



教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese	多變量統計與觀光研究應用		學年/學期 Academic Year/Semester	113/1
課程名稱(英文) Course Name in English	Multivariate Data Analysis in Tourism Studies			
科目代碼 Course Code	TRLS51500	系級 Department & Year	碩士	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	/賴柏欣			
先修課程 Prerequisite				
課程描述 Course Description				
<p>This course intends to build student capacity including:</p> <ol style="list-style-type: none"> 1. 科學及邏輯思考方法。 2. 具備資料收集、分析和匯總數據的能力。 3. 熟悉多變量統計分析方法與概念、理論及相關應用。 4. 實作及正確解讀觀光、休閒或遊憩相關之分析與研究報告的數據。 5. 培養學生應用統計分析工具(SPSS)於觀光、休閒、遊憩研究領域的能力。 				
課程目標 Course Objectives				
<p>本課程著重於統計方法和分析技術在觀光旅遊領域的應用，將以深入淺出的授課方式取代只求導艱深瑣碎公式的傳統方式，並搭配一般觀光旅遊領域中的常見的議題（例：遊客的旅遊行為、觀光行銷組合的可行性分析，或者旅館產業的顧客關係等），運用課堂所學的概念實際去操作和分析，以增加使用高等統計學應用的興趣和信心，故課程目標主要有三：</p> <ol style="list-style-type: none"> 1. 熟悉多變量統計分析方法基本概念、理論與先關應用。 2. 正確解讀分析與研究報告的數據。 3. 培養學生應用統計分析工具於觀光、休閒、遊憩研究領域的能力。 				
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	具備觀光、休閒、遊憩之理論的進階知識 To Have advanced knowledge on tourism、recreation and leisure.			○
B	具備多元邏輯思考、問題分析與解決的能力 Students will be able to identify, analyze and solve business problems with logical thinking.			●
C	具備跨文化領導、溝通協調與團隊合作的能力 Students will be able to demonstrate effective leadership, communication, coordination and teamwork skills.			
D	具備國際視野以及外語溝通的能力 Students will be able to communicate in foreign languages and have an awareness of the global and cultural diversity issues.			
E	善用資訊科技進行資訊搜尋、分析與統整 To Use of technology for information gathering, analysis and integration.			●
F	熟悉「深度遊憩體驗」之經營與規劃的觀光休憩知識 To Develop "deep recreation experience" of tourism and recreation management and planning knowledge.			○
G	熟悉「關懷社群健康」之經營與規劃的觀光休憩知識 To Develop "Caring for the Community Health" of tourism and recreation management and planning knowledge			○
H	熟悉「強調資源永續」之經營與規劃的觀光休憩知識 To Develop "emphasis on sustainable resource" of tourism and recreation management and planning knowledge.			○
<p>圖示說明 Illustration : ● 高度相關 Highly correlated ○ 中度相關 Moderately correlated</p>				

授課進度表 Teaching Schedule & Content

週次Week	內容 Subject/Topics	備註Remarks
1	Course introduction	
2	<ul style="list-style-type: none"> Review of basic statistical terms Multivariate analysis- An overview Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Overview of multivariate methods. In Multivariate data analysis (pp. 1-42). Cengage.	
3	Questionnaire design and measurement concepts Vaske, J. J. (2008). Writing and constructing surveys. In Survey research and analysis- Applications in parks, recreation and human dimensions (pp. 121-171). Venture.	
4	1. Data entry and coding 2. Data cleaning and examination Jaggia & Kelly (Chapters 2 & 3)	
5	Public holiday (Oct 10)	
6	<ul style="list-style-type: none"> Data entry and coding Data cleaning and examination Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Examining your data (pp. 45-91). Cengage.	
7	Sampling and sampling distribution Jaggia, S., & Kelly, A. (2022). Sampling and sampling distributions. In Business statistics: Communicating with numbers (pp. 7-1-7-33). McGraw Hill.	
8	<ul style="list-style-type: none"> Hypothesis testing Univariate data analysis Jaggia & Kelly (2022), Chapter 9	
9	期中考試週 Midterm Exam	
10	Bivariate Statistical Analysis: Chi-square, t-tests, ANOVA Jaggia & Kelly (2022), Chapters 10, 12 & 13	
11	Bivariate Statistical Analysis: Measures of Associations- Correlation, simple linear regression Lind et al. (2024), Chapter 13	
12	Exploratory Factor analysis Hair et al. (2019), Chapter 3	
13	Cluster analysis Hair et al. (2019), Chapter 4	
14	MANOVA Hair et al. (2019), Chapter 6	
15	Multiple linear regression & logistic regression Hair et al. (2019), Chapter 8	
16	SEM- An introduction Course review and group project consultations Hair et al. (2019), Chapter 11	
17	Group presentations	

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	20%		✓						
期中考成績 Midterm Exam	30%	✓							
期末考成績 Final Exam									
作業成績 Homework and/or Assignments	50%			✓	✓				
其他 Miscellaneous (_____)									

評量方式補充說明

Grading & Assessments Supplemental instructions

General performance will be assessed based on students' completion of the assigned exercise each week. Midterm exam will be comprised of multiple-choice questions and analysis questions. There will be two assignments- an individual and a group presentation. Each student will identify a research paper from a journal article that employs multivariate data analysis in addressing a research problem. Students are encouraged to identify an article that aligns with their research interest. The second assignment is a group presentation where students will work in group (2 students) to develop and examine one or more research questions and test related hypotheses based on at least one multivariate statistical method. In addition to an oral presentation, students will also need to submit relevant data analysis and results of hypothesis testing to the lecturer at the end of their presentation.

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.)

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.)

其他補充說明 (Supplemental instructions)