朝陽科技大學 097學年度第1學期教學大綱
Calculus 微積分

當期課號	2549	Course Number	2549
授課教師	楊志弘	Instructor	YANG,CHIH HUNG
中文課名	微積分	Course Name	Calculus
開課單位	資訊管理系(四日)一B	Department	
修習別	必修	Required/Elective	Required
學分數	3	Credits	3
課程目標	本課程之目的在使學生能瞭解微積分的基本原理和應用的技術，課程內容包含1.實數、函數與其圖形 2.導函數與微分 3.微分的應用 4.指數函數與對數函數的微分 5.反導函數和積分的定義 6.三角函數的微分&積分 7.積分技術	Objectives	The main purpose of this course is to let students understand the fundamental principles of the differential integral calculus and its basic techniques of applications. The content involves real numbers, functions and graphs, the derivative and its applications, derivatives of exponential and logarithmic functions, derivative the trigonometric functions, and techniques of integration.
教材	Daniel D.Benice「Calculus and Its Applications」	Teaching Materials	Daniel D.Benice「Calculus and Its Applications」
成績評量方式	01.期中考 50.0%　02.期末考 50.0%　03.態度勤惰-10.0%　總共110分	Grading	01.midterm exam 50.0%　02.final exam 50.0%　03.presence 10.0%　total:110 points.
教師網頁			
教學內容	01/課程介紹;函數與函數圖形 02/指數與根號;直角坐標與距離公式 03/函數轉換 04/極限 05/連續函數 06/導數及計算 07/導函數的乘除法則; 08/高階導函數 09/期中考 10/鍊鎖率 11/隱微分 12/反導函數 13/定積分 14/微積分基本定理 15/代入積分法 16/分部積分法 17/積分技巧練習 18/期末考試	Syllabus	01/A Precalculus Review:Function and Graphs 02/Exponents and Radicals|The Cartesian Plane and the Distance Formula| 03/Functions 04/Limits 05/Continuity 06/Some Rules for Differentiation 07/The Product and Quotient rules 08/Higher order derivatives 09/A midterm examination 10/The Chain Rules 11/Implicit differentiation 12/Antiderivatives 13/Indefinite Integrals 14/The General Power Rule 15/Integration by Substitution| 16/Integration by Parts and Present Value 17/Techniques of Integration 18/A final examination

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