

Bachelor Degree in Business Administration Program
Department of Banking and Finance
Faculty of Commerce and Accountancy
Chulalongkorn University

1. **Course Number** 2604482
2. **Course Credit** 3
3. **Course Title** Fixed Income Security Analysis /
การวิเคราะห์ตราสารหนี้ที่ให้อำนาจซื้อ / FIX INC SEC ANAL
4. **Faculty / Department** Commerce and Accountancy / Banking and Finance
5. **Semester** 2
6. **Academic Year** 2017
7. **Instructors** Tanawit Sae-Sue, Ph.D.
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8. **Condition**
☒ Prerequisite ☐ Co-requisite
☐ Corequisite ☐ Consent of Faculty
☐ None
9. **Status** ☐ Compulsory Courses ☒ Elective course
10. **Curriculum** Bachelor Program in Business Administration (Thai)
11. **Degree** Bachelor Degree
12. **Hours / Week** 3 Hours

13. Course Description

Types and characteristics of fixed-income securities; roles of fixed-income markets; risks associated with investing in fixed-income securities; fixed-income securities pricing; analysis of price volatility in fixed-income securities; structure of interest rates; fixed-income securities from securitization; objective and investment process of fixed-income security portfolios; strategies in fixed-income security portfolio management; asset and liability management for financial institutions.

14. Course Outline

14.1 Objectives

No.	Course Objectives	Learning Outcome*	Teaching Approach	Evaluation Approach
1	Be able to derive the price of various fixed income securities as well as analyzing the price impact due to relevant factors	1, 2, 4.3, 4.4, 5.1, 5.2	1, 2	1, 7
2	Be able to use fixed income securities as a tool to hedge or manage investment in an advantageous financial position	1, 2, 4.3, 4.4, 5.1, 5.2	1, 2	1, 7

14.2 Contents

Week	Date	Description	Course Objectives	Assignment (due date)
1	M Jan 8, 18	Overview of fixed income markets. Bond pricing fundamentals	1	
2	M Jan 15, 18	Interest rates	1	
	M Jan 22, 18	No class – Intercollegiate sports		
3	M Jan 29, 18	Yield measures, accrued interest	1	HW 1
4	M Feb 5, 18	Sensitivity analysis I: DV01 and duration	1, 2	
5	M Feb 12, 18	Sensitivity analysis II: Convexity	1, 2	HW 2
6	M Feb 12, 18 (4-6PM)	Sensitivity analysis III: Multi-factor models	1, 2	
7	M Feb 19, 18	Swaps	1, 2	
	M Feb 26, 18	No class		HW 3
	W Mar 7, 18	Midterm Exam	1, 2	
8	M Mar 12, 18 1-5PM [+1 hour extra]	- Risk-neutral pricing in binomial models	1	
9	M Mar 19, 18 1-5PM [+1 hour extra]	- Interest rate models	1	
10		- Fixed income derivatives		
	M Mar 26, 18	No class		HW 4
11	M Apr 2, 18	Forwards and futures	1, 2	
12	M Apr 9, 18	Mortgage-backed securities I	2	HW 5
	M Apr 16, 18	No class – Songkran		
13	M Apr 23, 18	Mortgage-backed securities II	1, 2	
14	M Apr 30, 18	Monte-Carlo simulation	1	HW 6
	Tu May 15, 18	Final Exam	1, 2	

14.3 Teaching Aids

Whiteboard

PowerPoint slides

14.4 Course Evaluation

Midterm Exam: 40%

Final Exam: 40%

Homework: 20%

Homework Policy

There will be 6 assignments in total for this course. All the assignments are due at the beginning of class (1 PM) on the due date. Late assignments will not be accepted. Make sure your hand-in assignment contains your name (please PRINT) and all other relevant information. Please make an effort to organize and present your result clearly in your work. Unreadable or poorly organized work will receive no credit.

You are encouraged to work together on the homework assignments. However, you must submit individually written/typed up work and you should only submit material which you fully understand. This implies in particular that if requested you can re-produce your work. In other words, collaboration is not, in itself, cheating, and working in groups can be an excellent way to learn material. On the other hand, the inability to adequately explain any submitted work will be treated as strong evidence of academic dishonesty. It can be very easy to mistakenly think you understand something that someone has helped you with. One good practice for people who work in groups is to work together, but write solutions separately.

Grading Policy

Due to the nature of the course that require calculations and mathematical reasoning, your work will be graded on solutions/calculation methods and not just answers. Correct answers from poorly justified arguments are not correct solutions. Partial credits should not be expected but may be given according to the instructor's judgement.

The weighted average determines your grade according to guideline below:

F	D	D ⁺	C	C ⁺	B	B ⁺	A
< 50	50-54	55-59	60-64	65-69	70-79	80-84	≥ 85

These are the grades you are guaranteed, however, the instructor reserves the right to bump students' grades up at his discretion.

15. List of Materials

15.1 Required

None

15.2 Optional

- Bruce Tuckman and Angel Serrat (2012), *Fixed Income Securities: Tool for Today's Market*. John Wiley & Sons, Inc.
- Pietro Veronesi (2010), *Fixed Income Securities: Valuation, Risk, and Risk Management*. John Wiley & Sons, Inc.

15.3 Electronic / Web sites Blackboard

16. Teaching Evaluation

16.1 Type of Evaluation

Online course evaluation

16.2 Changes made in accordance to previous teaching evaluation

N/A

16.3 Discussion or Analysis which develops Desired Characteristics of Chulalongkorn University

- Knowledge
- Skill
- Ethics
- Social

17. Code of Conduct

Here is a small part of the Code of Conduct for Penn State students.

“Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at The Pennsylvania State University, and all members of the University community are expected to act in accordance with this principle. Consistent with this expectation, students should act with personal integrity, respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts. Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others.

Academic dishonesty includes, but is not limited to, cheating, plagiarism, fabrication of information or citations, facilitation of acts of academic dishonesty by others, unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, and tampering with the academic work of other students”

We adopt this statement in this course. Students who fail to comply with this statement will be given a **Fail grade as a minimum punishment.**

In this course, students who make theirs and/or the works of others available to someone who may engage in academic dishonesty due on the availability of such works will be given a **Fail grade as a minimum punishment** as those students facilitate the acts of academic dishonesty.

All students are required to read and understand the content available in the following website before they submit the first homework: http://en.wikipedia.org/wiki/Academic_dishonesty

***Notes**

Desired Characteristics of Chulalongkorn University Graduates			
No.	Outcomes		
1	Being knowledgeable	1.1	Possessing well-rounded knowledge
		1.2	Possessing in-depth knowledge
2	Having good morals	2.1	Being moral and ethical
		2.2	Having an awareness of etiquette
3	Having higher order thinking skills	3.1	Being able to think critically
		3.2	Being able to think creatively
		3.3	Having skills in problem solving
4	Possessing essential capabilities	4.1	Having professional skills
		4.2	Having communication skills
		4.3	Having skills in information technology
		4.4	Having mathematical and statistical skills

		4.5	Having management skills
5	Having an inquiring mind and knowing how to learn	5.1	Having an inquiring mind
		5.2	Knowing how to learn
6	Having leadership qualities		
7	Maintaining well-being		
8	Being community-minded and possessing social responsibility		
9	Sustaining Thainess in a globalized world		

No.	Teaching Methods
1	Lecture
2	Discussion
3	Seminar
4	Deductive
5	Inductive
6	Case
7	Role playing
8	Field work
9	Field trip
10	Simulation
11	Dramatization
12	Demonstration
13	Learning center
14	Game
15	Experiment
16	Programmed instruction/Computer-aided instruction/Blended learning Online learning
17	Practice

18	Practicum (including teaching practicum)
19	Research-based instruction
20	Problem-based instruction
21	Reflective thinking
22	Inquiry-based instruction
23	Independent study
24	Self-directed learning
25	Project-based instruction
26	Learning from model persons/learned persons
27	Micro teaching
28	Supervision
29	Cooperative learning
30	Individual advice
31	Tutorial group
32	Brain storming
33	Summary of main topics, or presentation of reading assignment
34	Apprentice
35	Activities
36	Clinical bed-side teaching or patient-based learning
37	Practice in behavior manifestation
38	Observation trip
39	Self study
40	Others (Please specify)
No.	Evaluation Methods
1	Written examination
2	Oral examination
3	Skills examination

4	Behavior observation
5	Assessment of work processes/activity roles
6	Assessment of output/lessons based on students' experience
7	Homework assessment
8	Report/Project assessment
9	Diary/Journal assessment
10	Performance testing
11	Assessment of report criticism/presentation
12	Assessment of result of team-work effort
13	Self assessment
14	360 Degrees assessment
15	Peer assessment
16	Oral presentation
17	Class attendance
18	Others (Please specify)