האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

The Hebrew University of Jerusalem

Syllabus

INTRODUCTORY STATISTICS & DATA PROCESSING A - 71723

Last update 20-07-2017

HU Credits: 4

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: environmental economics & management

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Rehovot

Course/Module Coordinator: Dizza Bursztyn

Coordinator Email: Dizza.Bursztyn@mail.huji.ac.il

Coordinator Office Hours: Sunday 13-14

Teaching Staff:
Dr. Dizza Bursztyn
Ms.

Course/Module description:
The course will provide basic knowledge of probability theory.
In the last part, the course will provide knowledge in data presentation and in descriptive statistics.

Course/Module aims:
To provide basic knowledge of probability theory. To provide knowledge of descriptive statistics and basic knowkedge of Excel.

Learning outcomes - On successful completion of this module, students should be able to:
To solve probability problems.
Find the distribution of a discrete random variable and calculation of moments.
Solve simple problems for continuous random variables.
Know the use of the normal distribution.
Know to calculate correlation.
Use of descriptive statistics for data presentation.
Basic use of Excel.

Attendance requirements(%):
None

Teaching arrangement and method of instruction: Lectures, frontal exercise and homework

Course/Module Content:
Probability:basic definitions.
Conditional probability. Dependent and independent events;
Random variables and distribution function. Joint probability distribution.
Expectation, variance and co-variance. Correlation. Binomial distribution.
Continuous random variables.
Normal distribution. Random sample and central limit theorem.
Knowledge of personal computer, basic learning of Excel.
Frequency tables, descriptive statistics and percentiles. Graphical presentations.

Required Reading:
Leviatan and Raviv: Introduction to probability and statistics: Probability.

Additional Reading Material:
none

Course/Module evaluation:
End of year written/oral examination 75 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 10 %
Reports 0 %
Research project 0 %
Quizzes 15 %
Other 0 %

Additional information:
None