表二

103 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) 商業資料分析：R運算 (英文) R Computing for Business Data Analytics
課程目標 Course Objectives	This is a course in business data analytics for senior undergraduate and graduate students. Although the focus is applied computation, necessary theoretical aspects will be covered as well. My goal is to help students become proficient in statistical computing and data analysis using *R*. After taking this course, students will be able to employ the introduced techniques to facilitate business decision making and conduct their own research.
上課進度 Weekly Course Schedule	Lecture 1: R as a computing environment Lecture 2: Programming with R Lecture 3: Probability Lecture 4: Discrete & continuous distributions Lecture 5: Parameter estimation & Monte-Carlo simulation Lecture 6: Linear regression Lecture 7: Generalized linear models Lecture 8: Multivariate methods Lecture 9: Numerical differentiation & integration Lecture 10: Numerical optimization Lecture 11: Resampling methods (if time permitted)
教學方式 Instructional Method	This is a lecture-based course. In each session I will give a detailed lecture about the essence of programming and modeling topics.
課程要求 Course Requirements	Prerequisites: Introductory calculus and statistics.
評量方式 Evaluation	*Homework*: 40% I will distribute 5 assignments (8% each) during the semester. *Midterm*: 30% The exam is composed of in-class and take-home exams. *Term Project*: 30% (10% Presentation & 20% Written-Report) You have to form a group of **3** people to work on this project. The project will require you to identify a question and apply technique(s) that you learn from this course. Each group will make an oral presentation about its project.
教材及參考書目 Textbooks & Suggested Materials	Lecture notes will be provided and NO textbooks are required.
課程相關連結網址 Course Website	http://elearn.nccu.edu.tw
備註 Remarks	此課程為巨量資料學程之選修。

申請教師簽章：

開課單位主管簽章：資管系系主任李有仁