朝陽科技大學 095學年度第2學期教學大綱
Financial Engineering 財務工程

當期課號	7024	Course Number	7024
授課教師	朱香蕙	Instructor	CHU,HSIANG HUI
中文課名	財務工程	Course Name	Financial Engineering
開課單位	財務金融系碩士班一A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	概略而言，舉凡金融商品的設計、組合、分解、定價、推廣與通路的建立等，均是「財務工程」的範疇。本課程對於財務工程相關議題，先闡述數學及統計原理， 討論其實際應用意義，幫助學生對此領域知的了解。	Objectives	Financial engineering involves the design, the development, and the implementation of innovative financial instruments and process, and the formulation of creative solutions to problems in finance. For the related topics about financial engineering, we first involve the fundamental theories and methods, and then discuss their implementation in practical applications.
教材	Klebaner, F. C. (1998) Introduction to stochastic calculus with applications. London: Imperial College. Wilmott, P., (1998) Derivatives: The Theory and Practice of Financial Engineering. John Wiley & Sons. S. Neftci, (1996) An introduction to the mathematics of financial derivatives, Academic Press. J. Hull, (2003) Options, Futures and Other Derivative Securities, 5th edition, Prentice Hall. 相關論文期刊	Teaching Materials	Klebaner, F. C. (1998) Introduction to stochastic calculus with applications. London: Imperial College. Wilmott, P., (1998) Derivatives: The Theory and Practice of Financial Engineering. John Wiley & Sons. S. Neftci, (1996) An introduction to the mathematics of financial derivatives, Academic Press. J. Hull, (2003) Options, Futures and Other Derivative Securities, 5th edition, Prentice Hall. Related papers
成績評量方式	作業 20% 平時成績 30% 期末報告 50%	Grading	Homework 20% Participation 30% Term paper + Presentation 50%
教師網頁			
教學內容	1. 財務數學介紹 2. 二元數評價模型 3. Black-Scholes 模型 4. 新奇選舉權 5. 利率衍生性商品 6. 相關論文期刊	Syllabus	1. Financial mathematics 2. Binomial Trees 3. Black-Scholes Model 4. Exotic Options 5. Interest Rate Derivatives 6. Related papers