

Statistics for Social Sciences

LEVEL	SEMESTER	ECTS	FORMAT	LANGUAGE
Bachelor - Master	Winter and summer	5 ECTS	Lectures and seminars	English

Course description

This course introduces students to the basic principles and practical applications of statistics in social science research. Students learn how to prepare, analyse and interpret quantitative data using descriptive and basic inferential statistical methods. The course also focuses on data visualization and the use of Excel and IBM SPSS Statistics.

Main topics

- Introduction to quantitative data and variables
- Data preparation and basic data management
- Frequency distributions and descriptive statistics
- Measures of central tendency and variability
- Tables and graphical presentation of data
- Relationships between variables: correlation and contingency
- Introduction to probability and statistical inference
- Normality and choosing appropriate statistical tests
- Parametric and non-parametric tests
- Hypothesis testing and statistical significance
- Correlation and comparison of groups
- Interpretation and presentation of statistical results
- Introduction to Excel and IBM SPSS Statistics

Learning outcomes

By the end of the course, students will be able to:

- understand basic statistical concepts used in social research
- prepare and organize quantitative data for analysis
- identify variables and select appropriate statistical procedures
- calculate and interpret basic descriptive statistics
- create and interpret tables and graphs
- analyse relationships between variables
- apply basic statistical tests and interpret their results
- understand hypothesis testing and statistical significance
- use Excel and basic functions of IBM SPSS Statistics
- clearly present and interpret statistical findings

Teaching methods

Lectures, practical exercises, data analysis, individual and group work, and interpretation of empirical datasets.

Assessment

Active participation, practical statistical assignments, a semester data-analysis task and a final written test.