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）管理科學 （英文） Management Science
課程目標 Course Objectives	This course is an introduction to quantitative models in managerial decision-making. Management Science, a well-established discipline in the field of business, can be defined as the application of a scientific method to managerial problems in order to make better decisions. The applications of management science techniques cover a large area (industry, government, military, transportation, marketing, health care, etc.). Topics include Linear Programming, Transportation and Assignment problems, Network Optimization Problems, PERT/CPM Models, Integer Programming, Goal Programming, Decision Analysis, Forecasting, Queueing Models, and Simulations. MS EXCEL will be the primary tool for the problem modeling and solving.
課程大綱 Course Description	Same as schedule
上課進度 Weekly Course Schedule	1. Introductions 2. Basics of EXCEL and Linear Programming 3. Linear Prog.: Formulations and Applications 4. Modeling with Spreadsheet 5. What-If Analysis for Linear Programming 6. Network Optimization Problems 7. Midterm 8. Binary Integer Programming 9. Transportation and Assignment Problems 10. Transportation and Assignment Problems 11. Nonlinear Prog. 12. PERT/CPM for Project Management 13. Queueing Models 14. Goal Programming 15. Forecasting 16. Final exam
教學方式 Instructional Method	Lecture, E-Learning, Study Group, Case Study, Project, Independent Learning
課程要求 Course Requirements	
評量方式 Evaluation	Participation—10% Midterm Exam—30% Assignments/Quizzes—30% Final Exam—30%
教材及參考書目 Textbooks & Suggested Materials	1.Hillier, F., Hillier, M., Schmedders, K., and Stephens, M. (2008) Introduction to Management Science, 3rd ed., McGraw-Hill, ISBN: 978-007-125927-9 (required).

	2.Hillier, F. S. and Hillier, M. S. (2003) Essentials of Management Science, 1st ed., McGraw Hill, ISBN: 0071241736. (recommended)

申請教師簽章： _____ 開課單位主管簽章： _____