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②國玄東華大學

教學計劃表 Syllabus								
課程名稱(中文) Course Name in Chinese	金融創新				學年/學期 Academic Year/Semester		113/2	
課程名稱(英文) Course Name in English	Financial Innovation							
科目代碼 Course Code	FIN_M0380	系級 Department & Year	epartment 碩士		開課單位 Course-Offering Department	財務金融學系		
修別 Type	選修 Elective	學分數/時間 Credit(s)/Hour(s)			3.0/3.0			
授課教師 Instructor	/吕進瑞							
先修課程 Prerequisite	/*衍生性金融商品							
課程描述 Course Description								
Financial innovation aims to create new financial products using options, stocks, bonds, and other financial instruments. This course offers numerous analyses, studies, and discussions regarding financial innovations. We discuss how financial engineers develop some new ideas for designing financial tools. I hope the learners understand the methods, principles, pricing, applications, hedging, and trading strategies of these new financial tools.								

Course Objectives 課程目標

Use computers as learning aids to help understand the innovation, evaluation, and risk management of various financial products, and use derivative products to In daily life to solve financial problems.

	系專業能力 Basic Learning Outcomes	課程目標與系專業能 力相關性 Correlation between Course Objectives and Dept.'s Education Objectives
A	具備財務金融的分析能力Understanding the financial analysis.	•
В	具備企業財務管理專業能力Capabilities for business financial management.	•
С	具備英語閱讀溝通協調等能力English reading ability of communication and coordination.	•
D	具備獨立研究之技能,以進行財金議題研究Independent research skills to research financial issues.	0
Е	具備個人投資理財能力Investment and financial management.	0
F	具備電腦程式運算及設計能力Ability of computer programs, algorithms and application.	0
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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	1. Introduction to financial innovations	
2	2. Valuation of Options by Binomial Models	
3	2. Programming coding for the Black and Scholes model	
4	3. Programming coding for the Monte Carlo simulation	

5	4. Programming coding for the Binomial model					
6	5. Innovation in Options - Brick-based options					
7	6. Innovation in Options - Brick-based options					
8	8 7. Innovation in Options - Path Dependent Options					
9	9 期中考試週 Midterm Exam					
10	7. Innovation in Options - Path Dependent Options					
11	8. Innovation in Options - Time Dependent Options					
12	9. Innovation in Options - Multi-asset options					
13	10. Innovation in Bonds					
14	11. Innovation in Corporate Bonds					
15	12. Structured Notes - ELN					
16	13. Structured Notes - HYL					
17	期末考試週 Final Exam					
18	14. Innovation in Trading Strategies					
	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:						
教 學 創 新 自 評 Teaching Self-Evaluation						
創新教學(Innovative Teaching)						
▼ 問題導向學習(PBL) ■ ■體合作學習(TBL) ■ 解決導向學習(SBL)						
翻轉教室 Flipped Classroom						
社會責任(Social Responsibility)						
✓ 在地實踐Community Practice 產學合作 Industy-Academia Cooperation						
跨域合作(Transdisciplinary Projects)						
一跨界教學Transdisciplinary Teaching 跨院系教學Inter-collegiate Teaching						
■ 業師合授 Courses Co-taught with Industry Practitioners						
其它 other:						

學期成績計算及多元評量方式 Grading & Assessments										
配分項目	配分比例	多元評量方式 Assessments								
Items	Percentage	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(含出鉄席) General Performance (Attendance Record)	10%			~					出席與課堂討論	
期中考成績 Midterm Exam	30%	>								
期末考成績 Final Exam	40%	>								
作業成績 Homework and/or Assignments	20%		~	~					課後作業與課堂報告	
其他 Miscellaneous										

評量方式補充說明

Grading & Assessments Supplemental instructions

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.)

No textbook. I will submit my PPT data to the e-learning system.

課程教材網址(含線上教學資訊,教師個人網址請列位於本校內之網址)

Teaching Aids & Teacher's Website(Including online teaching information.

Personal website can be listed here.)

其他補充說明(Supplemental instructions)

無

無