


國立東華大學
教學計劃表 Syllabus

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| 課程名稱(中文) Course Name in Chinese | 衍生性金融商品 | | | 學年/學期 Academic Year/Semester | 113/1 |
| 課程名稱(英文) Course Name in English | Derivatives | | | | |
| 科目代碼 Course Code | IM_M0080 | 系級 Department & Year | 碩士 | 開課單位 Course-Offering Department | 資訊管理學系 |
| 修別 Type | 選修 Elective | 學分數/時間 Credit(s)/Hour(s) | | 3.0/3.0 | |
| 授課教師 Instructor | /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 | 培育具備創造與思考能力、服務精神、團隊合作以及國際觀Nurture ability regarding creativity and thinking, spirit of service, teamwork and international view | | | | ● |
| B | 培養具備資訊專業知識與技能Nurture professional ability and skill regarding information | | | | |
| C | 培養具備資訊科技與管理領域之知識整合應用能力Nurture integrated ability regarding information technology and management | | | | |
| D | 培養具備解決問題之資訊剖析、組織、整合、應用以及表達的能力Nurture ability of information analysis, organization, integration, application, and expression regarding problem solving | | | | ○ |
| E | 培養具備獨立研究、領導智能與資訊創新能力Nurture ability regarding independent research, leadership and information innovation | | | | ○ |
| 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 | | | | |

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|----|--|--|
| 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 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:

| 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 | 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) | | | | | | | | | |