



# 課 綱 Course Outline

## 企業管理學系博士班財務金融組

中文課程名稱 Course Name in Chinese	衍生性金融商品				
英文課程名稱 Course Name in English	Derivative Securities				
科目代碼 Course Code	BM__74200	班 別 Degree	博士班 Ph. D.		
修別 Type	必修 Required	學分數 Credit(s)	3.0	時 數 Hour(s)	3.0
先修課程 Prerequisite	Matlab/Gauss softwar				
課程目標 Course Objectives					
This lecture is aimed to explore the properties of derivatives that are commonly encountered in practice, and to provide a theoretical framework within which all derivatives can be properly valued and hedged.					
系教育目標 Dept.'s Education Objectives					
1	培育具有財金議題研究能力之學者 Cultivation of research financial talents and academic researching potentials				
2	培育具有管理能力之金融專業人才 Cultivation of manage finances talents for Financial professionals				
3	培育具備當代財務金融理論與實證知識的教學人才 Good manner and professional ethics, understanding of the national financial theory and practice teaching capability.				
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	具備企業管理理論的核心專業知識			●	
B	具備邏輯思考與企業經營管理問題解決的能力			●	
C	具備高階財務金融的分析能力			●	
D	具備高階企業財務管理專業能			●	

E	具備英語閱讀溝通協調及教學之能力	●
F	具備前瞻開創新興議題之能力	●
G	具備金融創新之能力	●

圖示說明Illustration：● 高度相關 Highly correlated ○ 中度相關 Moderately correlated

課程大綱  
Course Outline

1. An introduction to derivatives.
2. The market mechanics of derivatives trading.
3. Its lemma, stochastic calculus, and martingale processes.
4. Option pricing theory.
5. Risk management.
6. Numerical procedures.
7. Exotic options.

資源需求評估（師資專長之聘任、儀器設備的配合．．．等）  
Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)

課程要求和教學方式之建議  
Course Requirements and Suggested Teaching Methods

1. The lecturer uses textbooks.
2. Students do homework and take examinations

其他  
Miscellaneous