

Course Syllabus

EE 431 Economics of Financial Markets and Institutions

Semester 1/2021 (August 9 – November 27, 2021)

- 1. Number of credits:** 3 credits (3-0-6)
2. Lecture Date and Time: Tuesday and Thursday, 8.00 – 9.30 AM.

3. Class Online Contact:

- 3.1 Class Venue:** Online Meeting Platform: Zoom
Meeting ID: 938 7671 5901
Passcode: ee431sicha

- 3.2 Class Material Repository:** Online LMS: Google Classroom
Invitation Link: <https://classroom.google.com/c/Mzc1NDA3NTkxMjl4?cjc=szhl3kj>
Passcode: szhl3kj

- 3.3 Line Official:** <https://lin.ee/bXyXCS7>



Note that this Line official is very important. We will use it to announce important news and we will use it for the exams. Please also note that I am not very responsive to this Line official. If you would like to contact me, please email.

4. About instructor:

Instructor's Name: Asst.Prof. Dr. Sicha Thubdimphun
Contact Information: sicha@econ.tu.ac.th

Office hours: appointment via email, meet via zoom

5. 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.

6. Prerequisite: EE311

7. Objective of the course:

- (1) To provide students with understanding of financial asset characteristics; risk, return and liquidity
- (2) To provide students with understanding of debt market and interest rate at microeconomic level.
- (3) To provide students with understanding of decision process for investment in financial assets at microeconomic level, where investors seek to maximize their expected utility under constraint (combination of risk and returns available in the financial market)
- (4) To provide students with understanding of diversification, degree of risk aversion, risk premium, which are important determinants of the equilibrium price of financial assets in the financial market.
- (5) To provide students with how to derive of equilibrium in the financial market
- (6) To provide students with understanding of asymmetric information problem in the financial market and the role of financial intermediaries
- (7) To provide students with understanding of risk management of financial institutions
- (8) To provide students of understanding of agency problem and excessive risk-taking in the financial market and how to mitigate the situation
- (9) To provide students with understanding of bank's liquidity creation, bank's liquidity problem, bank runs and deposit insurance

8. Evaluation

Homework	10%
Quiz	15%
In-class activities	5%
Mid-term exam	30% (Topic 1 – Topic 4)
Final exam	40% (Topic 4 – Topic 8)

Mid-Term Examination: 28 September 2021, 9.00 – 11.00 hr.

Final Examination: 8 December 2021, 13.30 -16.00 hr.

Remarks:

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

9. Teaching Materials and Resources

Required Text:

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

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

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

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

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

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

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

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

Lecture presentation will be provided by the lecturer.

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

10. Lecture/Schedule

Topics	Reading
Part I : Economic Analysis of Asset Prices	
Topic 1. Financial assets and the overview of financial market (1 time)	FM2009
1.1 Money and functions of money	Ch. 1-3
1.2 Money, Wealth and Income	
1.3 Financial Market and Financial Assets	
1.4 Financial Assets Classified by Information Theory	
1.5 Flows of Funds in The Financial Market	
1.6 Structure of Financial Market	
Topic 2. Debt Market and Structure of interest rates (7 times)	FM2009
2.1 Measuring Interest Rates	Ch.4-6
2.2 Nominal Interest Rates and Real Interest Rates	
2.3 The Behavior of Interest Rates	
2.4 Risk and Term Structure of Interest Rates	
Topic 3. Mean-Variance Analysis (3 times)	Copeland2005
3.1 Measuring Risk and Returns for a Single Asset	Ch.5
3.2. Measuring Portfolio Risk and Returns	
3.3. Efficient Frontier with Two Risky Assets	
3.4. Efficient Frontier with One Risky and One Risk Free Asset	
3.5. Optimal Portfolio Choice N Risky asset	
3.6. Optimal Portfolio Choice N Risky asset and One Risk Free Asset	
Topic 4: Capital asset pricing model (CAPM) and Arbitrage Pricing Theory (APT) (4 times)	Copeland2005
4.1 Capital Asset Pricing Model	Ch.6
• 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	
Topics	Reading
Part II : Financial Institution, Financial Market and Asymmetric Information	

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

11. Important dates:

ACADEMIC CALENDAR & HOLIDAY SEMESTER 1/2021

Semester 1/2021 (August 9 - November 27, 2021)	
Classes Begin	August 9, 2021
Add-drop period	August 16 – 19, 2021
Tuition Fee Installment Plan For ID.61-63 only <i>(9 AM - 10.30 PM)</i>	#Round 1 (July 16 – 18, 2021) #Round 2 (August 20 – 22, 2021) #Round 3 (September 20 – 22, 2021)
<i>H.M. Queen Sirikit The Queen Mother's Birthday*</i>	<i>August 12, 2021</i>
Mid-term Examination Period	September 27 - October 3, 2021
Withdrawal period with "W" on record	October 11 - November 15, 2021
<i>H.M. King Bhumibol Adulyadej The Great Memorial Day*</i>	<i>October 13, 2021</i>
<i>King Chulalongkorn's Day*</i>	<i>October 23, 2021</i>
<i>Substitution for King Chulalongkorn's Day*</i>	<i>October 25, 2021</i>
Last day of class for Semester 1/2021	November 27, 2021
Final exam period	November 29-30, December 1-3, 7-9, 11-17, 2021
<i>H.M. King Bhumibol Adulyadej The Great's Birthday*</i>	<i>December 5, 2021</i>
<i>Substitution for H.M. King Bhumibol Adulyadej The Great's Birthday*</i>	<i>December 6, 2021</i>
<i>Constitution Day*</i>	<i>December 10, 2021</i>

Remark * Holiday, No classes during this period

12. Class Policies:

Any changes to the course outline (if any) **will be announced in the Zoom Class, Google Classroom or Line Official**. It is the responsibility of the students to obtain any information announced in the class. Ignorance of such information due to 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. Please make an appointment in advance via email. Please allow enough time (at least 2 working days) for the lecturer to confirm the appointment. I will be available for you only if you confirm such an appointment by emailing back.

Attendance is highly encouraged
Proper manner and courtesy are expected
A student may contact me by sending email.

On the night before a text/an exam the cut off for any question is 7.00 pm. via email, I can provide only short answer. If you prefer long answer, please come to visit me by making an appointment.