104-1

表二

____ 學年度 ____ 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 (weeks 1-2) Lecture 2: Programming with R (weeks 3-4) Lecture 3: Probability distributions (weeks 5-6) Lecture 4: Monte-Carlo simulation (weeks 7-8) Lecture 5: Distribution fitting & MLE (week 9-10) Lecture 6: Linear regression & quantile regression (weeks 11-13) Lecture 7: Generalized linear modeling (weeks 14-15) Lecture 8: Multivariate methods (week 16) Lecture 9: Numerical methods (week 17) Lecture 10: Nonlinear models (week 18)
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。

資管系系主任 李有仁

申請教師簽章： 莊皓鈞
資管系莊皓鈞

開課單位主管簽章： _____