朝陽科技大學 097學年度第2學期教學大綱
Calculus(II) 微積分(二)

當期課號	2710	Course Number	2710
授課教師	鄭佳炘	Instructor	CHENG,CHIA HSIN
中文課名	微積分(二)	Course Name	Calculus(II)
開課單位	資訊與通訊系(四日)一A	Department	
修習別	必修	Required/Elective	Required
學分數	3	Credits	3
課程目標	本課程之目標在使學生擁有微積分之計算技巧。微積分是基礎的數學工具，在許多的科技領域都必須使用它來解題。學生可以從本課程中學到微積分應用到其他學科上的解題技巧，因而提升學生將來解決問題的能力。"a. 學習微積分基本原理和應用, b. 具有解題技巧及演算能力 c. 培養思考和邏輯能力 d. 奠定學習其他專門工程學科的基礎"	Objectives	The goal is to train the students to have good calculation skills. Calculus is a very useful mathematical tool in various fields. Students might have to apply what they have learned in this course in many other applications. So they got to have well trained problems solving skills for handling various upcoming situations. a. Learn the basic fundamentals and applications of Calculus. b. Have the ability of solving skills and calculus. c. Train the ability of thinking and logic. d. Establish the foundation for learning the other Engineering subjects
教材	R. T. Smith and R. B. Minton "Calculus: Early Transcendental Functions" 3e,McGraw-Hill, 2007	Teaching Materials	R. T. Smith and R. B. Minton "Calculus: Early Transcendental Functions" 3e,McGraw-Hill, 2007
成績評量方式	平時成績30%，期中考30%，期末考30%，出席率 10%	Grading	Tests and homeworks 30%, midterm 30%, final 30%, Attendance 10%
教師網頁	http://www.cyut.edu.tw/~chcheng		
教學內容	本課程主要介紹微分及積分的定義、技巧及應用，其主要涵蓋的範圍有： 1. 極限與連續性 2. 微分 3. 微分的應用 4. 積分 5. 定積分的應用 6. 積分的技巧 7. 一階微分方程式 8. 無窮級數	Syllabus	This course gives an introduction to the definitions, techniques and applications of differentiation and integration. Topics to be covered are: 1. Limits and continuity 2. Differentiation 3. Applications of differentiation 4. Integration 5. Applications of the definite integral 6. Integration techniques 7. Fist-order differential equations 8. Infinite series

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