with the symbol “👍”) and gives a 10-minutes presentation summarizing the main ideas and providing some critical comments or recommendations regarding issues.

Excursion essay (5 points)

It is impossible to understand the complexity of agriculture only sitting in the classroom. A field trip would be organized. Students are expected to give one short essay (not more one-two pages) on what inspires or questioned them during the field visits.

Study plan

Date	Topic	Remark
	Overview	
	Agricultural world and economy	
	Economic models of farm households	
	(cont.)	
	Dynamics of global agricultural development	
	(cont.)	
	Dynamics of Thai agricultural development	
	(cont.)	
	Public policy and agricultural development	
	(cont.)	Group project I
	Food industrialization, agri-businesses, and modern trades	
	Market governance and contract farming	
	International trade and agricultural development	Guest speaker
	(cont.)	
	Food crisis	
	Paradigm shifts in development and sustainable development	
	Alternative agricultural development	
	Rural credit system & microfinance	
	Community-based resource management	
	Agricultural land system and reforms	
	Farmers, poverty, and rural migration	Group project II

Date	Topic	Remark
	Rural governance and politics	
	Frameworks for community analysis <ul style="list-style-type: none"> • Institutional analysis and development Framework • Sustainable livelihoods Framework • Community economic analysis 	
	(cont.)	
	How to work with the community?	Guest speaker
	Poster presentation (1)	
	Poster presentation (2)	
	Wrap-up and review	
Final Exam		

Reading list

Major Reading:

“Handbooks of Agricultural Economics” Volume 1-4. North-holland.

Eicher, Carl K. and Staatz, John M. (edited). (1998). “International agricultural development, Third Edition”. Baltimore (Md.) : Johns Hopkins university press, 1998.

Tsakok, Isabelle. (2011). “Success in Agricultural Transformation: What It Means and What Makes It Happen”. Cambridge University Press, New York.

Siamwalla, Ammar (2001). “The Evolving Roles of the State, Private, and Local Actors in Rural Asia”. Oxford University Press.

Listed by topic:

1. Agricultural world and economy

Eicher and Staaaz, Chapter 7

Standage, Tom (2009). “An Edible History of Humanity”. Walker Publishing Company, Inc., New York.

Southgate, D., D. Graham, and L. Tweeten (2007). “The World Food Economy”. Malden: Blackwell Publishing.

OECD and FAO (2008). “OECD-FAO Agricultural Outlook 2008-2017”.

FAO (2012). “The state of food and agriculture: investing in agriculture for a better future”.

World Bank (2008). “Agriculture for Development”. World Bank Development Report 2008.

2. Economic models of farm households

Eicher and Staaaz, Chapter 18

Forget, Evelyn L. (1995) “The Peasant Proprietor in Classical Economics”. in Lobdell, Richard A & Forget, Evelyn L., 1956- (1995). *The peasant in economic thought : a perfect republic*. Edward Elgar, Aldershot, UK ; Brookfield, US.

Ellis, Frank. (1993) “Peasant economics : farm households and agrarian development” . Cambridge ; New York, NY, USA : Cambridge University Press. (page 3-60).

J. P. Platteau (1994). "Behind the Market Stage Where Real Society Exist. Part 1: The Role of Public and Private Order Institutions". *Journal of Development Studies*, 30, pp.533-73; "Part II: The Role of Moral Norms," *ibid.*, pp.753-817.

3. Dynamics of global agricultural development

Eicher and Staaaz, Chapter 1, 8, 9, 10, 28

HAE, Chapter 28 Vol.2A

HAE, Chapter 55 Vol.3

Tsakok.

Swinnen, Johan F.M. & Rozelle, Scott (2006) "From Marx and Mao to the Market: The Economics and Politics of Agricultural Transition," OUP Catalogue, Oxford University Press. (page 123-186)

Norton, Gorge W. and Alwang, Jeffrey (1993) "Introduction to Economics of Agricultural Development". New York: McGraw Hill. (page 169-189).

4. Dynamics of Thai agricultural development

👍 Goss, Jasper and Burch, David (2001). "From Agricultural Modernisation to Agri-Food Globalisation: The Waning of National Development in Thailand". *Third World Quarterly*, Vol. 22, No. 6, The Post-Cold War Predicament, (Dec., 2001), pp. 969-986.

Poapongsakorn, N., Ruhs, M. and Tangjitwisuth, S. (1998). "Problems and outlook of agriculture in Thailand". In *Proceedings of the 4th JIRCAS International Symposium "Sustainable agricultural development compatible with environmental conservation in Asia"*, eds. Horiuchi, H. & Tsubota, K., JIRCAS, Tsukuba, Japan, 45–62.

Siamwalla, Ammar (1996) "Thai Agriculture: From engine of growth to sunset status". *TDRI Quarterly Review*, Vol. 11, no. 4, December, 3-10.

Siamwalla, Ammar., Sethboonsang, Suthad., and Werakarnjanapongs, Prasong. (1991). "Changing comparative advantage in Thai agriculture". OECD, Working paper number 35. OECD Development Centre.

Coxhead, Ian and Plangprapha, Jiraporn (1999) "Thailand's Economic Boom and Bust, and the Fate of Agriculture". *TDRI Quarterly Review*. Vol. 13 No. 2 June 1998, pp. 15-24.

Nidhiprabha, B. (2005) "Dynamism of the Thai Agriculture". *East Asian Economic Perspectives*, Vol. 12, No. 2, August.

Warr, Peter G. (2000) "Is growth good for the poor? Thailand's boom and bust", *International Journal of Social Economics*, Vol. 27 Iss: 7/8/9/10, pp.862 – 877.

👍 Warr, Peter G. (2007) "Trade policy and the structure of incentives in Thai agriculture". *ASEAN Economic Bulletin*, 25(3), 249-70.

Dixon, C.J. (1999) *The Thai economy: Uneven development and internationalization* Routledge.

👍 Jitsuchon, S., and Siamwalla, Ammar (2009) "Economic Shocks and the Vulnerable in Thailand: A Case Study of Rising Food and Fuel Prices". Discussion Paper prepared by the Thailand Development Research Institute.

Hayami, Yujiro, (2007). "An Emerging Agricultural Problem in High-Performing Asian Economies," *Agricultural Distortions Working Paper 48635*, World Bank.

5. Public policy and agricultural development

Eicher and Staa, Chapter 11, 13

HAE, Chapter 36 Vol.2B

Siamwalla, Chapter 2, 6, 8

Hazell, Peter. (2009). "The Role of Markets for Managing Agricultural Risks in Developing Countries". In, Kaliappa Kalirajan and Kejiro Otsuka (edited) (2009). *Community, Market and State in Development*. Palgrave Macmillan.

Poapongsakorn, Nipon (2010). "The political economy of Thai rice price and export policies in 2007 – 2008". in *The rice crisis : markets, policies and food security*. - London [u.a.] : Earthscan [u.a.], ISBN 978-1-8497-1134-0. - 2010, p. 191-217.

Puntasen, Apichai., and, Chenvidyakarn, Montri. (2001). "Politics of Rice in Thailand: Policies, Issues, and Conflicts". In, Chaiyuth Punyasavatsut (edited) (2001). "60th Anniversary, Mr. Apichai Puntasen" (Thai title: "๖๐ ปี นายอภิชาต พันธเสน").

Forsell, Sara. (2008). "Rice Price Policy in Thailand- Policy Making and Recent Developments". *Masters' Thesis. Department of Economics at the University of Lund 2009:3. Minor Field Study Series No. 189.*

6. Food industrialization, agri-businesses, and modern trades

👍 Reardon, Thomas (2011). "The global rise and impact of supermarkets: an international perspective". Crawford Fund--Conference Proceedings--2011: The Supermarket Revolution in Food: Good, Bad or Ugly for the World's Farmers, Consumers and Retailers?, 14-16 August 2011.

👍 Lovell, Richard D. (2011). "From farm to fork: logistics, transport, infrastructure". Crawford Fund--Conference Proceedings--2011: The Supermarket Revolution in Food: Good, Bad or Ugly for the World's Farmers, Consumers and Retailers?, 14-16 August 2011.

Shaffer, Harwood D., Koonathamdee, Pracha., and Ray, Daryll, E. (2008). "Economics of Industrial Farm Animal Production." A report of the. *Pew Commission on Industrial Farm Animal Production.*

Reardon, T., Timmer, C.P. and Minten, B. (2010). "The supermarket revolution in Asia and emerging development strategies to include small farmers". *Proc Natl. Acad.Sci.USA* doi:10.1073/pnas.1003160108.

👍 Goss, Jasper, Burch, David and Rickson, Roy E., (2000). "Agri-Food Restructuring and Third World Transnationals: Thailand, the CP Group and the Global Shrimp Industry". *World Development*, Vol. 28, No. 3, March 2000.

7. Market governance and contract farming

Williamson, Oliver (1991). "Comparative Economic Organization: The Analysis of Discrete Structural Alternatives", *Administrative Science Quarterly*, Vol. 36, No. 2. pp. 269-296.

Wu, S. Y. (2006). "Contract theory and agricultural policy analysis: a discussion and survey of recent developments". *Australian Journal of Agricultural and Resource Economics*, 50: 490–509.

Sykuta M.E. and Cook M.L. (2001) "A New Institutional Economics Approach to Contracts and Cooperatives". *American Journal of Agricultural Economics* 83:1273–79.

Bachev, Hrabrin (2012). "Framework for assessing efficiency of farms and agrarian organizations". *Munich Personal RePEc Archive*. Paper No. 40136, posted 18. July 2012.

Simmons, Phils (2002). "Overview of Smallholder Contract Farming in Developing Countries". *ESA Working Paper No. 02-04.*

Sriboonchitta, S. and Wiboonpongse, A. (2008). "Overview of contract farming in Thailand: Lessons learned". *Asian Development Bank Discussion Paper No. 112 Tokyo : Asian Development Bank Institute.*

- 👍 Shankar, Bhavani., Posri, Wilatsana., and Srivon, Teeradej. (2010). "A Case Study of a Contract Farming Chain Involving Supermarkets and Smallholders in Thailand", *Canadian Journal of Development Studies/Revue canadienne d'études du développement*, 31:1-2, 137-153.

8. International trade and agricultural development

Eicher and Staaz, Chapter 12

HAE, Chapter 37 Vol.2B

Anderson, Kym., Rausser, Gordon., and Swinnen, Johan (2012). "Political Economy of Public Policies: Insights from Distortions to Agricultural and Food Markets," LICOS Discussion Papers 32312, LICOS - Centre for Institutions and Economic Performance, KU Leuven.

Warr, Peter G. and Kohpaiboon, Archanun (2007). "Distortions to Agricultural Incentives in Thailand," Agricultural Distortions Working Paper 48474, World Bank.

- 👍 Rosset, P., Rice, R. and Watts, M. (1999). "Thailand and the world tomato: Globalization, new agricultural countries and the agrarian question". *International Journal of Sociology and Agriculture of Food*, 8 : 71 – 94.

9. Food crisis

Eicher and Staaz, Chapter 15

Headey, Derek. and Fan, Shenggen. (2008). "Anatomy of a crisis: the causes and consequences of surging food prices," *Agricultural Economics, International Association of Agricultural Economists*, vol. 39(s1), pages 375-391, November.

ITUC (2009). "A recipe for hunger: How the world is failing on food". Brussels: International Trade Union Confederation.

International Food Policy Research Institute (IFPRI) (2007). "Responding to the Global Food Crisis - Three perspectives". *IFPRI 2007-2008 Annual Report Essay*.

10. Paradigm shifts in development and sustainable development

HAE, Chapter 31 Vol.2A

Eicher and Staaz, Chapter 5, 17

Puntasen, Apichai., and, Suzuki, Pattamawadee. (2001). "Strategies in Strengthening the Community (Synthesis and Recommendations)". In, *Chaiyuth Punyasavatsut (edited) (2001). "60th Anniversary, Mr. Apichai Puntasen" (Thai title: "๖๐ ปี นายอภิชาติ พันธเสน")*.

Sneddon, Chris ., Howarth, Richard B., and Norgaard, Richard B. (2006). "Sustainable development in a post-Brundtland world". *Ecological Economics, Elsevier*, vol. 57(2), pages 253-268, May.

- 👍 Berr, Eric (GREThA), (2008). "Keynes and the Post Keynesians on Sustainable Development," *Cahiers du GREThA 2008-01, Groupe de Recherche en Economie Théorique et Appliquée*.

11. Alternative agricultural development

HAE, Chapter 25 Vol.2A

Lipper, L. and Neves, B. (2011). "Payments for environmental services: what role in sustainable agricultural development?". *ESA Working paper No. 11-20 December 2011 Agricultural Development Economics Division, Food and Agriculture Organization of the United Nations*.

Amekawa, Yuichiro. (2010). "Rethinking Sustainable Agriculture in Thailand: A Governance Perspective". *Journal of Sustainable Agriculture*, 34 (4), 389-416.

Buch-Hansen, M. (2001). "Is sustainable agriculture in Thailand feasible?". *Journal of Sustainable Agriculture*, (2-3).

Jungbluth, Frauke (1996). "Crop Protection Policy in Thailand: Economic and Political Factors Influencing Pesticide Use". A *Publication* of the Pesticide Policy Project. The Institute of Horticultural Economics, Hannover, December 1996. Publication Series No. 5

12. Rural credit system & microfinance

Eicher and Staz, Chapter 23, 24

HAE, Chapter 56 Vol.3

Roodman, David. and Qureshi, Uzma. (2006). "Microfinance as Business," Working Papers 101, Center for Global Development.

Gine, Xavier., Jakiela, Pamela., Karlan, Dean., and Morduch, Jonathan. (2010). "Microfinance Games," *American Economic Journal: Applied Economics*, American Economic Association, vol. 2(3), pages 60-95, July.

Siamwalla, Ammar., Pinthong, Chirmsak., Poapongsakorn, Nipon., Satsanguan, Ploenpoit., Nettayarak, Prayong., Mingmaneeakin, Wanrak., and Tubpan, Yuavares. (1990). "The Thai Rural Credit System: Public Subsidies, Private Information, and Segmented Markets". *The World Bank Economic Review*, Vol. 4, No. 3, A Symposium Issue on Imperfect Information and Rural Credit Markets (Sep., 1990), pp. 271-295.

👍 Puntasen, Apichai., Piumphongsan, Preecha., Boonyarattanasoontorn, Jaturong., Sodarak, Jarupa., and Pruthiarenun, Jarupa. (2001). "A System of Local Exchange: A Case Study of Thailand". In *Chaiyuth Punyasavatsut (edited) (2001). "60th Anniversary, Mr. Apichai Puntasen" (Thai title: "๖๐ ปี นายอภิชาัย พันธเสน")*.

13. Community-based resource management

HAE, Chapter 24 Vol.2A

Johnson, Craig and Forsyth, Tim (2002) *In the eyes of the state: negotiating a "rights-based approach" to forest conservation in Thailand*. *World development*, 30 (9). pp. 1591-1605.

👍 Walker, A. (2003), "Agricultural transformation and the politics of hydrology in northern Thailand", *Development and Change*, 34 (5), 941-64.

14. Agricultural land system and reforms

HAE, Chapter 6 Vol.1A

Galiani, S., and Schargrodsky, E. (2010). "Resource Allocation, Transaction Costs and Land Property Rights".

15. Farmers, poverty, and rural migration

Balisacan, Arsenio M. and Fuwa, Nobuhiko (2007). "Poverty and Vulnerability". In Balisacan, Arsenio M. and Fuwa, Nobuhiko. (edited) (2007). "Reasserting the Rural Development Agenda: lessons learned and emerging challenges in Asia". Institute of Southeast Asian Studies, Singapore, and Southeast Asian Regional Centre for Graduate Study and Research in Agriculture.

de Haas, Hein (2007). "Migration and Development: A Theoretical Perspective", Bielefeld: COMCAD, 2007.

Delgado, Christopher L. and Siamwalla, Ammar (1997). "Rural economy and farm income diversification in developing countries," MTID discussion papers 20, International Food Policy Research Institute (IFPRI).

👍 Rigg, Jonathan., and Nattapoolwat, Sakunee. (2001). "Embracing the Global in Thailand: Activism and Pragmatism in an Era of Deagrarianization," *World Development*, Elsevier, vol. 29(6), pages 945-960, June.

Fiszbein, Ariel., and Schady, Norbert. (2009) "Conditional Cash Transfers: Reducing Present and Future Poverty". A World Bank Policy Research Report.

16. Rural politics & governance

Siamwalla Ch.2

Baland J.-M., Moene K.-O. and Robinson J.A. (2009). "Governance and Development", in Rodrik D. and Rosenzweig M. (eds.) *Handbook of Development Economics*, Amsterdam: North Holland.

👍 Dufhues, Thomas., Theesfeld, Insa., Buchenrieder, Gertrud., and Munkung, Nuchanata. (2011). "The political economy of decentralization in Thailand - Does decentralization allow for peasant participation?". Paper prepared for presentation at the EAAE 2011 Congress Change and Uncertainty Challenges for Agriculture, Food and Natural Resources.

👍 Walker, Andrew (2008). "The Rural Constitution and the Everyday Politics of Elections in Northern Thailand". *Journal of Contemporary Asia* 38, 1 (February 2008), pp. 84-105.

Phongpaichit, Pasuk. and Baker, Christopher John. (2005). "'Business Populism" in Thailand". *Journal of Democracy*, Volume 16, Number 2, April 2005, pp. 58-72.

👍 Buch-Hansen, Mogen. (2003). "The Territorialisation of Rural Thailand between Localism, Nationalism and Globalism: Institutional Forces in a Theory of Local Development". *Tijdschrift voor Economische en Sociale Geografie*, Vol. 94, No. 3, 2003. Reprinted in: Nijenhuis, Broekhuis and van Westen (eds.): *Space and Place in Development Geography*. Dutch University Press 2005.

17. Frameworks for community analysis

Krantz, Lasse (2001). "The Sustainable Livelihood Approach to Poverty Reduction: An Introduction". Division for Policy and Socio-Economic Analysis. Swedish international development Cooperation agency.

Polski, M. M., & Ostrom, E. (1999). "An institutional framework for policy analysis and design". Retrieved from <http://mason.gmu.edu/~mpolski/documents/PolskiOstromIAD.pdf>

IFAD (2009). "Community-driven development decision tools for rural development programmes", IFAD, Rome.

18. How to work with the community?

Nicholes, Paul. (1991). "Social Survey Methods: A Fieldguide for Development Workers, Oxford, UK: Oxfam GB.

Heim, Franz G. (1990). "How to work with farmers: a manual for field workers, based on the case of Thailand". Franz Gangolf Heim J. Margraf, Weikersheim .

Movies:

"Food Inc." (2008), Robert Kenner.

"Our daily bread" (2005), Nikolaus Geyrhalter.

"Home" (2009), Yann Arthus-Bertrand.

Facebook:

"Thailand Agri-food Outlook"



**(Tentative) Course Syllabus
for
Non - Economics Courses
Semester 2/2013**

Course Outline

AC 202 Managerial Accounting

Number of credits 3 credits

Course Description : Develops foundational knowledge and skills needed to apply accounting data in planning and controlling business operations. Topics include costs, cost drivers and allocation, contribution margin and managerial budgeting.

Course Prerequisites : AC201 Financial Accounting or equivalent course

Grading: Grades for the course will be based on the following three components:

1. Midterm Exam	45%
2. Final Exam	45%
4. Quizzes and Homework	<u>10%</u>
Total	<u>100%</u>

Quizzes and Homework: Quizzes and homework will be given throughout the course. They are designed to evaluate student understanding of recently assigned reading materials. You will be allowed to drop some of the quizzes. **No make-up quiz will be given.** Homework will be graded based on quality and completeness. Homework will be collected at the beginning of the class. Late work will not be accepted.

Attendance: Students are expected to attend class. The material covered on the exams will include issues raised in lecture and class discussion. Those who arrive late or do not attend class are responsible for all material covered during class. Assignments are listed in this syllabus. Additional assignments and communication will be announced in class. I reserve the right to make any adjustments to the syllabus.

Policies and Procedures:

1. Regular class attendance and completion of all assigned homework are necessary to successfully complete this course.
2. The student is responsible for all subject matter (handouts, lecture materials, assignments, announcements, etc.) whether present or absent.
3. The student is expected to actively participate in class discussions.
4. I reserve the right to make any necessary adjustments to the syllabus.

• **Academic Dishonesty**

Dishonesty or cheating will not be tolerated. It is your responsibility to know what constitutes academic misconduct and to comply with the Student code of Conduct. According to the University policy, the student will receive “F” grade for the course and suspension for at least 2 semesters.

• **Add-Drop Policy**

Please contact the BE program for adding and dropping from class.

Withdrawal (with W on transcript) can be made about 2 weeks after the mid-term week.

Required Text : Garrison, Noreen, Brewer. Managerial Accounting, 14th. Edition (Thailand), McGraw-Hill/Irwin, 2012. ISBN: 9781121546349

Course schedule

Wk.	Date	Material to be covered	Instructor	Recommended exercise
1		Chapter 1: Overview Chapter 2: Managerial Accounting and Cost Concept	Pailin	Ex. 2-3, 2-4, 2-5, 2-6, 2-7, Prob. 2-21
2		Chapter 3: Job-Order Costing	Pailin	Ex. 3-1, 3-2, 3-3, 3-6, 3-7
3		Chapter 4: Process Costing	Pailin	Ex. 4-1, 4-2, 4-3, 4-4, Prob. 4-13
4		Chapter 5: Cost-Volume-Profit Relationships	Pailin	Ex. 5-1, 5-3, 5-4, 5-5, 5-6, 5-7, 5-8, 5-9
5		Chapter 6: Variable Costing and Segment Reporting	Pailin	Ex. 6-1, 6-2, 6-3, 6-4, Prob. 6-16
6		Chapter 7: Activity-Based Costing	Pailin	Ex. 7-1, 7-2, 7-3, 7-4, 7-5, Prob. 7-17
7		Review for Midterm Exam	Pailin	
Midterm exam: Covering Chapter 1-7				
9		Chapter 8: Profit Planning	Nontawan	Ex. 8-10, Ex8-11
10		Chapter 9: Flexible Budgets and Performance Analysis	Nontawan	Ex. 9-1, 9-2, 9-3, 9-4, 9-5, Prob. 9-20
11		Chapter 10: Standard Costs and Variances	Nontawan	Ex. 10-1, 10-2, 10-3, Prob. 10-9
12		Chapter 10 Cont' Chapter 11: Performance Measurement in Decentralized Organizations	Nontawan	Ex. 11-1, 11-2, 11-3, Prob. 11-14
13		Chapter 12: Differential Analysis	Nontawan	Ex. 12-1, 12-2, 12-3, 12-4, 12-5, 12-6
14		Chapter 12 Cont'	Nontawan	
15		Chapter 13: Capital Budgeting Decisions	Nontawan	Ex. 13-1, 13-2, 13-3, 13-4
16		Chapter 13 Cont' Review for Final Exam	Nontawan	
Final exam: Covering Chapter 8-13				

Course Outline

BA 291 Introduction to Business

Number of credits: 3 credits

Course Description

This course will introduce students to a complete overview of different aspects in business management and organization. Students will learn important business functions, such as marketing, human resources, operations and quality management, accounting and financial management and how these functions are related to each other. Additionally, students will get to know the business environment and learn how to adapt their business strategies and organization to stay competitive in a turbulent business environment.

Prerequisite: none

Learning outcomes

After this course, students should be able to:

- understand the management process and business functions
- see the big picture of business organization and the relationship between each business functions and able to plan the business systematically
- analyze the business environment and identify threats and opportunities and able to create sustainable competitive business models and strategies
- use knowledge in business management for the future specialized courses and career
- discuss and analyze the business cases and able to work in team

Course Format

The course will comprise of lectures, class discussions, presentations and case studies. Students should prepare for the class by reading the given textbooks and learning materials as well as regularly follow the business news.

Literatures

Ferrell, Hirt, Ferrell (2009): Business – A changing world, Mc Graw-Hill.

Robbins & Coulter (2010): Management, Prentice Hall.

Pride, Hughes, Kapoor (2010), Introduction to Business, Cengage.

Class materials can be downloaded at <http://be-moodle.econ.tu.ac.th/>

Grading policy and examination

Class participation	10%
Quiz and work assignments	15%
Business plan	15%
Business plan presentation	10%
Midterm exam	25%
Final exam	25%

Grading policy

>90%	A	86 - 89%	B+
80 – 85%	B	76 – 79%	C+
70 – 75%	C	66 – 69%	D+
60 – 65 %	D	<60%	F

Class Schedule

Class	Topics
1	Course introduction Understanding the business Model by using business model canvas
2	How to write an effective business plan
3	The external and Internal environment of Business
4	Business ethics and social responsibility <ul style="list-style-type: none"> - The role of ethics in business - Corporate social responsibility (CSR)
5	Options for organizing business (Legal form of business in Thailand) Small business and entrepreneurship
6	Introduction to business management process (The POLC) <ul style="list-style-type: none"> - Planning - Organizing - Leading - Controlling
Midterm Examination September 30, 2013	
7	Managerial decision and strategic planning <ul style="list-style-type: none"> - Corporate-level strategy - Business-level strategy - Functional-level strategy
8	Human resource management
9	Operations management and quality management
10 - 11	Developing marketing strategy <ul style="list-style-type: none"> - The nature of marketing - Customer segmentation - The 4 P

13-14	Introduction to accounting and financial statement Analyzing financial statements
15	Business plan presentation and review
	Final Examination December 12, 2013

**Please note, the class schedule can be rearranged as seen appropriated.*

Course Outline
FN 211 Financial Markets (Section 046401)

Number of credits: 3 credits

Course Description:

The study of money and the role of money in the economic system; the money market, monetary instruments, interest rate, financial management in the private and public sectors as it relates to the money market, commercial banks, financial institutions, the central bank and monetary policy.

Prerequisite: *second-year status (have taken at least 30 credits)*

Recommended Textbooks:

1. Mishkin and Eakins (2012), **Financial Markets and Institutions**, 7th Edition, Pearson Education.
2. McMillan and Pinto (2011), **Investments: Principles of Portfolio and Equity Analysis**, 1st Edition, Wiley. Chapter 1, 2, 3, and 10.

Equipment: Financial Calculator

Attendance Policy:

Attendance in every class is mandatory. Absence without a satisfactory cause or a proper medical proof will adversely affect final grade.

Grading:

Course grades will be determined by your performance on class participation, hand-in homework, Case Studies and two exams:

Class Attendance and Participation	15%
Case Studies	20%
Midterm Exam	25%
Final Exam	<u>40%</u>
Total	<u>100%</u>

Grading Criteria

A	= 4.0 (90 – 100)	Excellent
B+	= 3.5 (85 – 89)	Very Good
B	= 3.0 (80 – 84)	Good
C+	= 2.5 (70 – 79)	Fair
C	= 2.0 (60 – 69)	Adequate
D+	= 1.5 (55 – 59)	Poor
D	= 1.0 (50 – 54)	Very Poor
F	= 0.0 (<49)	Fail

Topics & Schedule

Class	Date	Topics	Textbook Reading
1		Introduction	Mishkin Ch 1+2
2		Interest Rates and their Determinants	Mishkin Ch 4
3		Interest Rates and their Roles in Valuation	Mishkin Ch 3
4		Interest Rates and Term Structure	Mishkin Ch 5
5		Efficiency of Financial Markets	Mishkin Ch 6
6		<i>Computer Lab Session</i>	
7		Review before mid-term	
8		IV. Mid-term Examination (9.30 – 11.00)	
9		Financial Institutions and Financial Crises	Mishkin Ch 7+8
10		Money Markets	Mishkin Ch 11
11		Bond Markets	Mishkin Ch 12
12		Stock Markets	Mishkin Ch 13
13		Insurance Companies and Pension Funds	Mishkin Ch 21
14		Commercial Banks	Mishkin Ch 17
15		Central Banks and the Conduct of Monetary Policy	Mishkin Ch 9+10
16		Case Study	
		Final Examination (9.00 – 12.00)	

Course Outline

MA 216 Calculus for Social Science I

Number of credits: 3 credits

Course Description:

Limits and continuity of one variable functions, derivatives of algebraic functions and transcendental functions, implicit differentiation, higher order derivatives, Roll's theorem, the mean value theorem, applications of derivative for determining limits and maximum and minimum of functions, differentials and its applications, antiderivatives, indefinite integrals and integration, definite integrals and application of area solving, functions of several variables, limits and continuity of functions of several variables, partial derivatives, the chain rule, total differential and its applications.

Note : There is no credit for students who are currently taking or have earned credits of MA111 or MA211 or MA218

Prerequisites: -

Recommended Text and Materials:

1. Stewart, James, *Calculus*, 6th ed., Thomson Learning, 2008.
2. L.J. Goldstein, D.C. Lay, and D.L. Schneider, *Calculus and its Applications*, 12th ed., Prentice Hall, 2010
3. Anton, H., Bivens, I., and Davis, S. *Calculus*, 9th ed., John Wiley & Sons, Inc., 2009.

Course Evaluation:

Midterm Examination	40%
Final Examination	50%
Assignments/Quizzes	10%

Course Schedule:

Session/ Date	Topic	Activities/Text & Materials/Media
	Course Overview Limits and Continuity <ul style="list-style-type: none"> - Limits (An Intuitive Approach) - Computing Limits 	Lecture Discussion Practice
	Limits and Continuity <ul style="list-style-type: none"> - Limits at Infinity - Limits of Trigonometric Functions - Continuity 	Lecture Discussion Practice Quiz
	Differentiation <ul style="list-style-type: none"> - The Derivative - Techniques of Differentiation - The Chain Rule 	Lecture Discussion Practice Quiz
	Differentiation <ul style="list-style-type: none"> - The Chain Rule - Implicit Differentiation 	Lecture Discussion Practice Quiz
	Differentiation <ul style="list-style-type: none"> - Derivatives of Logarithmic and Exponential Functions - Higher Derivatives - Linear Approximations and Differentials 	Lecture Discussion Practice Quiz
	Applications of Differentiation <ul style="list-style-type: none"> - L'Hospital's Rule; Indeterminate Forms - Related Rates - Interval of Increase and Decrease; Concavity 	Lecture Discussion Practice Quiz
	Applications of Differentiation <ul style="list-style-type: none"> - Relative Extreme; First and Second Derivative Tests - Graphs of Polynomials and Rational Functions - Maximum and Minimum Values of a Function 	Lecture Discussion Practice Quiz
	Midterm Exam	

	<p>Applications of Differentiation</p> <ul style="list-style-type: none"> - Applied Maximum and Minimum Problems - Rolle's Theorem; Mean Value Theorem 	<p>Lecture Discussion Practice Quiz</p>
	<p>Integration</p> <ul style="list-style-type: none"> - Antiderivatives; The Indefinite Integral - Integration by Substitution 	<p>Lecture Discussion Practice Quiz</p>
	<p>Integration</p> <ul style="list-style-type: none"> - The Definite Integral - The Fundamental Theorem of Calculus 	<p>Lecture Discussion Practice Quiz</p>
	<p>Integration</p> <ul style="list-style-type: none"> - Evaluating Definite Integrals by Substitution <p>Applications of Definite Integral</p> <ul style="list-style-type: none"> - Area Between Two Curves 	<p>Lecture Discussion Practice Quiz</p>
	<p>Techniques of Integration</p> <ul style="list-style-type: none"> - Integration by Parts - Integrating Rational Functions by Partial Fraction 	<p>Lecture Discussion Practice Quiz</p>
	<p>Techniques of Integration</p> <ul style="list-style-type: none"> - Integrating Rational Functions by Partial Fraction - Improper Integrals 	<p>Lecture Discussion Practice Quiz</p>
	<p>Functions of several Variables</p> <ul style="list-style-type: none"> - Function of Two or More Variable - Partial Derivatives 	<p>Lecture Discussion Practice Quiz</p>
	<p>Functions of Several Variables</p> <ul style="list-style-type: none"> - The Chain Rule - Total Differential and Its Applications 	<p>Lecture Discussion Practice Quiz</p>
	<p>Final Exam</p>	

Course Outline

ST216 Statistics for Social Science 1

Number of credits: 3 credits

Prerequisites: -

General Information:

This course provides an introduction to the concept and applications of Statistics for Economics. As a practicing economist, you would have come across a tremendous amount of information that is contained in data. Statistics helps you extract and understand this information. It answers questions such as, How should we summarize this mountain of data? and, To what extent should you really believe these numbers and their implications? It thus helps complement your economics knowledge, experience and intuition with the knowledge that is contained in the numbers that you come across, which ultimately leads to better decision-making.

The course does not require advanced math knowledge, and your performance in this course will depend on conceptual skills that you develop through assignments, exercises, and class lectures. Some of you might have taken statistics from high school. These courses do not necessarily promise your success in this class because statistics courses vary in terms of content and approach.

Course Description:

Introduction to descriptive statistics; index numbers; unconditional and conditional probability; random variables and probability distribution; unconditional and conditional expectations; elementary sampling and sampling distribution; estimation and hypotheses testing for one and two population; statistical package results interpretation.

Course Objectives:

This course covers the standard methods of descriptive statistics and some statistical inference needed for economics. The purpose of the course is to provide students in the economic sciences with enough understanding of statistical ideas and methodology to communicate knowledgeably and effectively with specialists in these technical areas. Upon successful completion of this course, students will be able to complete the following tasks:

1. Explain basic concepts of social statistics (e.g., population, sample, sampling distribution).
2. Summarize numeric data by computing descriptive statistics (e.g., mean, variance) and by creating tables and graphs. For each procedure, students will learn a hand calculation method (using calculators) and a computer method (using software called SPSS-computer outputs interpretation)
3. Compute various inferential statistics (e.g., z, t and chi-square statistics) using both hand calculation and computer method (computer outputs interpretation)
4. Parameter estimations and test hypotheses applying probability theory.
5. Explain the differences among various statistical techniques and identify an appropriate technique for a given set of variables and research questions.

The widespread availability of computer software packages is revolutionizing statistics education. Each year, more and more students enter statistics course with a good experience in computer technology and an expectation of using computer packages to solve problems in statistics. Because of this trend, this course will also focus on reading and interpreting the computer outputs. The computer software used in the course is SPSS for windows.

Main Text:

Anderson, David R., Sweeney, Dennis J., and Williams, Thomas A. *Statistics for Business and Economics*. Eleventh Edition. International Student Edition South-Western, 2011.

Other Recommended Book:

1. Berenson, Mark L., Levine, David M., and Krehbielm Timothy C. *Basic Recommended Business Statistics*. Eleventh Edition. Pearson/Prentice Hall, 2009.
2. Lind, Douglas A., Marchal, William G., and Wathen, Samuel A. *Basic Statistics for Business and Economics*. Seventh Edition. McGraw-Hill Irwin, 2011.
3. McClave, James T., Benson, P. George, and Sincich, Terry. *Statistics for Business and Economics*. Eleventh Edition. Student Edition. Prentice Hall, 2011.
4. Newbold, Paul, Carlson, William L., and Thorne, Betty. *Statistics for Business and Economics*. Fifth Edition. Pearson Education, Inc., 2003.

Grading Policy:

The course grades will be based on two exams (individual performance) and homework assignments (individual performance). Grading scheme is as follows.

- | | |
|-------------------------|-----|
| 1. Midterm Examination | 30% |
| 2. Final Examination | 60% |
| 3. Homework Assignments | 10% |

Teaching Plan:

Class Schedule

Class	Date	Topics	Chapter Section
1-2		1. Data and Statistics	1.
		1.1 What is Statistics?	
		1.2 Types of Statistics	1.4
		1.2.1 Descriptive Statistics	
		1.2.2 Statistical Inference	1.5
		1.3 Statistical Data	1.2
		1.3.1 Data, Element, Variable	
		1.3.2 Types of Data	
		1.4 Scales of Measurement	1.2
		1.4.1 Nominal Scale	
		1.4.2 Ordinal Scale	
		1.4.3 Interval Scale	
		1.4.4 Ratio Scale	

3-4		2. Describing Data: Frequency Tables, Frequency Distributions and Graphic Presentation	
		2.1 Summarizing Qualitative Data (Categorical Data)	2. 2.1
		2.1.1 Frequency Distribution	
		2.1.2 Relative Frequency Distribution	
		2.1.3 Bar Charts and Pie Charts	
		2.2 Summarizing Quantitative Data (Numerical Data)	2.2
		2.2.1 Frequency Distribution	
		2.2.2 Relative Frequency Distribution	
		2.2.3 Histogram and Frequency Polygon	
5-6		3. Measures of Central Location	3.
		3.1 Mean	3.1
		3.1.1 Population Mean	
		3.1.2 Sample Mean	
		3.2 Weighted Mean	
		3.3 Median	
		3.4 Mode	
7-8		4. Measures of Dispersion (Measures of Variability)	3.2
		4.1 Range	
		4.2 Mean Deviation	
		4.3 Variance and Standard Deviation	
		4.4 Coefficient of Variation	
9-11		5. Introduction to Probability	4.
		5.1 Random Experiment and Sample Space	4.1
		5.2 Approaches to Probability	4.1-4.4
		5.2.1 Classical Probability	
		5.2.2 Relative Frequency Probability	
		5.2.3 Subjective Probability	
		5.3 Properties of Probabilities	4.1-4.4
		5.4 Rules of Addition	4.1-4.4
		5.5 Conditional Probability	4.4
		5.6 Rules of Multiplication	4.1-4.4
		5.7 The Bayes' Theorem	4.5
		5.8 The Multiplication Formula	4.1
		5.10 The Permutation Formula	4.1
		5.11 The Combination Formula	4.1
12-14		6. Discrete Probability Distributions	5.
		6.1 Random Variables	5.1-5.2
		6.1.1 Discrete Random Variables	
		6.1.2 Continuous Random Variables	
		6.2 Expected Values and Variances of Random Variables	5.3
		6.3 The Binomial Probability Distribution	5.4
		6.4 The Poisson Probability Distribution	5.5
15-16		7. Continuous Probability Distributions	6.
		7.1 General Probability Distributions for	

		Continuous Random Variables	
		7.2 Normal Probability Distribution	6.2
		7.3 Areas under the Normal Curve	6.2
		7.4 Normal Approximation to the Binomial Probability Distribution	6.3
17-18		8. 8.1 Bivariate Distributions	5. 5.7 (Reference No. 4)
		8.2 Conditional Probability Function	5. 5.7 (Reference No. 4)
		8.3 Conditional Expectation	5. 5.7 (Reference No. 4)
19		9. Sampling and Sampling Distributions	7.
		9.1 Methods of Probability Sampling	7.2,7.8
		9.2 Sampling Distribution of the Mean, Proportion	7.5,7.6
		9.3 Standard deviation of Sample Mean	7.5
		9.4 Central Limit Theorem	7.5
20-21		9.5 Point Estimation	7.3,7.7
		10. Interval Estimation	8.
		10.1 Interval Estimation of a Population Mean: Known Population Standard Deviation	8.1,8.2
		10.2 Interval Estimation of a Population Mean: Unknown Population Standard Deviation	8.1,8.2
		10.3 Interval Estimation of a Population Proportion	8.4
22-23		11. Hypothesis Testing	9.
		11.1 Developing Null and Alternative Hypotheses	9.1
		11.2 Steps of Hypothesis Testing	9.1
		11.3 Type I and Type II Errors	9.2
		11.4 One-Tailed and Two-Tailed Tests of Significance	9.3
24-25		11.5 Hypothesis Tests about a Population Mean	9.4,9.5
		11.5.1 Known Population Variance	
		11.5.2 Unknown Population Variance	
		11.6 Hypothesis Tests about a Population Proportion	9.6
		11.7 Hypothesis Tests about a Population Variance	11. 11.1
26-27		12. . Statistical Inference: Two Population	10.,11.
		12.1 Testing Hypotheses on Differences Between	
		12.1.1 Two Population Variances	11.2
		12.1.2 Two Population Means	10.1,10.2,10.3
		12.1.3 Two Population Proportions	10.4
28-29		12.2 Confidence Intervals for the Differences Between	
		12.2.1 Two Population Means	10.1,10.2
		12.2.2 Two Population Proportions	10.4
30		13. Index Numbers	17. 17.1-17.7
		13.1 The Meaning of Index Numbers	
		13.2 Types of Index Numbers	

		13.2.1 Price Indexes	
		13.2.2 Quantity Indexes	
		13.2.3 Value Indexes	

Course Evaluation

Type of evaluation	Evaluation Method	Evaluation date
Homework	Written assignment (essay questions)	
Midterm Examination	Written exam (essay questions)	
Final Examination	Written exam (essay questions)	

Course Outline
FN451 Equity Analysis

Number of credits: 3 credits

Course Description

The focus of this class is on the valuation of equities and the role of analysts as investment advisors. Course topics covers a broad spectrum of analytical tools that equity analysts require to carry out their jobs-- starting with economic and market analysis, sector and stock analysis, and investment management. Discussions will include the dynamism of capital markets, and interaction between equity analysts with mutual fund managers, investment bankers, and retail clients. The class also familiarizes students with computational tools in equity analysis and asset management.

Prerequisite: FN 312

Objectives

1. Acquaint students with the analytical tools that are necessary to become future equity analysts or investment advisors.
2. Develop understanding of the relationship between investment environment, market valuation, and intrinsic valuation.
3. Familiarize students with tools for evaluating stock prices.
4. Provide updates on current thinking and practice of securities investment and valuation.
5. Familiarize students with quantitative and computing tools for equity analysis and asset management.

Assessment requirements as follows:

A) Group Assignments Problem solving	30%
B) Mid-term Examination	35%
C) Final Exam	35%

Texts

R1. (Main) Jerald E. Pinto, CFA, Elaine Henry, CFA, Thomas R. Robinson, CFA, and John D. Stowe, CFA
Equity Asset Valuation, Second Edition CFA Institute Investment Books (January 2010)

R2. (Supplement) Edwin Elton, and Martin Gruber, Modern Portfolio Theory and Investment Analysis, Wiley and Sons.

Other references

Damodaran, A., **Investment valuation**, Wiley, 2002

Daily readings of business newspapers

John L. Maginn, Donald Tuttle, Jerald E. Pinto, and Dennis W. McLeavey, **Managing Investment Portfolios: A Dynamic Process** CFA Institute Investment Books

Emerging market portfolio fund research, www.epfr.com

The Economist, www.economist.com

Class reports

Investment committee meetings: Groups will be randomly selected at the beginning of each class to provide a 5 minute talk about their investment strategy or market directions in the previous week and evaluate their weekly performance.

Performance report and presentation: Each group will be allowed the opportunity to give a short talk to evaluate their overall strategy and portfolio performance. The performance report must conform to industry standards.

Class schedule

Date	Topic	Text Chaps
	Overview of an equity analyst's job Fundamental stock picking vs Quantitative asset allocation <i>Instructor: Pantisa Pavabutr</i>	Chapter 1 R1
	Economic and firm analysis and market environment <i>Instructor: Sirinattha Techasiriwan</i>	Class handouts
	Valuation model 1: Discounted cash flow models <i>Instructor: Sirinattha Techasiriwan</i>	Chapter 3 R1
	Valuation model 2: Dividend discount models and real option valuation <i>Instructor: Sirinattha Techasiriwan</i>	Chapter 2 R1
	Valuation model 3: Market multiples <i>Instructor: Sirinattha Techasiriwan</i>	Chapter 4 R1
	Quantitative asset allocation 1 (Computer lab) Portfolio return and risk <i>Instructor: Siraprapa Watakit</i>	Chapter 4 R2
	Quantitative asset allocation (Computer lab) Beta and CAPM <i>Instructor: Siraprapa Watakit</i>	Chapter 7 R2
	No class: Mid-term week	
	Quantitative asset allocation (Computer lab) Mean variance optimization <i>Instructor: Siraprapa Watakit</i>	Chapter 5, 6 R2
	Sector and firm workshop 1: Financial analysis, report writing and analyst presentations <i>Instructor: Sirinattha Techasiriwan</i>	
	Sector and firm workshop 2: Valuation models of banks and financial companies <i>Instructor: Sirinattha Techasiriwan</i>	Handouts
	Trading and market microstructure	Handouts

	<i>Instructor: Pantisa Pavabutr</i>	
	Behavioral Finance: Measuring downside risk and lower moment asset beta (Computer lab) <i>Instructor: Pantisa Pavabutr</i>	Handouts
	Equity derivatives and portfolio risk management <i>Instructor: Pantisa Pavabutr</i>	Handouts
	No class Songkran break	
	Portfolio performance measurement Presentations <i>Instructor: Pantisa Pavabutr</i>	Handouts

Course Outline

MK 311: Consumer Behaviour

Number of credits: 3 credits

Course Description:

This course aims to equip and familiarise students with consumer behaviour as an underpinning notion to their marketing education. The lectures embrace and integrate a mixture of concepts derived from various disciplines such as psychology, sociology and anthropology which are used to study and explain consumer behaviour.

Prerequisite: MK 202

Course Objectives:

After taking this course, students are expected to achieve learning objectives as follows:

1. To understand consumer behaviour as a vital constituent of marketing.
2. To be able to explicate the concept and process of consumer behaviour.
3. To be able to critically analyse consumer behaviour and to define relevant influences on the consumer's purchasing decision.
4. To be able to apply the students' knowledge of consumer behaviour in their marketing careers and their everyday lives.

Required Texts and Materials:

Solomon, Michael (2012), *Consumer Behavior: Buying, Having, and Being*, Tenth edition, Upper Saddle River, New Jersey: Pearson Prentice Hall.

Teaching Philosophy:

In class, teaching and learning aims to pursue a process of joint learning with students. That is, the lecturer introduces concepts and theories of Consumer Behaviour to the class; then students share their experiences regarding the lectured concepts and theories. Hopefully, we learn from each other for ultimately we all are consumers!!!

Outside class, students are encouraged to do their own self-study as much as possible. As consumer behaviour is a 'dynamic subject', assignments and the term paper intend to provide some of the necessary analytical skills needed.

Grading:

Class Participation	10 %
Assignments	10 %
Term Paper (and Presentation)	30 %
Final Examination	50 %
Total	100%

6		Consumers as Individuals <ul style="list-style-type: none"> ◆ The Self: Traditional View ◆ The Self: Alternative View ◆ Personality 	Chapter 5 Chapter 6
7		Consumers as Individuals <ul style="list-style-type: none"> ◆ Lifestyle and Values Consumers and Symbolic Consumption: An Alternative View to Understand Consumers <ul style="list-style-type: none"> ◆ Consumer Identity and Symbolic Consumption ◆ Consumers and Meaning Appropriation ◆ Possessions and the Extended Self 	Chapter 6
8		Consumers as Social Beings <ul style="list-style-type: none"> ◆ Consumers and Social Structure ◆ Consumers and Demographics ◆ Consumers and Social Class 	Chapter 13-15
9		Consumers as Social Beings <ul style="list-style-type: none"> ◆ Consumers and Reference Groups ◆ Consumers and Family 	Chapter 11
10		Consumers as Social Beings <ul style="list-style-type: none"> ◆ Consumers and Culture ◆ Consumers and Subcultures ◆ Cultural Changes and Diffusion <ul style="list-style-type: none"> ◆ Globalisation ◆ Media & Information Society ◆ Postmodernity ◆ Body Culture 	Chapter 16-17
11		Consumers as Decision Makers <ul style="list-style-type: none"> ◆ Individual Purchase Decision Process ◆ Consumer Satisfaction 	Chapter 9 Chapter 10
12		Consumers as Decision Makers <ul style="list-style-type: none"> ◆ Group/Organisational Decision ◆ Consumers and Family Decision 	Chapter 12
13		Other Sides of Consumers <ul style="list-style-type: none"> ◆ Impulsive Buying Behaviour ◆ Consumer Fantasy, Fun and Escapism ◆ The Dark Side of Consumer Behaviour Consumer Behaviour and Marketing <ul style="list-style-type: none"> ◆ Marketing and Consumer Research Marketing and Consumer Responsibility 	Chapter 1

14-15*		Paper Presentation	⌚ 30 Min/Group	
✍		Final Examination		-1

Course Outline

MK 361 International Marketing

Number of credits: 3 credits

Description:

This course covers a broad range of marketing concepts and focuses on the applications of marketing strategies used by international marketing managers. The role of marketing in an international MNC firm is determining, creating, communicating and delivering a value proposition that meets the needs of the customer. Students will learn how this is done and evaluate the marketing campaigns of several successful international companies. Students will develop a solid understanding of international marketing issues, models and practices. The marketing functions will be examined via lecture and case analysis to successfully integrate all elements of the managerial process.

This course provides concepts and theories of international marketing, which cover market systems and other factors influencing international business. Topics include marketing concepts without geographical boundaries, international marketing strategy, analysis of new challenges and ethical issues related to international marketing.

This course will encourage and require students to analyze marketing from multiple angles, including customer, provider and agency. Students will be required to be able to think strategically and integrate all areas of marketing

Prerequisite : MK 201 or MK 202

Aims and Objectives:

Aims: This course aims to provide students with an understanding of the business environment in international marketing today. It seeks to equip students with practical knowledge and skills in marketing systems, business strategies and practices, as well as make them aware of the state of international marketing today.

It also aims to enable students to “connect the dots” in today’s complex global business world and to be able to analyze and synthesize information from various sources in order to see the relationships between ideas, concepts, things and people.

Objectives:

Upon completion of this course, students should be able to:

- Understand the complexities of marketing in today’s demanding global arena
- Understand how firms can encourage and nurture a spirit of innovation in marketing and how that translates into new products and services in a global context
- Recognize and understand how marketing functions so that they will be able to think like a marketing professional
- Better analyze and synthesize information to see the relationships rather than the differences in the complex world of global marketing

Section one: Introduction

- Introduction and description of course and contents
- Description of course assessment.

Section two: International Marketing Strategies (basics) Communications and Marketing

- The role of communications
- Communications and marketing
- Trust as the centerpiece of marketing strategy
- Listening and observation and their roles in communication
- Customer defections
- Relationship marketing
- Transaction and relationship buyers
- Sales resistance

Section three: Marketing strategies – positioning and advertising

- Definitions and background of positioning
- Comparative advertising strategies
- Media sources
- Image and emotionality
- Image as it pertains to advertising
- Advertising psychology
- The ideas and concepts of creative advertising
- Television advertising
- Statistics and their use in marketing

Section four: Globalization

- Influence of globalization on business
- Influence of globalization on you personally
- Why people are afraid of globalization
- Impact of globalization on international marketing

Section five: Entrepreneurship and international marketing

- Why people buy
- Similarities between entrepreneurship and intl. marketing strategies
- Conversion and interception rates and analysis
- Retailing techniques
- Customer loyalty
- Affinity and appreciation programs
- Techniques to know what your customers really want
- Taking your product to the global level

Section six: International marketing strategies

- global marketing, cases for and against
- worldwide research and expansion
- international criteria
- marketing analysis
- types of entry
- target marketing
- segmenting
- product positioning and adaptation
- private brands and emerging markets

Section seven: Internet marketing (the international aspects)

- internet history and characteristics
- the similarities between the internet and direct mail
- internet marketing
- branding
- startups and entrepreneurship

Section eight: Wrap up and synthesis

- International marketing strategies
- Matching the strategy to the product

Case study – Murphy Brewery

Case study – Coca Cola

Case study – Starbucks

Case study – Benetton

Case study – Disney or Mattel

*All case studies used are original case studies written by the course professor

Methodology: Lecture, case study, discussion, exercises

Assessment:

- 50% evaluation of all work done in class, including participation, exercises, case studies
- 50% final exam.

Suggested reading:

Ogilvy on Advertising, by David Ogilvy
John Wiley and Sons, Publisher

Appendix A

Evaluation of Class work: (50% of final grade)

Criteria:

Engagement –

- Student displays a positive attitude in class and actively and attentively follows the lectures and the contributions of fellow classmates
- Student contributes to class by offering ideas, asking questions and attempting to answer questions
- Student recognizes that the subject requires outside reading and reads more than what is assigned

Analysis –

- Evidence of original thinking, good organization of course materials, capacity to analyze and synthesize, capacity to connect the dots of the materials presented in course and also to connect them to general knowledge

Preparation –

- Student is prepared for class with assignments and required class materials
- Student reflects on what has been taught and takes a personal interest in the subject
- Student is aware of current events and their relation to the course

Students will be provided copies of the power point used during the lectures, (mainly for language purposes). .

Power point of the case studies will only be provided after the case is discussed in class. This is because students need to make decisions in all the case studies used and thus if the power point is supplied beforehand students would have the answers to the questions posed. Case study analysis, (which will be done both in groups and individually) is an important part of the course.

This is an exciting course which will challenge the student to integrate and blend their knowledge of marketing with their experiences both professionally (corporate) and privately (consumers).

Appendix B

Grading the Exam (50% of final grade)

Criteria:

Analysis –

- Capacity to analyze and synthesize, capacity to connect the dots of the materials presented in course and further to connect them to general knowledge

Understanding -

- Grasp of the subject matter, evidence that the student fully understand the course

Application -

- Evidence that the student can apply knowledge obtained in the course to problems and situations that they have not been given the answers to. (application of data rather than retention of data)

Course Outline

ST217 Statistics for Social Science 2

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

General Information:

Inference, in the form of estimation, hypothesis testing, and predictions, plays a vital role in everyday life as well as in organized research. In many cases, a knowledge of statistics will allow a quantitative assessment of risk involved with each inference and, hence, improve the basic knowledge of inference-making procedures for students. This course is a second course in statistics that applies tools from ST 216 to develop a variety of statistical inference that can be used to make decisions with data in the real world. Since this course builds directly from ST 216, material from that course, descriptive statistics, probability, sampling distribution, estimation, and hypothesis testing, should be reviewed.

Course Description:

Estimation and hypotheses testing for two populations; one – way and two – way analysis of variance; curve fitting; simple and multiple linear regression and correlation analysis; classical time series analysis; chi – square test; statistical package results interpretation.

Prerequisites: ST 216

Course Objectives:

This course covers the standard methods of statistical inference needed for economics. The purpose of the course is to provide students in the economic sciences with enough understanding of statistical ideas and methodology to communicate knowledgeably and effectively with specialists in these technical areas.

The widespread availability of computer software packages is revolutionizing statistics education. Each year, more and more students enter statistics course with a good experience in computer technology and an expectation of using computer packages to solve problems in statistics. Because of this trend, this course will also focus on reading and interpreting the computer outputs. The computer software used in the course is SPSS for windows.

Main Text:

Anderson, David R., Sweeney, Dennis J., and Williams, Thomas A. *Statistics for Business and Economics*. Eleventh Edition. International Student Edition South-Western, 2011.

Other Recommended Book:

1. Berenson, Mark L., Levine, David M., and Krehbiel, Timothy C. *Basic Business and Economics*

Eleventh Edition. Pearson/Prentice Hall. 2009.

2. Lind, Douglas A., Marchal, William G., and Wathen, Samuel A. *Basic Statistics for Business and*

Economics. Seventh Edition. McGraw-Hill Irwin 2011.

3. McClave, James T., Benson, P. George, and Sincich, Terry. *Statistics for Business and Economics*. Eleventh Edition. Student Edition. Prentice Hall, 2011.
4. Mendenhall, W., Reinmuth, J.E., Beaver, R., and Duhan, D. *Statistics for Management and Economics*. Fifth Edition. Duxbury Press, 1986.
5. Watson, C.J., Billingsley P., Croft D.J., and Huntsberger D.V. *Statistics for Management and Economics*. Fifth Edition. Allyn and Bacon, 1993.
6. Wonnacott, T.H., and Wonnacott R. J. *Introductory Statistics for Business and Economics*. Fourth Edition. John Wiley & Sons, 1990.

Grading Policy:

The course grades will be based on two exams (individual performance) and homework assignments (individual performance). Grading scheme is as follows.

1. Midterm Examination 30%
2. Final Examination 60%
3. Homework Assignments 10%

Teaching Plan:

Class Schedule

Class	Topics	Chapter	Section
1-4	1. Statistical Inference: Two Population	10, 11	
	1.1 Confidence Intervals for the Differences Between		
	1.1.1 Two Population Means		
	1.1.2 Two Population Proportions		
5-8	1.2 Testing Hypotheses on Differences Between		
	1.2.1 Two Population Variances		
	1.2.2 Two Population Means		
	1.2.3 Two Population Proportions		
9-12	2. Analysis of Variance	13	13.1-13.4
	2.1 One-Way Analysis of Variance		
	2.2 Multiple Comparisons of Means		
	2.3 Two-Way Analysis of Variance		
13-18	3. Regression and Correlation	14	14.1-14.6
	3.1 Simple Linear Regression		
	3.2 Finding the Slope and the Intercept of a Regression Line		
	3.3 The Standard Error of Estimate		
	3.4 Coefficient of Determination		
	3.5 Statistical Inference in Regression Analysis		
	3.6 Correlation Coefficient		
	3.7 Inferences Concerning the Population Correlation Coefficient		
	3.8 Relationship Between Regression and Correlation		
19-24	4. Multiple Regression	15	15.1-15.6

		4.1 Multiple Linear Regression		
		4.2 Finding the Coefficients for a Multiple Regression Equation		
		4.3 Multiple Standard Error of Estimate		
		4.4 Coefficient of Multiple Determination		
		4.5 Statistical Inference in Multiple Regression Analysis		
		4.6 Multiple Correlation Analysis		
		4.6.1 Coefficient of Multiple Correlation		
		4.6.2 Coefficient of Partial Correlation		
25-28		5. Time Series Analysis	18	18.1-18.4
		5.1 Components of a Time Series		
		5.1.1 Trend Component		
		5.1.2 Cyclical Component		
		5.1.3 Seasonal Component		
		5.1.4 Irregular Component		
		5.2 Forecasting Using Smoothing Methods		
		5.2.1 Moving Averages		
		5.2.2 Exponential Smoothing		
		5.3 Methods of Determining Seasonal Indexes		
		5.3.1 A Method Using Averages		
		5.3.2 Ratio-to-Moving-Average Method		
		5.4 Forecasting a Time Series with Trend and Seasonal Components		
29-30		6. Chi-Square Tests	12	12.1-12.3
		6.1 Goodness-of-Fit Test: A Multinomial Population		
		6.2 Tests for Independence		
		6.3 Goodness-of-Fit Test: Normal Distribution		

Course Evaluation

Type of evaluation	Evaluation Method	Evaluation date
Homework	Written assignment (essay questions)	
Midterm Examination	Written exam (essay questions)	
Final Examination	Written exam (essay questions)	

Course Outline

PY 228 Psychology of Interpersonal Relations

Number of credits: 3 credits

Course Description:

This course emphasizes overt behaviors of the individual, interpersonal relationships between the individual and society, understanding of self and others through communication, exchange of ideas, adjustment to family, peer groups and society, human attitudes and values, leadership, and applications of humanistic approach to effective interpersonal relations.

Prerequisites: None

Course Objectives:

Effective communication with others comes from a deep understanding of ourselves and an empathic understanding of others, as well as knowing the skills and methods for dealing with interpersonal situations. In this course, the students will work at developing self-awareness, study the theories of personality and interpersonal relationships, understand the basic processes of forming and maintaining friendship and romantic relationships, and learn some effective interpersonal relations skills such as active listening, conflict management, and communication with the same and different gender etc.

Recommended Text:

Weiten, W., Hammer, E. & Dunn, D., (2012). *Psychology and Contemporary Life: Human Adjustment*, 10th ed., Wadsworth, Cengage Learning.

Suggested Readings:

1. Dubrin, Andrew J. (2010) *Human Relations for Career and Personal Success : Concepts, Applications and Skills*, 9th ed. Prentice Hall.
2. Knapp, Mark L. & Vangelisti, Anita L. (2008) *Interpersonal Communication and Human Relationships*. 6th ed., Allyn & Bacon .
3. Lussier, Robert N. (2009) *Human Relations in organizations*. 8th Revised ed., McGraw-Hill.
4. Reece, Berry L. & Brandt, Rhonda (2010) *Effective Human Relations: Personal and Organizational Applications*. 11th ed., Houghton Mifflin.

Teaching – Learning Methods:

Lecture, exercise, case study, group discussion, role play and self-study.

V. Teaching Aids: Computers, video, and illustrations.

Teaching Plan:

Topic

Tentative Date

1. Introduction to Psychology of Interpersonal Relations
2. Interpersonal Relations and Adjustment in Today's World
3. Personality
4. Stress and Coping
5. The Self in a Social World
6. Impression Formation and Social Influences
7. Attitudes, Values, and Ethics
8. Gender and Behavior
9. Communication
10. Conflict Management
11. Close Relationships
12. Motivating Yourself and Others
13. Effective Leader
14. Positive Psychology and Effective Interpersonal Relations

Course Evaluation:

Grading

Final Examination	40%
Mid-Term Examination	35%
Assignments	25%

Detail for Class Assignments:

Objectives

1. To motivate students to attend the class regularly and participate in class activities.
2. To practice problem solving and critical thinking skills.
3. To develop interpersonal relations and teamwork skills.
4. To expand students' understanding about themselves and others.
5. To enhance students' understanding of each topic.

Most assignments are in class activities. The assignments will be exercise, case study, group discussion, role play and self – assessment. There will be at least one assignment for every class. The students are required to submit his/her assignment after each class. There is no excuse for any late or absent assignment and there will be no make-up assignment for students who miss the class.

Course Outline

การใช้ภาษาไทย ๑ (TH ๑๖๑ Thai Usage)

คำอธิบายรายวิชา

หลักและฝึกทักษะการใช้ภาษาไทย ด้านการฟัง การอ่าน การเขียน และการพูด โดยเน้นการจับใจความสำคัญ การถ่ายทอดความรู้ ความคิด และการเขียนเรียบเรียงได้อย่างเหมาะสม

วัตถุประสงค์

1. เพื่อให้ นักศึกษา ได้ศึกษาภาษาไทยทั้งภาคทฤษฎีและปฏิบัติ ในด้านการคิด การฟัง การพูด การอ่าน และการเขียน
2. เพื่อเพิ่มพูนความสามารถในการใช้ภาษาไทยเพื่อการสื่อสารได้อย่างถูกต้อง และสามารถนำทักษะต่าง ๆ ไปใช้ได้อย่างมีประสิทธิภาพ
3. เพื่อเป็นการส่งเสริมและกระตุ้นให้นักศึกษาเรียนรู้เพิ่มเติมด้วยตนเองตามวัตถุประสงค์ของหลักสูตรวิชาศึกษาทั่วไปของมหาวิทยาลัยธรรมศาสตร์

เนื้อหาวิชา

วิชา ท.๑๖๑ ภาค ๒/๒๕๕๕ ศึกษาเกี่ยวกับเรื่องต่าง ๆ ดังต่อไปนี้

๑. ภาษากับความคิด
๒. การรับสารและการส่งสาร
๓. การใช้ภาษา
๔. การจับใจความสำคัญ
๕. การเขียน ได้แก่ การเขียนโครงเรื่อง การเขียนย่อหน้า และการตอบข้อสอบอัตนัย

การจัดการเรียนการสอน

๑. บรรยายและอภิปรายในชั้นเรียน
๒. มอบหมายงานให้ศึกษาค้นคว้าเป็นรายบุคคลและรายกลุ่ม

คะแนนเก็บ (คะแนนเก็บทั้งหมด ๖๐ คะแนน)

๑. หนังสืออ่านนอกเวลา (ปรนัย ๒๐ ข้อ แบบ ๔ ตัวเลือก)	๑๐	คะแนน	} สอบกลางภาค
๒. การจับใจความสำคัญ (จับใจความสำคัญแต่ละย่อหน้า)	๑๐	คะแนน	
๓. การใช้ภาษา	๑๐	คะแนน	
๔. การทดสอบการฟัง	๕	คะแนน	
๕. การทดสอบการพูด	๕	คะแนน	
๖. การเขียนย่อหน้า	๑๐	คะแนน	
๗. ความร่วมมือในชั้นเรียน	๕	คะแนน	

พิจารณาจากการเข้าชั้นเรียนและส่งงานตรงเวลา การปฏิบัติตนให้เหมาะสมตามข้อตกลงในชั้นเรียน และการแต่งกายให้ถูกต้องตามระเบียบมหาวิทยาลัย

หากนักศึกษาขาดเรียนห้กครั้งละครั้งคะแนน ในกรณีต่อไปนี้ให้อยู่ในดุลยพินิจของอาจารย์ผู้สอน

- ๗.๑ นักศึกษามีใบลาป่วย และมีใบรับรองแพทย์
- ๗.๒ นักศึกษามีใบลากิจ (ต้องส่งล่วงหน้า)
- ๗.๓ นักศึกษาทำกิจกรรมให้มหาวิทยาลัย และมีใบรับรองจากอาจารย์ที่ปรึกษา
- ๗.๔ นักศึกษาไปฝึกภาคสนามรักษาดินแดน

๘. แบบฝึกหัด ๕ คะแนน

- ๘.๑ นักศึกษาส่งแบบฝึกหัดที่ทำตามคำสั่ง
- ๘.๒ นักศึกษามีความซื่อสัตย์ไม่ลอกผลงานของผู้อื่น
- ๘.๓ นักศึกษามีความก้าวหน้า ชยัน ตั้งใจทำแบบฝึกหัด และพิจารณาจากผลงานของนักศึกษา

คะแนนสอบปลายภาค (คะแนนสอบปลายภาคทั้งหมด ๔๐ คะแนน)

๑. ทฤษฎี (ปรนัย ๓๐ ข้อ แบบ ๔ ตัวเลือก) ๑๕ คะแนน
๒. การตอบข้อสอบอัตนัย (แสดงความคิดเห็น เหตุผล ๒ ประการ) ๑๐ คะแนน
๓. จับใจความสำคัญจากเรื่องแล้วนำมาเรียบเรียง ๑๐ คะแนน
๔. โครงเรื่อง ๕ คะแนน

เกณฑ์ในการตัดเกรด

เกรด	ช่วงคะแนน
A	๘๕-๑๐๐
B+	๗๙-๘๔
B	๗๓-๗๘
C+	๖๗-๗๒
C	๖๑-๖๖
D+	๕๕-๖๐
D	๔๙-๕๔
F	๐-๔๘

-๓-

หมายเหตุ : นักศึกษาสามารถทำแบบฝึกหัดเรื่องการใช้ภาษาและการจับใจความสำคัญเพิ่มเติมด้วยตนเองได้จากโปรแกรม moodle ที่ <http://be-moodle.econ.tu.ac.th/>

**ทุจจริตในการสอบปรับตกในรายวิชานั้น
และมีโทษพักการศึกษาสูงสุด ๒ ภาคการศึกษา**

Course Outline
EL 172: English Course 3

Number of credits: 3 credits

Course Objectives:

1. To enhance students' reading skills through a variety of reading materials in English.
2. To enable students to write more effectively in English through extensive writing practice including components of a paragraph and an academic essay.
3. To develop students' listening and speaking skills through listening comprehension exercises, role plays and group discussions.
4. To enrich students' vocabulary essential for their future application.
5. To improve students' accuracy in English grammar through exercises related to the contents.

Prerequisite: EL 171

Texts:

1. Cunningham, Sarah and Moor, Peter. 2002. *Cutting Edge: Upper Intermediate*. Mateu Cromo, S.A. Pinto (Madrid), Spain: Longman
2. Supplementary Materials

Evaluation:

Attendance and Participation	10% (absent = minus 1%; late = minus 0.5%)
Assignments & Quizzes	20%
Mid-term Examination	30%
Final Exam	40%
Total	100%

Notes: Students cannot be absent for more than 6 times throughout the semester. Only 3 absences are allowed before or after the midterm exam.

Dates	Topics
	<p>Introduction</p> <p>Pretest</p> <p><u>Writing Assignment 1: Talk about your life</u></p>
	<p>Module 1: Past and present</p> <p>Reading: The family that plays together</p> <p>Vocabulary: Past and present time phrases</p> <p>Past and present (continued)</p> <p>Language focus: Revision of verb forms/Use of auxiliaries</p> <p><u>Writing Assignment 2: Planning and drafting a Biography</u></p>
	<p>Module 2: Life's ups and downs</p> <p>Reading: So you think you know what's good for you?</p> <p>Language focus: Forming nouns and gerunds/Forming Adjectives</p> <p><u>Writing Assignment 3: List the things that make you feel...</u></p>
	<p style="text-align: center;">Topics</p>
	<p>Module 3: Adventures and mishaps</p> <p>Vocabulary: Mishaps</p> <p>Reading: The gentle touch</p> <p>Language focus: Verb forms in the narrative/ Continuous aspect in other tenses</p> <p><u>Writing Assignment 4: A narrative</u></p>
	<p>Module 4: The mind</p> <p>Reading: Gender Gaps on the brain</p> <p>Vocabulary: Qualities of mind</p> <p>Language focus: The passive/have/get something done</p> <p><u>Writing Assignment 5: A formal letter</u></p> <hr/> <p>Module 5: Unusual achievements</p> <p>Reading: Remarkable achievements</p> <p>Language focus: Present tenses in the past, present and</p>

	<p>future/More about the Present perfect simple and continuous</p> <p>Vocabulary: Verb-noun combinations</p> <p><u>Writing Assignment 6: Talk about an achievement you find amazing</u></p>
	<p>Review (Writing Assignment 1-6)</p>
	<p>Midterm Exam (14.00 – 15.30 P.M.) (Module 1-5)</p>
	<p>Module 6: Getting it right</p> <p>Reading: Worst case scenarios</p> <p>Language focus: Use and non-use of articles/Different ways of giving emphasis</p> <p><u>Writing Assignment 7: Make a list of tips on <i>How to...</i></u></p>
	<p>Module 7: Big events</p> <p>Vocabulary: Events and celebrations/extreme adjectives</p> <p>Language focus: Relative clauses/Quantifiers</p> <p>Reading: Food festivals around the world</p> <p><u>Writing Assignment 8: Describe a memorable event</u></p>
	<p>Module 8: Fame and fortune</p> <p>Reading: How to be a celebrity</p> <p>Vocabulary: The road of fame</p> <p>Language focus: Gerund or infinitives?/Different infinitive and gerund forms/Linking ideas and arguments</p> <p><u>Writing Assignment 9: Summarizing an article</u></p> <hr/> <p>Module 9: Mysteries, problems, oddities</p> <p>Vocabulary: Strange events</p> <p>Language focus: Modals and related verbs/Past modals</p> <p>Reading: Real Life Unsolved Mysteries</p> <p><u>Writing Assignment 10: Arguments</u></p>
	<p>Module 10: Getting together</p> <p>Reading: Getting together 21st century style</p> <p>Language focus: Review of future form/Future</p>

	<p>continuous and Future perfect</p> <p><u>Writing Assignment 11: Types of message</u></p>
	<p>Module 11: Interfering with nature</p> <p>Reading: BIG QUESTIONS FACING MODERN MEDICAL SCIENCE</p> <p>Language focus: Hypothetical situations in the present/hypothetical situations in the past</p> <p><u>Writing Assignment 12: For and against essay</u></p>
	<p>Module 12: Media mania</p> <p>Vocabulary: Types of media</p> <p>Language focus: Reporting people’s exact words/Verbs that summarize what people say</p> <p>Reading: Giving up TV</p> <p><u>Writing Assignment 13: A film review</u></p>
	<p>Review (Writing Assignment 7-13)</p>
	<p>Final Exam (09.00 – 12.00 A.M.)</p> <p>(Module 6-12)</p>

Course Outline

TU 110 INTEGRATED HUMANITIES

Number of credits: 3 credits

Course Description:

This is a survey course on human history and Western humanities; a study of Western thoughts, ideologies, arts, and their influences on the modern world. The course will focus on the crucial intellectual and artistic movements which have had a revolutionary and shaping influence on Western civilization and the world at large. In the process of establishing a firm background in mankind's aesthetic, intellectual, and cultural expressions, the student's personal growth will be fostered.

Prerequisite: none

Course Objective:

This course aims to awake within the students an informed and appreciative awareness of the major issues and assumptions that helped shape the modern world. Students will be encouraged to develop their ability to think critically, to read and interpret sophisticated texts, and to write at university level about the material they study. In addition, students will learn how to apply this knowledge to their own lives to help them adapt and cope in an increasingly complicated and interconnected world.

Evaluation:

Class Participation	10 %	≥ 90	A
Midterm Exam	20 %	≥ 85	B+
Group Project	30 %	≥ 80	B
Final Exam	40 %	≥ 75	C+
		≥ 70	C
		≥ 60	D+
		≥ 50	D
		< 50	F

Course Administration

Class Etiquette

- Talking during class is distracting to others. Occasional whispers are fine, but any talking between students that can be heard at the front of the room is not acceptable.
- Do not bring food into the classroom.
- Cell phones must be silenced and out of sight during class.
- Laptop computers are to be out of sight unless their use is expressly permitted.
- Class begins and ends on time. Arriving late, leaving early, and coming and going during class are all inappropriate.

Moodle

The class moodle page is used to make class announcements, to distribute class materials, to share answers from student questions, and to report grades. Messages sent to the class are required reading.

TU110 Integrated Humanities: Dr. Russell A. Jones
<http://be-moodle.econ.tu.ac.th/course/view.php?id=311>
Enrollment Key: 8000

After you have enrolled in the class moodle page, please update your profile with an easily recognizable picture of yourself and your student I.D. number.

These tasks count as class participation activities. To earn full credit, complete them before the second class.

Class Participation (10%)

This is the easiest portion of your grade to earn, assuming you are present in class to earn it. Occasionally, students will be asked to do something, such as work in small groups, participate in class discussion, upload a file to Moodle, take a pop-quiz, etc. Class participation activities are usually scored pass/fail, but some may be graded.

Class Participation Worksheets

Most lectures have an associated class participation worksheet to be completed and turned in before the beginning of the following class. The purpose of the worksheets is to help students master the relevant class materials, to help develop informed opinions of the class subject matter, and to give the students an opportunity to practice writing essay answers such as they will be doing in exams.

Late worksheets may be submitted for half credit up to two weeks after they were due.

Any plagiarism will result in a score of zero. An excellent tutorial on plagiarism and related topics can be found here: <http://tutorials.sjlibrary.org/tutorial/plagiarism/selector.htm>

Group Projects (30%)

Students will form themselves into groups and make short, documentary movies on a humanities related subject. The completed movies will be watched in class at the end of the semester. Groups will also upload their movies to YouTube so that they may be enjoyed by a larger audience. Further details will be provided in the group project assignment handout.

These are relatively large groups and the project provides significant challenges not only in mastering the subject matter and technology, but in working together as a team. The group projects are a significant portion of your grade, so it will behoove you to plan well, to adapt and cooperate, and most importantly, to get started as soon as possible.

Midterm and Final Exams (20% and 40%, respectively)

Students must be present for two exams: the midterm and the final. The midterm exam will consist of material from the first half of the semester. The final exam will consist mostly of material from the second half of the semester, but does have an element of comprehensiveness. The exams are closed book. For both exams, in order to earn a superior grade, students must demonstrate mastery of the course subject matter and also demonstrate that they have integrated this knowledge into their worldview, i.e. students are expected to have contemplated the issues raised in class discussions and to have developed informed opinions about them.

Reading Materials

There is no textbook for this class. Reading and study materials will be provided in the form of lecture notes, class handouts, and emails. You should read the lecture notes before class to familiarize yourself with the material and vocabulary of each class. The lecture notes are not a complete resource in themselves; you must pay attention to the class lectures to understand the context of the provided notes. If you have questions about the lectures, you are encouraged to answer basic questions by yourself with the use of Wikipedia and other reputable sources.

Questions

Students are highly encouraged to raise their hands and ask questions during lectures. This enables other students who also have the same question to benefit from the response. Furthermore, asking questions promotes interesting class discussion. Students are also encouraged to ask questions after class and by email.

For your edification and future success, please read the “How to Email a Professor” handout.

Course Schedule

Session	Topics	Activities/Text & Materials/Media
#1	Class Overview Ancient Civilizations	Lecture-Discussion Reading: The Epic of Gilgamesh Worksheet: What are the humanities?
#2	Ancient Greek Civilization	Lecture-Discussion Plagiarism tutorial and quiz
#3	Introduction to Filmmaking Homer’s Iliad and Odyssey	Lecture-Discussion Videos (to be watched before class): Troy, The Odyssey. Group project assignment
#4	Ancient Greek Culture and Philosophy	Lecture-Discussion Reading: Plato’s Allegory of the Cave. Fallacies of Reasoning. Worksheet: Greek Philosophy
#5	Ancient Rome	Lecture-Discussion Worksheet:
#6	Abrahamic Religions: Judaism Christianity Islam	Lecture-Discussion Reading: Genesis 1-3 Worksheet: Abrahamic Religions
#7	The Middle Ages The Renaissance	Lecture-Discussion Worksheet: The Renaissance
#8	The Northern Renaissance: Protestant Reformation Shakespeare’s Hamlet	Lecture-Discussion Video: Hamlet Reading: To Be or Not To Be
#9	The Scientific Revolution	Lecture-Discussion Reading: How we know the earth is old
#10	The Enlightenment	Lecture-Discussion Worksheet: The Age of Enlightenment

#11	Industrial Revolution Romanticism	Lecture-Discussion Reading: Excerpts from Adam Smith and John Stuart Mill
#12	The Twentieth Century: World Wars Existentialism	Lecture-Discussion Worksheet: The 20 th Century
#13	Modernity: Modern Art Modern Architecture Post-Modernism	Lecture-Discussion Worksheet: Modern Art and Architecture
#14	Group Projects	Group project feedback survey
#15	Contemporary Topics in the Humanities	Lecture-Discussion

Course Outline

TU 116 Man and Arts: Visual Art, Music and Performing Arts

Course Syllabus

Objectives

A study of the 3-dimensional relationship of man, the arts and society through the functions of the art and its aesthetic values from the past until the present. Aesthetic theories of painting, music and theatre are analyzed through the comparison of human values of the West, the East and Thailand. The elements of artistic form are used as a tool to interpret the content and value of the work of arts.

Course Description

A study of the principal theories of art as the fundamental understanding for art appreciation and its role on human and the society. A consideration of unique relationship between creativity of man, the meaning of art and its values. A practice on being a critic of the arts.

Painting, theatre and music are individually analyzed through their forms, contents, subject matters, functions and meanings. The ideologies and aesthetic concepts of each art form are examined through the comparison of the West, the East and Thai artist's world views and their intention as expressed through their works as the concluded session.

Topics to Be Covered

A Work of Art
Artistic Form, Content and Subject Matter
Value
Being a Critic of the Arts
Criticism
Painting
Performing Arts
Music

Reading List for TU 116

1. Humanities through the Arts by F. David Martin, Lee Jacobus, McGraw-Hill, 2007
2. Art and Human Values by Melvin Rader Prentice-Hall, New Jersey, 1976
3. The Aesthetics of Music by Roger Scruton Oxford University Press, Oxford, 1999
4. Poetics by Aristotle, Translated by Malcolm Heath Penguin Books, London, 1996
5. Dance, Drama and Theatre in Thailand by Mattani Rutnin Centre for East Asian Cultural Studies for UNESCO, Tokyo, 1993
6. Transformation of the Thai Concepts of Aesthetics by Mattani Rutnin, Thai Khali Institute, Bangkok, 1981

Activity

Lecture and presentation
Individual and group reports and presentation
Field Study

Class Schedule

Class	Date	Topics
1		Introduction on a Work of Art
		Class cancelled
2		What is a Work of Art vs. Non Art
3		Criticism I
4		Criticism II
5		Summary and Midterm Quiz
6		Painting I
7		Painting II
8		Painting and Gallery Visit (16.30-19.30) make up class for 14/01/13
9		Performing Arts I
10		Performing Arts II
11		Music I
12		Music II
13		Discussion and Preparation for Final Group Project
14		Group Presentation and Report I (12.00-15.00)
15		Group Presentation and Report II (15.00-18.00)

Reading List for TU 116

1. Humanities through the Arts by F. David Martin, Lee Jacobus, McGraw-Hill, 2007
2. Art and Human Values by Melvin Rader Prentice-Hall, New Jersey, 1976
3. The Aesthetics of Music by Roger Scruton Oxford University Press, Oxford, 1999
4. Poetics by Aristotle, Translated by Malcolm Heath Penguin Books, London, 1996
5. Dance, Drama and Theatre in Thailand by Mattani Rutnin Centre for East Asian Cultural Studies for UNESCO, Tokyo, 1993
6. Transformation of the Thai Concepts of Aesthetics by Mattani Rutnin, Thai Khali Institute, Bangkok, 1981

Assessment

Classroom attendance	10%
Midterm In-class quizzes	10%
Group paper on the gallery visit	20%
Group presentation and paper	20%
Final examination	40% (May 10, 2013, 09.00 – 12.00)

Course Outline

TU 120 Integrated Social Sciences

Number of credits 2 credits

Course Description:

A study of the origin of social sciences in the modern world, the separation of social science from science, and the acceptance of scientific paradigm for the explanation of social phenomena. The course presents an analysis of significant disciplines, concepts and theories in social science by pointing out their strengths and weaknesses when applied to social problems. The course also includes analysis of current issues with the application to social theories so that each issue is understood from the individual group, macro-social, national and world perspectives.

Prerequisites: none

Course Objective:

There is a body of knowledge that all educated people share. The objective of this course is to introduce you to one area of that shared knowledge; the social sciences. A simple definition of the social sciences is the scientific study of organized groups. This includes, but is surely not limited to: economics, sociology, political science, psychology, anthropology, demographics, cultural geography etc. You will experience a basic introduction to the various fields of study and the opportunity to apply that information to your own life circumstances. When you have completed the course you will have joined a community of educated people around the world who share a common knowledge and understanding of the social sciences.

Course Structure:

The course structure and its accompanying textbook emphasize comprehensive coverage of the social sciences by introductory review of historical and current academic thought in each area and its application to societal structures. This information is then supplemented with examples from, and analysis of, different cultures. A strong emphasis is placed on the application of social science theory to enhance student understanding of Thai society and culture.

Learning Activities:

Learning activities include assigned readings, lectures, class discussions, structured debates, group writing exercises and topical video documentaries.

Group work, which counts for 20 points, includes the following activities:

1. Civil law negligence legal analysis writing activity. Groups will analyze a fact pattern and apply the elements of negligence to determine commercial liability for negligence. The learning goal is to explore how civil law organizes, structures and regulates society and business activity. (10 points)

2. Zimbabwe group debate. Groups will represent different countries in a mock UN debate on international relations with Zimbabwe. The learning goal is to experience and understand the complex issues involved in international relations. (5 points)

3. Gandhi and non-violence. Groups will analyze a current political conflict from the perspective of Gandhi’s philosophy of non-violence. The learning goal is to challenge students to explore their own beliefs about when, if ever, violence is appropriate. (5 points)

Grading:

Midterm 35 points
 Final 45 points
 Group Work 20 points

Total 100 points

Grade Criteria:

A 90-100
 B+ 85-89
 B 80 -84
 C+ 75-79
 C 70-74
 D+ 65-69
 D 60-64
 F Less than 60

Required Text and Materials:

Social Science: An Introduction to the Study of Society; Fourteenth Edition; by Hunt and Colander.

Published by Pearson Education Inc.

Handouts will be sent to students prior to class using Moodle.

Course Schedule:

Session	Topics	Reading
1	Social science and its methods	Chapter 1
2	The functions and forms of governments Video: 14 October	Chapter 13
3	The functions and forms of governments	Chapter 13
4	Jurisprudence and the regulation of society – Criminal Law	Handout
5	Jurisprudence and the regulation of society – Civil Law Group project 1: Commercial liability analysis	Handout
6	International institutions and the search for peace	Chapter 21
7	Society, culture, and cultural change	Chapter 4
	Midterm on classes 1-7	
8	Gandhi and peaceful social/political change Video: Gandhi	Handout

	Group project 2	
9	Gandhi and peaceful social/political change Video: Gandhi Group project 2	
10	International political relations Group activity 3: Zimbabwe group debate	Chapter 18 Handout
11	International political relations Group project 3: Zimbabwe group debate	Handout
12	Geography, demography, ecology, and society Video: David Attenborough Documentary	Chapter 5
13	The political economies of developing countries	Chapter 20
14	The political economies of developing countries	Chapter 20
15	Technology and society Review for final exam	Chapter 6

Course Outline

TU 130 Integrated Sciences and Technology

Number of credits: 2 credits

Course Description:

A study of scientific concepts, theories and rules concerning inorganic particles from the planetary level to particle levels, and to molecule and atom levels, the interaction between atom and molecule, chemical and inorganic chemical reaction relating to biological conditions of living things and the evolution of life on the planet. It explores basic concepts in science and technology that are pertinent to modern day living, important debated concerning the relationship between science and technology and the environment and society and their distinctive features as separate fields of knowledge.

Prerequisite: none

Course Objectives:

1. For the students to appreciate the importance of Science and Technology
2. To realize that one needs to live in harmony with the nature.

Text and Materials:

1. Butz, Stephen D., "Science of Earth Systems", Thomson Learning, Inc., New York, 2004.
2. Emiliani, Cesare, Planet Earth: Cosmology, Geology and the Evolution of Life and Environment, Cambridge University Press, 1992.
3. Sagan, Carl, Pale Blue Dot, Random House, Inc., New York, 1994.
4. Sullivan III, W.T. and Baross, J.A., "Planets and Life", Cambridge University Press, Cambridge, UK, 2007.
5. Trefil, James, and Hazen, Robert M., "The Sciences: An Integrated Approach" 5th Edition, John Wiley & Sons, Inc., New York, 2007.

Grading:

Midterm Examination	40%
Final Examination	60%
Total	100%

Course Schedule:

Week	Topic	Teaching Materials
1 - 2	Development of Science and Technology	Power Point and DVD
3	Matter and Energy	Power Point and DVD
4 - 5	Human and the Universe	Power Point and DVD
6 - 8	Formation and Evolution of the Earth	Power Point and DVD
9 - 12	The Beginning and Evolution of Life on Earth	Power Point and DVD
13 - 15	The Impacts of Science and Technology to Everyday Life	Power Point and DVD

Course Outline

TU 152 Fundamental Mathematics

Number of credits 3 credits

Course Description

Logical rule for proving; methods of proofs, arguments, mathematical induction, proofs of theorems of inequalities and absolute values, inequalities solving, functions, type of functions, applications of functions, curve sketching, partial fractions decomposition, solving of simple systems of linear equations.

Prerequisites - none

Recommended Text and Materials:

Epp, S.S. **Discrete Mathematics with Applications**, 4th Edition, Brooks/Cole Cengage Learning, 2011.

Ferland, K., **Discrete Mathematics: An Introduction to Proofs and Combinatorics**, Houghton Mifflin Company, 2009

Stewart J., **Calculus**, 7th Edition, Brooks/Cole Cengage Learning, 2012.

Haeussler, E. F., Jr., et al., **Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences**, 13th Edition, New Jersey: Prentice Hall, 2011.

Course Evaluation:

Midterm Examination	40%
Final Examination	40%
Term Project & Class Activities	10%
Quizzes	10%

Course Schedule:

Session/Date	Topic	Activities/Text & Materials/Media
	Course Overview Chapter 1: Speaking Mathematically	Discussion Lecture (Epp, S.S., <i>Discrete Mathematics with Applications</i> , 4 th Edition)
	Chapter 2: The Logic of Compound Statements	Lecture (Epp, S.S., <i>Discrete Mathematics with Applications</i> , 4 th Edition) Discussion Practice Quiz

	Chapter 3: The Logic of Quantified Statement	Lecture (Epp, S.S., <i>Discrete Mathematics with Applications</i> , 4 th Edition) Discussion Practice
	Chapter 4: Elementary Number Theory and Methods of Proof	Lecture (Epp, S.S., <i>Discrete Mathematics with Applications</i> , 4 th Edition) Discussion Practice
	Chapter 5: Sequences, Mathematical Induction, and Recursion	Lecture (Epp, S.S., <i>Discrete Mathematics with Applications</i> , 4 th Edition) Discussion Practice Quiz
	Chapter 6: Set Theory	Lecture (Epp, S.S., <i>Discrete Mathematics with Applications</i> , 4 th Edition) Discussion Practice
	Chapter 7: Functions	Lecture (Epp, S.S., <i>Discrete Mathematics with Applications</i> , 4 th Edition) Discussion Practice
	Chapter 8: Relations	Lecture (Epp, S.S., <i>Discrete Mathematics with Applications</i> , 4 th Edition) Discussion Practice Quiz
	Chapter 1: Functions and Limits	Lecture (Stewart, J., <i>Calculus</i> , 7 th Edition) Discussion Practice Quiz
	Chapter 2: Derivatives	Lecture (Stewart, J., <i>Calculus</i> , 7 th Edition) Discussion Practice Quiz
	Chapter 3: Applications of Differentiation	Lecture (Stewart, J., <i>Calculus</i> , 7 th Edition) Discussion Practice Quiz

	Chapter 3: Applications of Differentiation	Lecture (Stewart, J., <i>Calculus</i> , 7 th Edition) Discussion Practice Quiz
	Partial Fraction Decomposition	Lecture (Instructor's handouts) Discussion Practice Quiz
	Partial Fraction Decomposition	Lecture (Instructor's handouts) Discussion Practice Quiz
	Review	Project presentation

Term project

Students in a group of 5-6 need to submit and present the term projects, which consists of

1. Math in everyday life

Students need to find interesting article (from book, internet, etc.) that shows how Mathematics can make life better. Each group needs to write up a summary of what you read and submit your report on November 26, 2013.

2. Math for accounting, or finance, or marketing

Same group of students write up a report explaining how contents in this class can be applied in either accounting, or finance, or marketing. This can include examples of uses, etc. The work must be submitted on November 26, 2013.