Cluster	Course Title	Instructor	Credit	Semester
S	Quantitative methods in Educational Research	Hyun Jung LEE	2	2016 Winter
Course Description				

The Quantitative method in Education research means a way of describing phenomena in numbers and measures instead of words. So, the purpose of This course is to learn knowledge and skill of basic statistical methods for educational research. Especially, this course focuses on learning the fundamental ideas and the most commonly used techniques to organize and make sense of data.

Not only to lecture about basic concepts and statistical theory, but also to practice SPSS computer program in lab will be accomplished in this course.

Objective

After completing this course, students will;

1. Have a clear and exact knowledge of statistical basis for Quantitative research.

- 2. Understand the material in journal articles.
- 3. Explain what the result of many Statistical analyses mean.
- 4. Know how to perform basic statistical work using SPSS.

Leaning Method

1)Lecture: Students will learn knowledge including theory, skill how to handle the Statistical program, and so on.

2) Practice: Students will exercise the statistical analysis with SPSS.

Contents

- 1) Course orientation and introduction: Yippee! I'm in Statistics.
- 2) Descriptive Statistics(central tendency)
- 3) Understanding Variability
- 4) A picture really is worth a thousand words: histogram, bar G, line G, pie G
- 5) Correlation
- 6) An introduction to understanding Reliability and Validity
- 7) Hypothetical Testing
- 8) Normal Distribution
- 9) Inferential Statistics : statistical significant
- 10) t-test: tests between the means of different groups and related groups
- 11) F-test: ANOVA (1)
- 12) F-test: ANOVA (2)
- 13) Regression
- 14) Chi-square Test statistics
- 15) Some other important statistical procedures

Requirements

- 1. Students who take this course have to get the textbook(Statistics for people who (think they)hate statistics.
- 2.Students who take this course will be required to have small knowledge of SPSS program.

Evaluation

- 1. Data analysis every day check up :50%
- 2. Final exam: 50%

Textbooks and Papers

Text book: Statistics for people who (think they) hate statistics.

Neil J. Salkind, 2008, Sage Publication

