



教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	統計應用研究		學年/學期 Academic Year/Semester	113/1
課程名稱(英文) Course Name in English	Seminar in Application of Statistics			
科目代碼 Course Code	BM_D0080	系級 Department & Year	博士	開課單位 Course-Offering Department
修別 Type	選修 Elective	學分數/時間 Credit(s)/Hour(s)	3.0/3.0	
授課教師 Instructor	/池文海			
先修課程 Prerequisite				
課程描述 Course Description				
Enhance students' ability for the knowledge and understanding of statistical skill and application in the management domain.				
課程目標 Course Objectives				
講授線性統計模式與多變量分析，在線性統計模式中探討迴歸、變異數分析與實驗設計，在多變量分析中探討主成份分析，因素分析，區別分析，集群分析，多變量變異數分析與線性結構關係模式。使博士班學生瞭解進行實證分析時最常用的高等統計分析工具之理論與應用，並結合統計在套裝軟體SPSS的運用，期俾學生能充份運用高等統計在其研究中。				
系專業能力 Basic Learning Outcomes				課程目標與系專業能力相關性 Correlation between Course Objectives and Dept.'s Education Objectives
A	具備企業管理相關理論與應用的知識Having knowledge of modern management theories and practices			●
B	具備邏輯推演、獨立思考與問題解決的能力Having capability of logical reasoning, independent thinking, and problem solving			●
C	具備學研產官重要議題與趨勢掌握的國際觀Having global perspective on key issues in academia, research, industry, and government			
D	具備專業與產業的倫理洞察力與堅持Having insights and persistence of professional and industry ethics			
圖示說明Illustration : ● 高度相關 Highly correlated ○ 中度相關 Moderately correlated				
授課進度表 Teaching Schedule & Content				
週次Week	內容 Subject/Topics			備註Remarks
1	Introduction			
2	Data and Statistics/Descriptive Statistics (Chapters 1 and 2)			
3	Descriptive Statistics: Numerical Measures (Chapter 3)			
4	Interval Estimation (Chapter 8)			
5	Hypothesis Testing (Chapter 9)			
6	Inferences about Means and Proportions with Two Populations (Chapter 10)			

7	Inferences about Population Variances (Chapter 11)	
8	Comparing Multiple Proportions, Test of Independence and Goodness of Fit (Chapter 12)	
9	期中考試週 Midterm Exam	
10	Experimental Design and Analysis of Variance (Chapter 13)	
11	Experimental Design and Analysis of Variance (Chapter 13)	
12	Simple Linear Regression (Chapter 14)	
13	Multiple Regression (Chapter 15)	
14	Regression Analysis: Model Building (Chapter 16)	
15	Mediation	
16	Moderation	
17	Moderation	
18	期末考試週 Final Exam	

教學策略 Teaching Strategies

- 課堂講授 Lecture
 分組討論 Group Discussion
 參觀實習 Field Trip
- 其他 Miscellaneous:

教學創新自評 Teaching Self-Evaluation

創新教學 (Innovative Teaching)

- 問題導向學習 (PBL)
 團體合作學習 (TBL)
 解決導向學習 (SBL)
- 翻轉教室 Flipped Classroom
 磨課師 Moocs

社會責任 (Social Responsibility)

- 在地實踐 Community Practice
 產學合作 Industry-Academia Cooperation

跨域合作 (Transdisciplinary Projects)

- 跨界教學 Transdisciplinary Teaching
 跨院系教學 Inter-collegiate Teaching

- 業師合授 Courses Co-taught with Industry Practitioners

其它 other:

學期成績計算及多元評量方式 Grading & Assessments

配分項目 Items	配分比例 Percentage	多元評量方式 Assessments							
		測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績 General Performance									
期中考成績 Midterm Exam									
期末考成績 Final Exam									
作業成績 Homework and/or Assignments	100%								
其他 Miscellaneous (_____)									

評量方式補充說明

Grading & Assessments Supplemental instructions

教科書與參考書目 (書名、作者、書局、代理商、說明)

Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)

Camm, J. D., Cochran, J. J., Fry, M. J., Anderson, D. R., Sweeney, D. J. and Williams, T. A. (2024), Statistics for Business and Economics, 15th Ed., Metric Version, South-Western College Publishing, Cincinnati, Ohio.

ISBN 986-0-35711448-3

Agent for Textbook: (04) 2708-8787

課程教材網址(含線上教學資訊, 教師個人網址請列位於本校內之網址)

Teaching Aids & Teacher's Website(Including online teaching information.
Personal website can be listed here.)

Design of Experiment (DOE) A

<https://www.youtube.com/watch?v=ie6zp2NkHdY>

<https://www.youtube.com/watch?v=qNUWU3YhOFQ>

<https://www.youtube.com/watch?v=yuH35ottILU>

<https://www.youtube.com/watch?v=d3BgtJ7hN1c>

http://www.jeremydawson.co.uk/2-way_with_binary_moderator.xls

其他補充說明 (Supplemental instructions)