

The Hebrew University of Jerusalem

Syllabus

Introduction to Statistics - 91135

Last update 07-10-2021

HU Credits: 3

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Nursing - Ein Kerem

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Ein Karem

Course/Module Coordinator: Moshe Piro

Coordinator Email: moshe.piro@mail.huji.ac.il

Coordinator Office Hours:

Teaching Staff:

Mr. Moshe Piro,
Mr. Nadav Har-tuv,
Ms. Nofar Gabay

Course/Module description:

The course is divided into three main parts - descriptive statistics, introduction to probability and inferior statistics.

Course/Module aims:

The course is designed to impart theoretical and practical knowledge of statistical methods for understanding and analyzing various problems, to provide tools for planning and conducting quantitative research, understanding and analyzing research findings, and understanding research published in academic journals

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

Upon successful completion of the course, the student will be able to:

1. Master basic concepts in the field of statistics and probability.
2. Perform statistical data processing for research purposes.
3. Understand the probabilistic background for statistical inference and sampling.
4. Understand the considerations in selecting statistical tools that are appropriate for different types of research.
5. Use descriptive and inference statistics output in excel, SPSS.

Attendance requirements(%):

Compulsory attendance

Teaching arrangement and method of instruction: Frontal course, with computerized tests

Course/Module Content:

Descriptive statistics:

Frequency tables.

Graphical representation of the data.

Central indices: average, median, common.

Dispersion indices.

Relative position indices.

Linear transformation.

Excel SPSS output analysis

Introduction to probability, random variables and normal random variable

Using a distribution board

Statistical inference on one span with a known variance: estimation and test of hypotheses.

Statistical inference on one span with unknown variance: estimation and test of hypotheses.

Proportional inference: estimation and testing of hypotheses.

Heating on the difference in expectation

Output analysis (excel, SPSS). Paired samples.

Independent samples.

Required Reading:

There are no reading materials in English

Additional Reading Material:

There are no reading materials in English

Course/Module evaluation:

End of year written/oral examination 70 %

Presentation 0 %

Participation in Tutorials 0 %

Project work 0 %

Assignments 10 %

Reports 0 %

Research project 0 %

Quizzes 20 %

Other 0 %

Additional information: