表二

104 學年度 商 學院 英語授課課程大綱

課程名稱 Course Title ☑模組☑個別	(中文) 管理數學
	(英文) Mathematics with Business Application

課程目標 Course Objectives	This course is an introduction to how quantitative models to be applied in aiding managerial decision-making. In practice, spreadsheets provide a comfortable and familiar environment for formulating and analyzing managerial problems. The spreadsheet takes care of applying the necessary mathematics automatically in the background with only a minimum of guidance by the user. Therefore, managers do not need to know any of the heavy mathematical theory. We will emphasize the use of spreadsheets throughout entire course.
課程大綱 Course Description	The topics covered in this course are as follows: Linear programming, Network Optimization Problems, Binary Integer Programming, Decision Analysis, etc. MS EXCEL will be the primary tool for the problem modeling and solving.
上課進度 Weekly Course Schedule	Week Date Content 1 Course Introduction 2 Modeling with Spreadsheet 3 Linear Programming: Basic Concepts 4 Linear Programming: Basic Concepts 5 Linear Programming: Formulation and Applications 6 Linear Programming: Formulation and Applications 7 The Art of Modeling with Spreadsheets 8 The Art of Modeling with Spreadsheets 9 Group Project Progress Report 10 Group Project Progress Report 11 What-If Analysis for Linear Programming 12 What-If Analysis for Linear Programming 13 Network Optimization problems 14 Network Optimization problems 15 Binary Integer Programming 16 Group Project Final Presentation 17 Group Project Final Presentation 18 Final Exam
教學方式 Instructional Method	Students are encouraged to discuss and share the ideas of course materials in class. Each student is required to joins the discussion at least four times.
課程要求 Course Requirements	
評量方式 Evaluation	Group Project---40% In-class Discussion------------------------------------20% Final Exam---40%

教材及參考書目 Textbooks & Suggested Materials	1. Textbook: F. S. Hillier and M. S. Hillier, Introduction to management Science: A Modeling and Case Studies Approach with Spreadsheets, International Edition 2011, McGraw-Hill. 2. Reference Books: Bernard W. Taylor, Introduction to Management Science, 11th Edition, Pearson.

申請教師簽章：＿＿＿＿＿＿＿＿　開課單位主管簽章：＿＿＿＿＿＿＿＿＿