

## Course Syllabus

### **EE 431 Economics of Financial Markets and Institutions**

Semester 1/2023 (August 15th – December 4th, 2023)

- 1. Number of credits:** 3 credits (3-0-6)  
**2. Lecture Date and Time:** Tuesday, 9.00 AM. – 12.00 PM.  
**3. Class Venue:** Room 204, Faculty of Economics building  
**4. Online Contact:**  
**Class Material Repository:** <https://classroom.google.com/c/NjE2NjIxOTI1NzEw?cjc=f3ioxis>

**Line Official:**



**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 responsive to this Line official account. If you would like to contact me, please email me.**

**5. About instructor:**

Instructor's Name: Asst.Prof. Dr. Sicha Thubdimphun

Contact Information: [sicha@econ.tu.ac.th](mailto:sicha@econ.tu.ac.th)

**Office hours: appointment via email.**

**6. 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.

**7. Prerequisite:** EE311

**8. The objective of the course:**

- (1) To provide students with an understanding of financial asset characteristics, risk, return, and liquidity
- (2) To provide students with an understanding of the debt market and interest rates at the microeconomic level.

- (3) To provide students with an understanding of the decision process for investment in financial assets at the 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 an understanding of diversification, degree of risk aversion, and 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 equilibrium in the financial market
- (6) To provide students with an understanding of asymmetric information problems in the financial market and the role of financial intermediaries
- (7) To provide students with an understanding of the risk management of financial institutions
- (8) To provide students of an understanding of agency problems and excessive risk-taking in the financial market and how to mitigate the situation
- (9) To provide students with an understanding of a bank's liquidity creation, bank liquidity problem, bank runs, and deposit insurance

## 9. Evaluation

Homework/Quiz	15%
Mid-term exam	35% (Topic 1 – Topic 4)
Final exam	50% (Topic 4 – Topic 8)
<b>Mid-Term Exam</b>	Tuesday, October 3, 2023; 09.00-11.00 hrs.
<b>Final Exam (Required)</b>	Monday, December 18, 2023; 09.00-12.00 hrs.

### Remarks:

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

## 10. Video Recording Policy

Make-up classes may be recorded for the convenience and review of students who are unable to attend in person. However, regular classes will not be recorded. If you cannot attend a make-up class, please inform the instructor in advance so arrangements can be made for the recording.

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

## 11. Grading Criteria:

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

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

## 12. Teaching Materials and Resources

### Required Text:

Frederic Mishkin, The Economics of Money, Banking and Financial Markets 9<sup>th</sup> 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 2<sup>nd</sup> 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*.

### A 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.

## 13. Expected Learning Outcomes

### 1. Morality and Ethics **EE<sub>A</sub>**

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

### 2. Knowledge

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students know and understand modern economics principles and theories, and are up to date with new developments.	In-class participations / Quizzes & HW / Exams
●	2. Students know and understand Thai and global economic structure and the importance of major international economic events.	In-class participations / Quizzes & HW / Exams

●	3. Students know and understand the instruments of economic analysis.	In-class participations / Quizzes & HW / Exams
●	4. Students know and understand applied fields in economics, including monetary, public, international, business, natural resource, and environmental, industrial, agricultural, cooperative, political, developmental, and entrepreneurial economics as well as agribusiness.	In-class participations / Quizzes & HW / Exams
○	5. Students are informed about related fields including sociology, business administration, education, law policy, and science.	

### 3. Intellectual Development

Applicability	Expected Learning Outcomes	Evaluation Method
●	1. Students have developed individual critical thinking.	In-class participations / Quizzes & HW / Exams
●	2. Students are sufficiently trained in research skills.	In-class participations / Quizzes & HW / Exams
●	3. Students demonstrate an ability to analyze and synthesize data, as well as appropriately integrate economics concepts to understand the causes of current economic problems in Thailand. Based on analysis and synthesis, students demonstrate an ability to propose policy guidelines to resolve problems.	In-class participations / Quizzes & HW / Exams

### 4. Interpersonal Skills and Responsibilities

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

### 5. Quantitative Analysis, communication, and information technology

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

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

Remark: ● Primary expected outcome ○ Secondary expected

## 14. Lecture/Schedule

Topics	Reading
<b>Part I : Economic Analysis of Asset Prices</b>	
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 Ch.5
3.1 Measuring Risk and Returns for a Single Asset	
3.2. Measuring Portfolio Risk and Returns	
3.3. Efficient Frontier with Two Risky Assets	
3.4. Efficient Frontier with One Risky and One Risk Free Asset	
3.5. Optimal Portfolio Choice N Risky asset	
3.6. Optimal Portfolio Choice N Risky asset and One Risk Free Asset	
Topic 4: Capital asset pricing model (CAPM) and Arbitrage Pricing Theory (APT) (4 times)	Copeland2005 Ch.6
4.1 Capital Asset Pricing Model	
<ul style="list-style-type: none"> <li>● Portfolio Diversification and Individual Asset Risk</li> <li>● Assumptions</li> </ul>	

Topics	Reading
<ul style="list-style-type: none"> <li>• The Efficiency of Market Portfolio</li> <li>• Derivation of CAPM</li> <li>• Properties of CAPM</li> </ul>	
4.2 Arbitrage Pricing Theory	
<ul style="list-style-type: none"> <li>• Arbitrage Opportunity</li> <li>• Replicating Portfolio</li> <li>• Derivation of Arbitrage Pricing Theory</li> </ul>	

Topics	Reading
<b>Part II : Financial Institution, Financial Market and Asymmetric Information</b>	
Topic 5. Financial institutions (2 times)	FM2009
5.1 Introduction	Ch.9 -11
5.2 Major risks faced by banks	
5.3 Liquidity Management and The Role of Reserve	KM 2008
5.4 Interest Rate Risk Management	Ch.7
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 bondholders and stockholders	KM 2008
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	

## 15. Other Policies:

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

Attendance is highly encouraged

Proper manner and courtesy are expected

A student may contact me by sending an email.

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

## 16. Academic Calendar & Holiday



### ACADEMIC CALENDAR & HOLIDAY SEMESTER 1/2023

Semester 1/2023 (August 15 – December 4, 2023)	
<b><i>the TU Office of the Registrar (TU REG) will process the registration (semester 1/2023) for all BE students who have completed the pre-registration via BE Portal.</i></b>	July 17 – 20, 2023
Tuition Fee Payment Period (Via TU Greats App)	July 21 – August 11, 2023
Create Plan from Quota via TU Greats App (*ID.66)	August 1 - 9, 2023
Registration via TU Greats App (*ID.66)	August 10, 2023
Classes Begin	August 15, 2023
Add-drop period	August 15 – 28, 2023 <i>(from 9.00 AM of August 15 to 10.30 PM of August 28)</i>
Tuition Fee Payment Period (Via TU Greats App)	August 15 – 29, 2023 <i>(9 AM - 10.30 PM)</i>
Mid-term Examination Period	October 1 – 7, 2023
<i>H.M. King Bhumibol Adulyadej The Great Memorial Day*</i>	<i>October 13, 2023</i>
<i>King Chulalongkorn's Day*</i>	<i>October 23, 2023</i>
Withdrawal period with "W" on record	September 4 – October 22, 2023 <i>(from 9.00 AM of September 4 to 10.30 PM of October 22)</i>
Special Withdrawal with "w" on record	October 24 – November 20, 2023
Last day of class for Semester 1/2023	December 4, 2023
Final exam period	December 12 – 23, 2023
<i>H.M. King Bhumibol Adulyadej The Great's Birthday*</i>	<i>December 5, 2023</i>
<i>Constitution Day*</i>	<i>December 10, 2023</i>
<i>Substitution for Constitution Day*</i>	<i>December 11, 2023</i>
Submitting Forms for Degree Conferral	August 15 – 28, 2023

Remark \* Holiday, No classes during this period  
Updated: July 24, 2023