

The Hebrew University of Jerusalem

Syllabus

COMPUTER DATA ANALYSIS IN SOCIAL WORK RESEARCH - 3814

Last update 26-10-2019

HU Credits: 2

<u>Degree/Cycle:</u> 1st degree (Bachelor)

Responsible Department: Social Work

Academic year: 0

Semester: 1st Semester

<u>Teaching Languages:</u> Hebrew

Campus: Mt. Scopus

<u>Course/Module Coordinator:</u> Yaakov Uriel Pinsky

Coordinator Email: yaakovu.pinsky@mail.huji.ac.il

Coordinator Office Hours: Arrange by Email

Teaching Staff:

Mr. Yaakovu Pinsky

Course/Module description:

The course provides students the ability to link research questions, information and data, to computerized data organization and statistical analysis.

Course/Module aims:

At the end of the course, students are expected to know how insert data into SPSS. They will know to check for errors in the data, define and treat missing values in different ways, modify variables and create complex variables from multiple items. Upon completion of the course the students will know to choose the appropriate statistical procedures to fit their hypotheses and the types of the data at hand.

<u>Learning outcomes - On successful completion of this module, students should be</u> able to:

Properly reading SPSS test outputs and reaching the appropriate conclusions. The statistical procedures that will be covered are:

Frequency and distribution printouts.

Chi-square for correlation and for goodness of fit (and its derivatives).

Mean comparisons (all t tests and one factor analysis of variance). Calculation of correlation coefficients and accompanying scatter plot use.

Reliability tests between items.

Upon completion of the course, students will know to export the data from their analyses and report their data in a scientific fashion.

Attendance requirements(%):

100%

Teaching arrangement and method of instruction: Active teaching in a computers Lab. Frontal explanations in which topics are presented on screen, while the students practice running the procedures and tests that the software offers and understanding and reporting the results.

Course/Module Content:

Introduction . The nature and structure of the course. What is spss software? Ways to type data or import data from another source into spss.

Understanding the main menu. Work In dataview. Variables and their definition.

Window display of variables and set attributes variables. Edits variables . Export outputs . Generation of reports / lists. Exercise 1

Reviewing outputs to identify problematic entries. Descriptives procedure. Producing a frequency distribution (frequencies). Display options and related statistics. Data file and the output file - saving and opening. Labels to variables and values. Recoding of the categories of variables (recode).

Making determinations regarding missing values (missing values) . Distributions of two variables (crosstabs) and production of chi-square and its derivatives . Interpretation of the results and limitations of the test. Chi-square goodness of fit . Summary of measurement scales subject .

Creating new variables using: Compute and count. An example of a questionnaire scoring guidelines " locus of control " LOC .

Single- sample t test , independent samples and correlated samples / Mating . Exercise 2 .

What and how to choose and interpret . Self- practice guidelines classroom / home. Working with more than two averages - variance analysis and various analysis options . Visualization of different analysis .

Significance: two - tailed and one- tailed .

How to choose the correct test: t-test and ANOVA.

Working with subgroups : Sort cases . Select cases . Split files for analysis.

Producing scatter plots to identify trends.

Pearson correlation coefficients and Spearman and partial correlation . Charts in spss

Workign with Syntax, statistics.jnl (journal). Benefits of working with syntax in spss.

Reliability analysis.

How to determin which procedures should be used with depending on to the nature of the data and the type of hypothesis.

Required Reading:

This is an applied course. The course website provides slides and handouts that accompany and expand on the lessons.

<u>Additional Reading Material:</u>

מעודכן לגרסה SPSS שריד, מרים, שריד, יוסף (2011) $^{\circ}$ מתדריך העברי למשתמש בתוכנת (2011) מחבר אורך:, קרית חיים : מכון שריד - שרותי מחקר והדרכה (19

2. מדריך מקוון (אנגלית) תוצרת IBM

ftp://public.dhe.ibm.com/software/analytics/spss/documentation/statistics/20.0/en/client/Manuals/IBM SPSS Statistics Brief Guide.pdf

3. מדריך שימושי באנגלית להלן

http://www.mhhe.com/socscience/psychology/runyon/spss/spss.html

Course/Module evaluation:
End of year written/oral examination 78 %
Presentation 0 %
Participation in Tutorials 2 %
Project work 0 %
Assignments 20 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information: