

The Hebrew University of Jerusalem

Syllabus

Foundations of Methodology and Statistics - 53103

Last update 10-03-2025

HU Credits: 4

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Sociology & Anthropology

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Mr. Alexandru Bucevschi

Coordinator Email: alexandr.bucevschi@mail.huji.ac.il

Coordinator Office Hours: Tuesday, 12:30-13:30. Please schedule in advance by e-mail

Teaching Staff:

Mr. alexander bucevschi,
Ms. nogah mishael,
Mr. Dekel Gilad

Course/Module description:

An introduction to statistics course for 1st year Sociology & Anthropology students at the BA level.

Course/Module aims:

This course provides a theoretical and applied introduction to statistics, focusing on applications relevant to sociological research. Throughout the course, students will:

1. Develop foundational knowledge in descriptive statistics, statistical inference, and the basics of probability theory.
2. Learn to translate theoretical statistical concepts into practical analysis using SPSS and Excel.
3. Cultivate critical thinking skills regarding the use and interpretation of quantitative data in sociological research.

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

Upon completion of this course, students will be able to:

1. Identify and classify data: Distinguish between different types of variables (nominal, ordinal, interval, ratio) and apply appropriate measurement scales to sociological data.
2. Analyze distributions: Characterize distributions using measures of central tendency (mean, median, mode) and measures of dispersion (range, variance, standard deviation), selecting appropriate measures based on variable type and distribution.
3. Apply statistical analysis: Calculate statistical measures, interpret their theoretical and practical significance, and draw valid conclusions from data distributions in sociological research.
4. Evaluate relationships between variables: Identify, quantify, and interpret the strength and significance of relationships between variables using appropriate association measures (Pearson's correlation, Spearman's rho, chi-square, etc.).
5. Utilize analytical tools effectively: Build and manage data files in SPSS and Excel,

perform data processing and cleaning operations, generate statistical outputs, and compare different groups and samples.

6. Conduct probability analysis: Calculate and interpret basic probabilities, understand the principles of key probability distributions (normal, binomial), and apply them in sociological research contexts.

7/ Apply statistical critical thinking: Evaluate the quality of statistical conclusions in sociological studies, identify potential biases, and make informed decisions regarding the selection of appropriate statistical methods.

Attendance requirements(%):
100%

Teaching arrangement and method of instruction: Lesson and practice

Course/Module Content:

Measurement scales
Tables and graphs
Central measures
Dispersion measures
Location measures
Normal distribution
Statistical estimation
Dependence measures
Probability

Required Reading:
None required reading

Additional Reading Material:

Grading Scheme:

Submission assignments during the semester: Exercises / Essays / Audits / Reports
/ Forum / Simulation / others 25 %
Mid-terms exams 75 %

Additional information:

Course requirements:

1. Submission of weekly exercises (25% of final grade):

Students are required to submit weekly exercises.

All exercises are mandatory as they prepare the students for the quiz that follows them.

The submission of exercises is personal. A misconduct or a delay in the submission of an exercise will cause a penalty of 2.5 points for each exercise, from the final grade .

Submission of exercises should be done electronically via Moodle.

Exercises are only registered as "Pass/Fail". Every week, a full solution of the exercise will be uploaded to the website and should be checked and compared by the student to the exercise submitted by him/her.

Pay attention - It is the student's responsibility to check the correctness of their answers every week.

2) Five quizzes (75% of final grade):

Quiz 1 - Class 7

Quiz 2 - Class 9

Quiz 3 - Class 11

Quiz 4 - Class 14

The highest 3 out of 4 grades will be calculated as 75% of the final grade.