

Tamkang University Academic Year 107, 1st Semester Course Syllabus

Course Title	FINANCIAL ENGINEERING	Instructor	WANG, REN-HE
Course Class	TLWXB4A BACHELOR'S PROGRAM IN GLOBAL FINANCIAL MANAGEMENT (ENGLISH-TAUGHT PROGRAM), 4A	Details	<ul style="list-style-type: none"> ◆ Selective ◆ One Semester ◆ 3 Credits
Departmental Aim of Education			
<ul style="list-style-type: none"> I. Learning and instanding international financial theory. II. Learn to plan the future. III. Enhance the ability of practical analysis. IV. Increase the team research ability. V. Master the international financial pulsation. VI. Cultivate morality and global civilization. 			
Departmental core competences			
<ul style="list-style-type: none"> A. The student to have a basic knowledge of international financial management theory and practice. B. To have a good grounding of relevant financial laws. C. To understand the basic moral principles within the international financial industry. D. To have a global perspective of the subject and a basic command of foreign language abilities. E. To obtain international professional qualifications that will aid their future career. F. To obtain a basic ability to examine domestic and global financial situations. 			
Course Introduction	<p>Derivatives markets have become increasingly important in the world of finance and investments. It is now essential for all finance professionals to understand how these markets work, how they can be used, and what determines prices in them. This course addresses these issues.</p>		

The Relevance among Teaching Objectives, Objective Levels and Departmental core competences

I.Objective Levels (select applicable ones) :

- (i) Cognitive Domain : C1-Remembering, C2-Understanding, C3-Applying,
C4-Analyzing, C5-Evaluating, C6-Creating
- (ii) Psychomotor Domain : P1-Imitation, P2-Mechanism, P3-Independent Operation,
P4-Linked Operation, P5-Automation, P6-Origination
- (iii) Affective Domain : A1-Receiving, A2-Responding, A3-Valuing,
A4-Organizing, A5-Charaterizing, A6-Implementing

II.The Relevance among Teaching Objectives, Objective Levels and Departmental core competences :

- (i) Determine the objective level(s) in any one of the three learning domains (cognitive, psychomotor, and affective) corresponding to the teaching objective. Each objective should correspond to the objective level(s) of ONLY ONE of the three domains.
- (ii) If more than one objective levels are applicable for each learning domain, select the highest one only. (For example, if the objective levels for Cognitive Domain include C3,C5,and C6, select C6 only and fill it in the boxes below. The same rule applies to Psychomotor Domain and Affective Domain.)
- (iii) Determine the Departmental core competences that correspond to each teaching objective. Each objective may correspond to one or more Departmental core competences at a time. (For example, if one objective corresponds to three Departmental core competences: A,AD, and BEF, list all of the three in the box.)

No.	Teaching Objectives	Relevance	
		Objective Levels	Departmental core competences
1	Introduce the two main products trading on exchanges are futures and options.The market participants are now subject to rules specifying how trading must be done, how trades must be reported, and the collateral that must be provided.	C5	ADEF

Teaching Objectives, Teaching Methods and Assessment

No.	Teaching Objectives	Teaching Methods	Assessment
1	Introduce the two main products trading on exchanges are futures and options.The market participants are now subject to rules specifying how trading must be done, how trades must be reported, and the collateral that must be provided.	Discussion, Problem solving	Written test

This course has been designed to cultivate the following essential qualities in TKU students

Essential Qualities of TKU Students	Description
◇ A global perspective	Helping students develop a broader perspective from which to understand international affairs and global development.
◆ Information literacy	Becoming adept at using information technology and learning the proper way to process information.
◇ A vision for the future	Understanding self-growth, social change, and technological development so as to gain the skills necessary to bring about one's future vision.
◇ Moral integrity	Learning how to interact with others, practicing empathy and caring for others, and constructing moral principles with which to solve ethical problems.
◇ Independent thinking	Encouraging students to keenly observe and seek out the source of their problems, and to think logically and critically.
◇ A cheerful attitude and healthy lifestyle	Raising an awareness of the fine balance between one's body and soul and the environment; helping students live a meaningful life.
◇ A spirit of teamwork and dedication	Improving one's ability to communicate and cooperate so as to integrate resources, collaborate with others, and solve problems.
◇ A sense of aesthetic appreciation	Equipping students with the ability to sense and appreciate aesthetic beauty, to express themselves clearly, and to enjoy the creative process.

Course Schedule

Week	Date	Subject/Topics	Note
1	107/09/10 ~ 107/09/16	Introduction	
2	107/09/17 ~ 107/09/23	Mechanics of Futures Markets	
3	107/09/24 ~ 107/09/30	Hedging Strategies Using Futures	
4	107/10/01 ~ 107/10/07	Interest Rates	
5	107/10/08 ~ 107/10/14	Determination of Forward and Future Prices	
6	107/10/15 ~ 107/10/21	Interest Rate Futures	
7	107/10/22 ~ 107/10/28	Mechanics of Options Markets	
8	107/10/29 ~ 107/11/04	Properties of Stock Options	
9	107/11/05 ~ 107/11/11	Trading Strategies Involving Options	
10	107/11/12 ~ 107/11/18	Midterm Exam Week	
11	107/11/19 ~ 107/11/25	Introduction to Binomial Trees	
12	107/11/26 ~ 107/12/02	Introduction to Binomial Trees	

13	107/12/03 ~ 107/12/09	Valuing Stock Options:The Black-Scholes-Merton Model	
14	107/12/10 ~ 107/12/16	Valuing Stock Options:The Black-Scholes-Merton Model	
15	107/12/17 ~ 107/12/23	The Greek Letters	
16	107/12/24 ~ 107/12/30	Value at Risk	
17	107/12/31 ~ 108/01/06	Value at Risk	
18	108/01/07 ~ 108/01/13	Final Exam Week	
Requirement			
Teaching Facility	Computer, Projector		
Textbook(s)	Fundamentals of Futures and Options Markets John C. Hull 8 Edition		
Reference(s)			
Number of Assignment(s)	(Filled in by assignment instructor only)		
Grading Policy	◆ Attendance : 10.0 % ◆ Mark of Usual : 20.0 % ◆ Midterm Exam : 30.0 % ◆ Final Exam : 40.0 % ◆ Other < > : %		
Note	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 . ※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.		