

## 南台科技大學 98 學年度第 2 期課程資訊

課程名稱	統計資料分析方法
課程編碼	7ZM02901
系所代碼	07
開課班級	碩企管國際一甲 碩企管國際二甲
開課教師	顏慧
學分	3.0
時數	3
上課節次地點	四 7 8 9 教室 S209A
必選修	選修
課程概述	<p>This course is the second part of a sequence of statistical data analysis courses: “Statistical Data Analytic Methods (I)”, “Statistical Data Analytic Methods (II)”, and “Advanced Statistical Data Analytic Methods”. Materials covered in the sequence consist of univariate statistical methods, and multivariate statistical methods. These courses are to help students, primarily from business and social sciences, learn the application of the basic and advanced data analytic techniques. We will emphasize the concepts of every given technique and its use, and will help students learn how to interpret the resulting output obtained from the widely used statistical package SPSS(Statistical Package for Social Sciences) or SAS(Statistical Analysis System).</p>
課程目標	<p>At the end of this course, students will be able to learn the basics of statistical data analysis, and will be aware of the importance of statistical analysis for conducting a scientific research. A wrongly doing statistical analysis which results in a misleading conclusion is worse than no analysis. Students will be introduced to the essentials of having an appropriate statistical analysis.</p>
課程大綱	英文全程教學，無須中文課程大綱。
英文大綱	<ol style="list-style-type: none"> <li>1. Tests of Population Means (Continue) <ol style="list-style-type: none"> <li>(1) Two-way ANOVA</li> <li>(2) Three-way ANOVA</li> <li>(3) Multi-way ANOVA</li> </ol> </li> <li>2. Studying the Relationships among Two or More Quantitative Variables <ol style="list-style-type: none"> <li>(1) Correlation Analysis</li> <li>(2) Regression Analysis</li> </ol> </li> <li>3. Tests of Population Proportions <ol style="list-style-type: none"> <li>(1) Tests for Two Population Proportions : Independent Samples (Binomial Test , Z-test (Normal Approximation) , Chi-Square Tests for Independence : Contingency Table Analysis)</li> <li>(2) Tests for Two Population Proportions : Paired Samples</li> </ol> </li> </ol>

	<p>(McNemar Test)</p> <p>(3) Tests for More Than Two Population Proportions : Independent Samples (Chi-Square Tests of Independence : Contingency Table Analysis)</p> <p>(4) Tests for More Than Two Population Proportions : Dependent Samples (Cochran's Q Test)</p> <p>4. Analysis of Data for Multiple Choices</p> <p>5. Nonparametric Methods</p> <p>(1) Spearman Rank Correlation Coefficient</p> <p>(2) Chi-Square Test</p> <p>(3) McNemar Test</p> <p>(4) Cochran's Q Test</p> <p>6. Analysis of Covariance</p> <p>7. Multivariate Data Analysis (I)</p> <p>(1) Principal Components Analysis</p> <p>(2) Exploratory Factor Analysis</p> <p>(3) Reliability and Validity Analysis</p> <p>(4) Canonical Correlation Analysis</p> <p>(5) Cluster Analysis</p>
教學方式	課堂教授,實務操作,
評量方法	自行設計測驗,作業/習題練習,實作評量,課堂討論,課程參與度(出席率),
指定用書	Applied Linear Statistical Models , 5th Edition
參考書籍	<p>1. Managerial Statistics 、Keller 、8th ed. 、ISBN : 9780324569551 、Publisher: Cengage Learning 、Taiwan Agent: Tsang Hai Book Publishing Co. (滄海)</p> <p>2. Applied Multivariate Techniques 、Subhash Sharma 、1996 ed 、Publisher: John Wiley &amp; Sons, Inc. 、Taiwan Agent: Tsang Hai Book Publishing Co. (滄海)</p> <p>3. Using Multivariate Statistics 、Tabachnick 、5th ed.(2007) 、Taiwan Agent: Hua Tung (華通)</p> <p>4. Multivariate Data Analysis Hair\Black\Babin\Anderson\Tatham 、6th ed.(2006) 、Taiwan Agent: Hwa Tai Publishing (華泰)(Note: The 7th ed. is also available now. ISBN: 0135153093)</p>
先修科目	<p>1. Introductory Statistics</p> <p>2. Statistical Data Analysis (I)</p>
教學資源	Notebook, Projector, Overhead, ftp site for class material downloading
注意事項	<p>1. No Absence</p> <p>2. No Late Homework</p> <p>3. No Makeup Exams</p> <p>4. No Cheating</p>

全程外語授課	1
授課語言 1	英語
授課語言 2	
輔導考照 1	
輔導考照 2	