

Prerequisites:

We encourage you to speak in English in this course. The lecture and discussion will be performed by speaking in English.

You should have experience with fundamental statistics. Experience using with IBM SPSS is not necessary, though basic familiarity with Factor analysis and Structural Equation Modeling would be helpful.

Course Description:

According to social and behavioral science research methods increasingly complex and advanced in computer technology in recent years, a variety of multivariate statistical method has good application in the analysis of social and behavioral sciences research data. This course describes the use of SPSS statistical software and the use of multivariate statistical methods to analyze research data.

This course is designed for graduate students who had completed course of Educational Statistics (I) or equivalent. Content will include concepts of inferential statistics, the assumptions associated with and the application of selected inferential statistical procedures, including z-test, t-tests, Chi-square, one-way ANOVA, factorial designs of ANOVA, analysis of covariance, and linear regressions. Computer software (SPSS) will be employed to assist in the analysis of data for this course. The emphasis in this course will be upon understanding statistical concepts, developing skills for carrying out data analyses, and interpreting and reporting findings.

Assessment Methodologies:

Assignments 20%

Midterm Exam 30%

Final exam 30%

Class discussion involvement 10%

Presentation 10%

Required and Recommended Texts/Readings with References:

Julie Pallant (2010) SPSS Survival Manual : A step by step guide to data analysis using SPSS ISBN : 9780335242399

Schedule:

Week	Content
1	Introduction of quantitative study
2	SPSS statistical software practice I
3	SPSS statistical software practice II
4	SPSS statistical software practice III
5	SPSS statistical software practice IV
6	SPSS statistical software practice V
7	Factorial analysis of variance I
8	Factorial analysis of variance II
9	Mid-term Examination
10	Multiple regression I
11	Multiple regression II
12	Item analysis, validity and reliability
13	Explore factor analysis
14	Confirmatory factor analysis
15	Structure equation modeling I
16	Structure equation modeling II
17	Structure equation modeling III
18	Final-term Examination