朝陽科技大學 091學年度第1學期教學大綱
Numerical Methods 數值方法

當期課號	7585	Course Number	7585
授課教師	羅世忠	Instructor	LOU,SHU ZON
中文課名	數值方法	Course Name	Numerical Methods
開課單位	工業工程與管理系碩士在職專班一A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	本課程教授數值分析之理論與運算程式之撰寫，使學生能應用程式與數值方法求解數學問題。	Objectives	The aim of this course is to give an introduction to some of the basic methods of numerical analysis and to provide the groundwork for the research in the Institute of Industrial Engineering and Management. The objectives is to let the students to be able to: (1)Write simple programmes to do numerical calculations. (2)Find the approximate solution of various mathematical problems. (3)Compare the performance of different methods for approximating the same problem by considering the accuracy of results and effort required to get them. (4)Understand the concept of convergence in numerical methods.
教材	數值分析之理論與程式撰寫介紹	Teaching Materials	Therories introduction and program practice
成績評量方式	期中考 30% 作業與計畫 40% 期末考 30%	Grading	midterm 30% hw & project 40% final exam 30%
教師網頁			
教學內容	本課程將以數值分析之理論與程式撰寫介紹，使學生能充分了解數值方法之由來與實際之運用。	Syllabus	Introduction & Chapter 0 Chapter1: Solving Nonlinear Equations Chapter2: Solving Sets of Equations Chapter3: Interpolation and Curve Fitting Chapter4: Numerical Differentiation and Numerical Integration Chapter5: Numerical Solution of Ordinary Differential Equations Chapter6: Boundary-Value Problems and Characteristic-Value Problems

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