



## 教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	衍生性金融商品		學年/學期 Academic Year/Semester	112/1
課程名稱(英文) Course Name in English	Derivatives			
科目代碼 Course Code	FIN_M0040	系級 Department & Year	碩士	開課單位 Course-Offering Department
修別 Type	必修 Required	學分數/時間 Credit(s)/Hour(s)	3.0/3.0	
授課教師 Instructor	/呂進瑞			
先修課程 Prerequisite				
課程描述 Course Description				
This course offers numerous analyses, studies, and discussions regarding options markets, futures markets, new financial tools, and financial risk management. We discuss how investors invest in the derivatives markets. I hope the learners can know these financial tools' properties, pricing, applications, hedging, and trading strategies.				
課程目標 Course Objectives				
The purpose of this course is to extend the student's knowledge of security valuation by examining the structure, valuation, and uses of derivative contracts.				
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.			●
B	具備企業財務管理專業能力 Capabilities for business financial management.			●
C	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.			●
E	具備個人投資理財能力 Investment and financial management.			●
F	具備電腦程式運算及設計能力 Ability of computer programs, algorithms and application.			●
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	Introduction of derivatives			
2	Option contracts and markets			
3	Option contracts and markets			
4	Option trading strategies			

5	Binomial model of derivatives pricings	
6	Binomial model of derivatives pricings	
7	Risk neutral valuation	
8	Black-Scholes pricing model	
9	期中考試週 Midterm Exam	
10	Black-Scholes pricing model	
11	Greek Letters and risk managements	
12	Exotic options	
13	Forward contracts	
14	Futures contracts and markets	
15	Futures pricing	
16	Hedging futures	
17	Derivatives applications	
18	期末考試週 Final Exam	

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)                     
 團體合作學習 (TBL)                     
 解決導向學習 (SBL)

- 翻轉教室 Flipped Classroom                     
 磨課師 Moocs

社會責任 (Social Responsibility)

- 在地實踐 Community Practice                     
 產學合作 Industry-Academia Cooperation

跨域合作 (Transdisciplinary Projects)

- 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:

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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	10%		✓	✓					class performances
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%			✓					
其他 Miscellaneous (_____)									quizzes and presentation

評量方式補充說明

Grading & Assessments Supplemental instructions

Google Meet: <https://meet.google.com/yft-jypf-rho>

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 textbooks. Course PPTs are uploaded in NDHU e-learning system before the course days. You should download PPTs, print them, and take them to the classes.

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.)

Google Meet: <https://meet.google.com/yft-jypf-rho>

NDHU e-learning

其他補充說明 (Supplemental instructions)