



## 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	114/2			
課程名稱(英文) Course Name in English	Derivatives							
科目代碼 Course Code	FIN_50200	系級 Department & Year	碩士	開課單位 Course-Offering Department	財務金融學系			
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	●
B	具備企業財務管理專業能力	●
C	具備英語閱讀溝通協調等能力	
D	具備獨立研究之技能，以進行財金議題研究	○
E	具備個人投資理財能力	●
F	具備電腦程式運算及設計能力	

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 to derivatives	
2	Option contracts and markets	
3	Option contracts and markets	
4	Option trading strategies	
5	Option valuation	

6	Binomial model of derivatives pricings	
7	Binomial model of derivatives pricings	
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	Greek Letters and risk managements	
13	Forward contracts	
14	Futures contracts and markets	
15	Futures pricing	
16	Hedging using futures	
17	Applications in options	
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 Industy-Academia Cooperation  
 跨域合作 Transdisciplinary Projects       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	
平時成績(含出缺席) General Performance (Attendance Record)	10%		✓	✓					class performances
期中考成績 Midterm Exam	30%	✓							
期末考成績 Final Exam	30%	✓							
作業成績 Homework and/or Assignments	30%			✓					
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)