Course Outline

EE 431 Economics of Financial Markets and Institutions

Semester: 1/2013

Instructor: Sicha Thubdimphun (sicha@econ.tu.ac.th)

Office: Room 470

Office hours : Tuesday and Thursday, 10.00 – 11.30 AM. or by appointment

Time : Tuesday and Thursday, 8.00 – 9.30 AM.

Class venue: Room 201, 2nd floor

Midterm Exam: October 1, 2013; 8.00 – 9.30 AM

Final Exam: December 6, 2013; 1.30 – 4.30 PM

Prerequisite: EE311

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.

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 9.

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?

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

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

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

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.

If a student is not convenient to meet at the lecturer's office hours, please make an appointment in advance via email. Please allow enough time (at least 2 working days) for the lecturer to confirm the appointment. The student also should confirm such an appointment by emailing back.