

The Hebrew University of Jerusalem

Syllabus

Statistics for Economists A - 57340

Last update 11-09-2022

HU Credits: 4

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Economics

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Sarit agami

Coordinator Email: sarit.agami@mail.huji.ac.il

Coordinator Office Hours: Sunday at 18:15. Office: 4208

Teaching Staff:

Dr. Sarit Agami,
Mr. yosef dinin,
Ms. ruth zussman

Course/Module description:

1. Statistical tools for describing and analyzing data, and in particular relationships between variables
2. The basics of probability
3. Sampling and estimation of parameters in the population.

Course/Module aims:

Providing basic knowledge in statistics and tools for statistical inference.

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

1. To describe and analyze a data file
2. To calculate probabilities
3. To estimate parameters in the population using a sample

Attendance requirements(%):

0

Teaching arrangement and method of instruction: Frontal teaching in the classroom and solving exercises.

Course/Module Content:

- * Descriptive statistics: graphical displays, measures for location and dispersion, measure for relative location, covariance, correlation.
- * Probability
 - basic concepts, probability calculations, conditional probability, independence, complete probability, Bayes formula.
 - One-dimensional random variable: general, binomial, Poisson, exponential, normal
 - Two-dimensional random variable: joint distribution, conditional distribution, covariance, Pearson.
- * Sampling: definition, Markov inequality, Chebyshev inequality, the weak law of large numbers, the central limit theorem,
- * Estimation of population parameters

Required Reading:

None

Additional Reading Material:

- * *Introduction to Statistics and Probability*, Shmuel Zamir and Ruth Bate Marom, Open University Press (In Hebrew).
- * *Introduction to Statistics without Statisticians*, Ronit Eisenbach (In Hebrew).
- * *Probability: Introduction to Probability and Statistics*, Thelma Leviathan, Alona Raviv (In Hebrew).

Course/Module evaluation:

End of year written/oral examination 70 %

Presentation 0 %

Participation in Tutorials 0 %

Project work 0 %

Assignments 5 %

Reports 0 %

Research project 0 %

Quizzes 25 %

Other 0 %

Additional information:

Each week an exercise will be given. At least 10 exercises must be submitted during the semester, the weight of the grade on the exercises will be 5% of the final grade, as a protective grade.

During the course there will be two exams. The weight of each exam will be 12.5% of the final grade, as a protective grade.

* The lessons will be recorded, and the lesson recordings will be available to all students at any time.