



教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	財務工程		學年/學期 Academic Year/Semester	103/2
課程名稱(英文) Course Name in English	Financial Engineering			
科目代碼 Course Code	IIE_54800	系級 Department & Year	碩士	開課單位 Course-Offering Department
修別 Type	選修 Elective	學分數/時間 Credit(s)/Hour(s)	3.0/3.0	
授課教師 Instructor	/李同蘇			
先修課程 Prerequisite				
課程描述 Course Description				
<p>This class intends to lay a solid foundation for students in financial engineering, mostly focus on the basic concept of derivatives. I will walk you through this textbook. The required textbook is more practical originated than theoretical and it is the required textbook for sitting in for FRM exam. After taking this class, you are actually benefited from saving your time to study derivatives portion of FRM exam, as well as CFA exam.</p>				
課程目標 Course Objectives				
圖示說明 Illustration : ● 高度相關 Highly correlated ○ 中度相關 Moderately correlated				
授課進度表 Teaching Schedule & Content				
週次 Week	內容 Subject/Topics			備註 Remarks
1	no class, semester has not get started yet.			
2	Introduction, Ch. 1 , interest rates and stocks, ch 2 and			
3	forwards and futures, Options, ch 4 and 5			
4	Trading, arbitrage, financial engineering and swaps, ch 6 and 7			
5	1st midterm, forwards and futures markets, ch 8			
6	futures trading and regulations, ch 9 and 10			
7	spring break, no class			
8	cost of carry model and beyond, ch 11 and 12, futures hedging, ch 1			
9	2nd midterm , options markets, ch 14			
10	option trading and relations, ch 15 and 1			
11	binomial model and beyond, ch 17 and 18			
12	Black Scholes Merton model and beyond, ch 19 and 20			
13	yield and forward rates, ch 21			
14	3rd midterm , Interest rate swaps, ch 22			

15	Single period binomial HJM model, Ch 23	
16	Multiperiod binomial HJM model, ch 24	
17	The HJM LIBOR model, ch 25	
18	4th midter	

教 學 策 略 Teaching Strategies

- 課堂講授 Lecture
 分組討論 Group Discussion
 參觀實習 Field Trip
 其他 Miscellaneous:

學期成績計算及多元評量方式 Grading & Assessments

配分項目 Items	配分比例 Percentage	多元評量方式 Assessments							
		測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績 General Performance	20%		✓						
期中考成績 Midterm Exam	60%	✓							3 midterm exams and each counts 20%
期末考成績 Final Exam	20%	✓							
作業成績 Homework and/or Assignments	0%								
其他 Miscellaneous (_____)									

評量方式補充說明

Grading & Assessments Supplemental instructions

There will be a test after one month lecture. Total of 4 tests will be conducted in this semester.

教科書與參考書目 (書名、作者、書局、代理商、說明)

Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)

An introduction to derivatives securities, financial markets and risk management, Jarrow Chatterjea, W.W. Norton, 2013 指南書局代理

課程教材網址 (教師個人網址請列在本校內之網址)

Teaching Aids & Teacher's Website (Personal website can be listed here.)

其他補充說明 (Supplemental instructions)

Class etiquette: Experience indicates that students with regular attendance of class have higher grades than those who did not. Followings are basic class etiquette. Turn off your mobile phone before class. No loud chatting allowed in the class. Having food or drink in the class is not encouraged. Any irrational behavior in the class will not be tolerated. Any violation of the class etiquette will be penalized by reduction in your grade.