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開課班級: 碩熱農一A

授課老師: 廖世義

學分數: 3

課程大綱:

Based on the view of multivariate data, the purpose of this course is to introduce several analysis methods and empirical applications. Course contents concern with statistical methods designed to elicit information, data reduction, sorting and group similar objects or structural simplification from the data sets include simultaneous measurements on many variables. Through the explanation of empirical problems in business, several applications of multivariate techniques will be introduced like as ANOVA, ANCOVA, MANOVA, Principal Components Analysis, Exploratory Factor Analysis (EFA), Multiple Regression Analysis, Multiple Discrimination analysis, Logistic Regression, Conjoint Analysis, Multidimensional Scaling Method (MDS), Clustering Analysis, Analyzing Nominal Data with Correspondence Analysis, Confirmatory Factor Analysis (CFA), and Testing Structural Equations Models. Achieving the objectives of this course contributes construction of research structure and interpretation of analyses results.

outline:

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教學型態:

課堂教學

成績考核方式:

平時成績:15%

期中考:30%

期末考:30%

其它:25% Homework of each week%

本科目教學目標:

參考書目:



課程進度表：

週次	起訖月日	授課單元(內容)	備註
第1週	2.21~2.28	Introduction of Multivariate Data Analysis (Dependence/Interdependence Techniques)	8日正式上課。8~12日課程加退選，轉學(系)生、復學生及延修生選課，雙主修、輔系申請，12日申辦抵免學分截止日
第2週	2.28~3.07	Examining Your Data ANOVA, Two way ANOVA, Interactive Effect	
第3週	3.07~3.14	ANCOVA, Control Variable, MANOVA	28日(日)孔子誕辰紀念日/教師節(放假),29日(一)補假
第4週	3.14~3.21	Principal Component Analysis (PCA)	29日成績優異提前畢業者提出申請截止日
第5週	3.21~3.28	Exploratory Factor Analysis (EFA)	6日(一)中秋節(放假)，10日(五)國慶日(放假)
第6週	3.28~4.04	Multiple Regression Analysis	14日學生宿舍安全輔導暨複合式防災疏散演練。18日多益測驗
第7週	4.04~4.11	Multiple Discriminant Analysis	24日(五)補假，25日(六)光復暨古寧頭大捷日(放假)。
第8週	4.11~4.18	Logistic Regression: Regression with a Binary Dependent Variable	30日校課程委員會
第9週	4.18~4.25	Midterm Exam	3~9日期中考試
第10週	4.25~5.02	Conjoint Analysis	13日教務會議,16日教師期中成績上網登錄截止日
第11週	5.02~5.09	Conjoint Analysis (continue)	
第12週	5.09~5.16	Clustering Analysis	24~28體育運動週。24日校園路跑。27日運動大會夜間開幕，28日運動大會活動，29日101週年校慶活動日，照常上班
第13週	5.16~5.23	Multidimensional Scaling (MDS)	
第14週	5.23~5.30	Analyzing Nominal Data with Correspondence Analysis	12日申請停修課程截止日
第15週	5.30~6.06	Analyzing Nominal Data with Correspondence Analysis (continue)	
第16週	6.06~6.13	Confirmatory Factor Analysis (CFA)	22日校務會議。25日行憲紀念日(放假)
第17週	6.13~6.20	Testing Structural Equations Models	1日(四)開國紀念日(放假)
第18週	6.20~6.27	Final exam	5~11日期末考試，10~11日學生退宿