

# 國立政治大學課程教學大綱

## Syllabus

課程資訊					
學年學期 Academic Year / Semester	114學年第 1 學期	Fall Semester, 2025			
科目代號 Course Number					
開課單位 Department Name	企業管理研究所 (MBA 學位學程)	MBA Program			
課程名稱 Course Name	商業數量方法	Business Analytics			
授課教師 Instructor	余清祥	Ching-Syang Jack Yue			
預收人數 Number of Students	60	60			
學分數 No. of Credits	2	2			
修別 Required / Elective	必修	Required			
先修科目 Prerequisite(s)					
上課時間 Session					
課程簡介 Course Description					
The course emphasizes applications through case analysis/data sets & presentations, and computer exercises. The focus of the course is as much on modeling and presenting solutions to business problems as on understanding statistical methods. Areas covered by the course include descriptive statistics, exploratory data analysis, probability, estimation, hypothesis testing, quality control, regression models, analysis of variance, forecasting, Clustering, and basic questionnaire analysis.					
課程目標與學習成效 Course Objectives & Learning Outcomes					
At the end of the course each student is expected to have					
<ul style="list-style-type: none"><li>● A good understanding of several commonly used statistical techniques in business;</li><li>● The ability to model and solve business problems using statistical methods;</li><li>● The ability to give a non-technical presentation containing solutions, obtained by statistical analysis of a data set from a business problem, to an audience of managers/decision makers;</li><li>● A good understanding of how to use statistics software.</li></ul>					
每週課程進度與作業要求 Course Schedule & Requirements					
週次 Week	課程主題 Topic	課程內容與指定閱讀 Content and Reading Assignment	教學活動與作業 Teaching Activities and Homework	學習投入時間 (Student workload expectation)	
				課堂講授 In-class Hours	課程前後 Outside-of-class Hours

1	Introduction & Descriptive Statistics	Chapters 1~6	Review	上課投影片	熟悉上課方式
2	Estimation & Hypothesis Testing	Chapters 7~10	Review	上課投影片	課程複習
3	Nonparametric Methods	Chapter 18	第一次作業	上課投影片	進度檢核
4	Quality Control	Chapter 21	第一次案例分析	上課投影片	實務分析
5	Regression (I)	Chapters 14~15	第二次作業	上課投影片	進度檢核
6	Regression (II)	Chapter 16	第二次案例分析	上課投影片	實務分析
7	ANOVA	Chapter 13	第三次作業	上課投影片	進度檢核
8	Time Series & Forecasting	Chapter 17	第三次案例分析	上課投影片	實務分析
9	Questionnaire Analysis	Chapter 12	第四次作業	上課投影片	實務分析
10	Final Exam	Chapters 12~18	第四次案例分析	考試	

授課方式 Teaching Approach

講述 Lecture： 60 %；討論 Discussion： 10 %；小組活動 Group Activity： 20 %；數位學習 E-learning： 10 %；其他 Others： %。

評量工具與策略、評分標準 Evaluation Criteria

【明列評量項目與給分標準】

Homework assignments 30%, Case presentations & write-ups 20%, Team & class participation 20%, and Final examination 30%

課程進行中，可否使用手機等智慧行動裝置 To Use Smart Devices During the Class

需經教師同意始得使用 Approval required

授課教師 Office Hours 及地點 Office Location

Tuesdays 14:00~16:00 in Rm1026

教學助理基本資料 Teaching Assistant Information

To be announced!

指定／參考書目 Textbook & References

【為維護智慧財產權，請務必使用正版書籍】

Statistics for Business and Economics, 14th edition by D. R. Anderson, D. J. Sweeney, and T. A. Williams, South-Western Publishing, 2011. ISBN: 0-357-11448-5, locally distributed by 滄海書局

課程相關連結 Course Related Links

<http://csyue.nccu.edu.tw/>

課程附件 Course Attachments

Lecture power-point files & in-class handouts