

## Tamkang University Academic Year 112, 1st Semester Course Syllabus

Course Title	FIXED INCOME SECURITIES AND FINANCIAL INNOVATION	Instructor	LIN, CHEN-SHENG
Course Class	TLUXM1A TKU-QUT DUAL MASTER DEGREE PROGRAM IN FINANCE (ENGLISH-TAUGHT PROGRAM), 1A	Details	<ul style="list-style-type: none"> <li>◆ General Course</li> <li>◆ Selective</li> <li>◆ One Semester</li> </ul>
Relevance to SDGs	SDG4 Quality education SDG8 Decent work and economic growth		
<b>Departmental Aim of Education</b>			
I. To cultivate a professional understanding of the theory and skills of finance. II. To be able to solve practical problems by professional knowledge of finance. III. Possess the ability to communicate and express views regarding financial profession. IV. Emphasize corporation and coordination within a team. V. To expand international vision and civic awareness.			
<b>Subject Departmental core competences</b>			
A. Have a strong grasp of the advanced knowledge and skills in professional finance. (ratio:20.00) B. Possess the advanced application ability to financial practices.(ratio:20.00) C. To be capable of communicating and expressing views in terms of advanced finance. (ratio:25.00) D. Illustrate the ability of corporation and coordination within a team.(ratio:20.00) E. Understand international financial issues and corporate responsibility.(ratio:15.00)			
<b>Subject Schoolwide essential virtues</b>			
1. A global perspective. (ratio:20.00) 2. Information literacy. (ratio:20.00) 3. A vision for the future. (ratio:20.00) 4. Moral integrity. (ratio:10.00) 5. Independent thinking. (ratio:10.00) 6. A cheerful attitude and healthy lifestyle. (ratio:10.00) 7. A spirit of teamwork and dedication. (ratio:5.00)			

8. A sense of aesthetic appreciation. (ratio:5.00)

**Course Introduction**

This course provides an in-depth analysis of fixed-income securities valuation, market operations, and risk management. It covers a wide range of topics, including bond valuation, bond price volatility determination, interest rate risk measurement, term structure of interest rates, interest-rate models, and credit risk modeling. Over the past few decades, the financial industry has experienced rapid transformation due to advancements in technology. This course acknowledges the evolving landscape and incorporates discussions on financial innovations.

**The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.**

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.

II.Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.

III.Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	Understand the pricing of bonds and their investment characteristics.	Cognitive
2	Learn analytical tools used in interest rate modeling and risk management.	Cognitive
3	Understand the meaning of financial innovation within the financial system.	Cognitive
4	To help students formulate research ideas and methodologies in the field of finance.	Cognitive

**The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment**

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDE	12345678	Lecture, Discussion	Testing, Study Assignments, Report(including oral and written)

2	ABCDE	12345678	Lecture, Discussion	Testing, Study Assignments, Report(including oral and written)
3	ABCDE	12345678	Lecture, Discussion	Testing, Study Assignments, Report(including oral and written)
4	ABCDE	12345678	Lecture, Discussion	Testing, Study Assignments, Report(including oral and written)

### Course Schedule

Week	Date	Course Contents	Note
1	112/09/11 ~ 112/09/17	Syllabus Discussion and Course Introduction	
2	112/09/18 ~ 112/09/24	Pricing of Bonds	
3	112/09/25 ~ 112/10/01	Pricing of Bonds	
4	112/10/02 ~ 112/10/08	Measuring Yield	
5	112/10/09 ~ 112/10/15	Measuring Yield	
6	112/10/16 ~ 112/10/22	Bond Price Volatility	
7	112/10/23 ~ 112/10/29	Bond Price Volatility	
8	112/10/30 ~ 112/11/05	Factors Affecting Bond Yields	
9	112/11/06 ~ 112/11/12	Term Structure of Interest Rates	
10	112/11/13 ~ 112/11/19	Midterm Exam Week	
11	112/11/20 ~ 112/11/26	Interest-Rate Models	
12	112/11/27 ~ 112/12/03	Interest-Rate Models	
13	112/12/04 ~ 112/12/10	Credit Risk Modeling	
14	112/12/11 ~ 112/12/17	Credit Risk Modeling	
15	112/12/18 ~ 112/12/24	Guest speaker: Introduction to Financial Innovation	
16	112/12/25 ~ 112/12/31	Oral Presentation of the Group Project I	
17	113/01/01 ~ 113/01/07	Oral Presentation of the Group Project II	
18	113/01/08 ~ 113/01/14	Flex week, learning activities should be arranged.	Submit Term Paper

Key capabilities	
Interdisciplinary	
Distinctive teaching	
Course Content	Logical Thinking
Requirement	<ol style="list-style-type: none"> <li>1. Some topics will require the fundamental knowledge of financial management and investment. Students without prior knowledge in these areas will be provided with a supplementary reading list.</li> <li>2. Some topics covered in the course will use middle school level algebra.</li> <li>3. Students are required to form small groups of two individuals to conduct a literature review and analysis on fixed income securities and financial innovation. These topics should be based on the theories introduced in the course. It is the responsibility of the students to find their own partners for the group project. After the university's scheduled mid-term exam week, each group must establish a work schedule and management plan for the project. The formal presentation for the group project will consist of both oral and written components, both of which should be in English. A written report (less than 10 pages) on the group project must be submitted by the last week of the semester.</li> <li>4. Please be aware that the instructor retains the right to make necessary adjustments to this syllabus.</li> </ol>
Textbooks and Teaching Materials	<p>Using teaching materials from other writers:Textbooks</p> <p>Name of teaching materials:</p> <p>Fabozzi, F. J. (2016): Bond Markets, Analysis, and Strategies, 8th Edition, Pearson Education. (Taipei:Yeh Yeh Book Gallery)</p>
References	Papers & Lecture Notes
Grading Policy	<p>◆ Attendance : 15.0 %    ◆ Mark of Usual : 20.0 %    ◆ Midterm Exam : 30.0 %</p> <p>◆ Final Exam : %</p> <p>◆ Other &lt;Group Project&gt; : 35.0 %</p>
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/CS/main.php">http://www.acad.tku.edu.tw/CS/main.php</a> .</p> <p><b>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b></p>