

Course Syllabus

Dr. Pavel Goldstein

Data Management and Analysis in SPSS for Non-Statisticians -286.4974

ניהול וניתוח נתונים ב- **SPSS** ללא-סטטיסטיקאים

Contact information:

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Overview

Data Management and Analysis in SPSS for Non-Statisticians is designed to (1) integrate statistical skills and knowledge acquired in academical classes introduce students to practical, applying it with SPSS. The class will focus on data management, and analysis to facilitate success in their coursework, master/PhD thesis or future employment. Students will learn basic skills related to creating, cleaning, and managing a dataset using SPSS. Additionally, students will learn skills related to: selecting appropriate statistical procedures; performing analyses in SPSS (including the use of SPSS syntax); interpreting the statistical outputs; and preparing tables, graphs, and general reports based on analyses. Programming topics will be demonstrated using examples from heuristic datasets. Students are expected to have a basic understanding of statistics (e.g., masters-level biostatistics or an equivalent) and required to be familiar with basic SPSS functionality or other statistical software. Importantly, during the course, the students will benefit from the opportunity to manage and analyze their own data. As a bonus, the students will improve their skills in reading statistical methods and results sections in scientific publications.

Successful leaders in public health should be able to demonstrate knowledge and skills in the areas taught in this course so they become able to support original research, critically review published research, and generate reports to a variety of audiences. Students are expected to understand all assigned readings and satisfactorily complete all SPSS-related homework assignments.

Course credits:

The full course will be taught as a 2 credit course.

Student Assessment:

1. Students will be assessed using in-class and out-of-class assignments where SPSS will be used to: manage data, apply appropriate univariate and multivariate methods, and present written results from data analyses.
2. Active participation in lectures, group discussions, and group assignments.
3. Students should be present at least 80% of the classes time.
4. The students will be required to submit a short statistical report based on their data/provided data. Could be done in dyads.

*סטודנטים נדרשים לפתוח מצלמות בשיעורים. במקרה שהשיעור יוקלט – תמונות הגלריה לא יוקלטו. אי פתיחת מצלמה תחשב כהעדרות. במקרים פרטניים של קושי בפתיחת מצלמה, יש לפנות למרצה הקורס מראש לפני השיעור לקבלת אישור או עזרה.

Required/Recommended Text:

1. George and Mallery. *SPSS for Windows Step by Step: A Simple Guide and Reference, 18.0 Update (11th Edition)*. Prentice Hall (2010). ISBN-10: 020501124. 1; ISBN-13: 978-0205011247.
2. Zagumny. *The SPSS® Book: A Student Guide to the Statistical Package for the Social Sciences®*

Although not required, if students wish to buy SPSS for their own computers they can do so for 120 NIS by following the instructions on this link:
<http://computing.haifa.ac.il/index.php/en/software>

CLASS CALENDAR

Day	Day/Time	Topic
1	19.07.2022 8:30-13:45	<ul style="list-style-type: none"> ● Course Introduction (format, assignments, grading, timing) ● “Expectations for Course” ● Primary and Secondary Sources of Data ● SPSS Introduction ● Data Entry Basics (names, labels, properties, logs, codebooks) ● Data Entry (in Excel) (heuristic 5 records) (can be done in SPSS)
2	26.07.2022 8:30-13:45	<ul style="list-style-type: none"> ● Importing Data from Excel (check for accuracy) ● Importing and managing your data ● Merging Data (sorting by ID, new cases, new variables) ● Recoding, Modifying and Transforming Data (missing data, naming, collapsing, computing) ● Prictice
3	02.08.2022 8:30-13:45	<ul style="list-style-type: none"> ● Descriptive statistics (central tendency, descriptive statistics, cross-tabulations) ● Exploring & Cleaning Data (missing data, incorrect values, outliers) ● Data imputation ● Data Management (select cases, split file, organizing outputs, saving/exporting) ● Prictice
4	09.08.2022 8:30-13:45	<ul style="list-style-type: none"> ● Parametric statistical tests: t-tests, ANOVA, linear regression ● Non-parametric statistical tests ● Writing statistical report ● Prictice
5	16.08.2022 8:30-13:45	<ul style="list-style-type: none"> ● Statistical modeling and predictions ● Introduction to Mixed models ● Reporting ● Questions and Specific Issues ● Practice ● Conclusion

** Class Calendar is subject to change at the discretion of the Instructor*

סטודנט יקר

אם יש לך לקות למידה או מוגבלות/בעיה רפואית שעשויה להשפיע על לימודיך, ושכגינה את/ה זקוק/ה להתאמות אנא פנה/י לדיקנאט הסטודנטים למדור נגישות ולקויות למידה:

טל: LDA@univ.haifa.ac.il 04-8249265 דואל

לאבחון והתאמות בגין לקות למידה ו/או הפרעת קשב יש לפנות ליה"ל:

טל: mhait@univ.haifa.ac.il 04-8249022 דואל

אם יש ברשותך מכתב התאמות מהאוניברסיטה ואת/ה זקוק/ה להנגשה בקורס אנא פנה/י אליי בשעות הקבלה או במייל בסמוך לתחילת הקורס.

If you have a disability that may affect your studies and for which you may require accommodations, please contact the Accessibility and Learning Disabilities Department at the Dean of Students office

e-mail: LDA@univ.haifa.ac.il Phone number: 04-98249265

Students that receive accommodation letters, and need academic adjustments, please meet with me to discuss the provisions of those accommodations as early in the semester as possible.