

Tamkang University Academic Year 112, 1st Semester Course Syllabus

Course Title	FINANCIAL DERIVATIVES	Instructor	(多位教師合開) LIN, CHIEN-CHIN
Course Class	TLBBM1A MASTER'S PROGRAM, DEPARTMENT OF BANKING AND FINANCE (ENGLISH-TAUGHT PROGRAM), 1A	Details	◆ General Course ◆ Selective ◆ One Semester
Relevance to SDGs	SDG4 Quality education		
D e p a r t m e n t a l A i m o f E d u c a t i o n			
In full and advanced financial courses to cultivate the international professional financial talents with independent analysis, judgement, and problem solve abilities.			
Subject Departmental core competences			
A. Cultivate advanced knowledge of financial theory.(ratio:20.00) B. Increase the skill of applied theory and practice.(ratio:30.00) C. Increase the ability of logical deduction.(ratio:10.00) D. Learning and use of financial research method.(ratio:20.00) E. Increase the ability to pass the exam of advanced financial professional certificate. (ratio:10.00) F. To have the potential of future advanced academic study.(ratio:10.00)			
Subject Schoolwide essential virtues			
1. A global perspective. (ratio:10.00) 2. Information literacy. (ratio:10.00) 3. A vision for the future. (ratio:10.00) 4. Moral integrity. (ratio:10.00) 5. Independent thinking. (ratio:30.00) 6. A cheerful attitude and healthy lifestyle. (ratio:10.00) 7. A spirit of teamwork and dedication. (ratio:10.00) 8. A sense of aesthetic appreciation. (ratio:10.00)			

Course Introduction	<p>The main purpose of this course is to study the advanced concept of the derivatives markets and the financial instruments used in this market. These instruments include the forwards, Futures , swaps and options. How to use these tools for arbitrage, speculative, and hedge is also an important object of this course. This course provides a solid basis for student to study financial engineering and new financial products</p>
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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	To understand how derivatives markets work, how derivatives can be used, and what determines the prices of derivatives.	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	ABCDEF	12345678	Lecture	Testing

Course Schedule

Week	Date	Course Contents	Note
1	112/09/11 ~ 112/09/17	Mechanics of futures markets	
2	112/09/18 ~ 112/09/24	Hedging strategies using futures	
3	112/09/25 ~ 112/10/01	Determination of forward and futures prices	
4	112/10/02 ~ 112/10/08	Swaps	
5	112/10/09 ~ 112/10/15	Mechanics of options markets	
6	112/10/16 ~ 112/10/22	Properties of stock options	

7	112/10/23 ~ 112/10/29	Trading strategies involving options	
8	112/10/30 ~ 112/11/05	Binomial trees	
9	112/11/06 ~ 112/11/12	Mid-term exam	
10	112/11/13 ~ 112/11/19	The Black–Scholes–Merton model	
11	112/11/20 ~ 112/11/26	The Greek letters	
12	112/11/27 ~ 112/12/03	Delta hedging	
13	112/12/04 ~ 112/12/10	Relationship between delta, theta, and gamma	
14	112/12/11 ~ 112/12/17	The VaR measure	
15	112/12/18 ~ 112/12/24	Historical simulation	
16	112/12/25 ~ 112/12/31	Model-building approach	
17	113/01/01 ~ 113/01/07	Estimating volatilities	
18	113/01/08 ~ 113/01/14	Final exam	
Key capabilities			
Interdisciplinary			
Distinctive teaching			
Course Content		Logical Thinking	
Requirement			
Textbooks and Teaching Materials		Using teaching materials from other writers:Textbooks Name of teaching materials: OPTIONS, FUTURES, AND OTHER DERIVATIVES	

References	
Grading Policy	<p>◆ Attendance : % ◆ Mark of Usual : % ◆ Midterm Exam : 30.0 %</p> <p>◆ Final Exam : 40.0 %</p> <p>◆ Other 〈Exercise〉 : 30.0 %</p>
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at http://info.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php.</p> <p>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>