朝陽科技大學 096學年度第1學期教學大綱
Calculus 微積分

當期課號	3092	Course Number	3092
授課教師	朱香蕙	Instructor	CHU,HSIANG HUI
中文課名	微積分	Course Name	Calculus
開課單位	財務金融系(四在)一B	Department	
修習別	必修	Required/Elective	Required
學分數	3	Credits	3
課程目標	著重在積分的介紹與應用.此課程乃要幫助學生學會反導數,以及它的推導和應用.另外也要幫助學生學會並運用部分積分和重積分的工具,去解決複雜的積分問題.若時間許可,泰勒多項式和無窮級數也會包含在此課程中,因其在財務金融的領域上也是常被用到的工具.	Objectives	This course will involve introduction to integration, the method of integration, the application of definite integration, partial derivatives, multi-integration, and, if time allowing, differential equations and Taylor polynomials and infinite series.
教材	Applied Calculus For The Managerial, Life, And Social Sciences. (6th Edition), Tan	Teaching Materials	Applied Calculus For The Managerial, Life, And Social Sciences. (6th Edition), Tan
成績評量方式	期中考30%,期末考30%,平時40%	Grading	Midterm Exam 30% Final Exam 30% Participation+Quiz+Homework 40%
教師網頁	_		
教學內容	2.4 Limits 2.5 One-Sided Limits and Continuity 2.6 The Derivatives 3.1 Basic Rules of Differentiation 3.2 The Product and Quotient Rules 3.3 The Chain Rule 3.4 Marginal Functions in Economics 3.5 Higher-Order Derivatives 3.6 Implicit Differentiation and Related Rates 3.7 Differentials 4.1 Applications of the First Derivative 4.2 Applications of the Second Derivative 4.3 Curve Sketching 4.4 Optimization 5.1 Exponential Functions 5.2 Logarithmic Functions 5.3 Compound Interest 5.4 Differentiation of Exponential Functions 5.5 Differentiation of Logarithmic Functions 5.6 Exponential Functions as Mathematical Models	Syllabus	2.4 Limits 2.5 One-Sided Limits and Continuity 2.6 The Derivatives 3.1 Basic Rules of Differentiation 3.2 The Product and Quotient Rules 3.3 The Chain Rule 3.4 Marginal Functions in Economics 3.5 Higher-Order Derivatives 3.6 Implicit Differentiation and Related Rates 3.7 Differentials 4.1 Applications of the First Derivative 4.2 Applications of the Second Derivative 4.3 Curve Sketching 4.4 Optimization 5.1 Exponential Functions 5.2 Logarithmic Functions 5.3 Compound Interest 5.4 Differentiation of Exponential Functions 5.5 Differentiation of Logarithmic Functions 5.6 Exponential Functions as Mathematical Models