

# The Hebrew University of Jerusalem

Syllabus

# INTRODUCTION TO PROBABILITY AND DESCRIPTIVE STATISTICS - 71025

*Last update 27-08-2024* 

HU Credits: 2

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Environmental Economics & Management

<u>Academic year:</u> 0

Semester: 2nd Semester

Teaching Languages: Hebrew

<u>Campus:</u> Rehovot

Course/Module Coordinator: Dizza Bursztyn

Coordinator Email: dizza.bursztyn@mail.huji.ac.il

Coordinator Office Hours: Tuesday 11-12

<u>Teaching Staff:</u> Dr. Dizza Bursztyn, Mr. Shlomo Akiva Levin, Dr. hadas Don

### Course/Module description:

During the course we shall learn: probability, conditional probability, random variables, normal distribution and central limit theorem. Descriptive statistics using JMP and Excel (self-learning)

## Course/Module aims:

To provide basic statistical tools in probability and descriptive statistics using JMP and Excel software

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

Knowledge in probability calculations.

*Use of graphical presentations and descriptive statistics in order to describe and summarize data. Basic knowledge of JMP and Excel* 

<u>Attendance requirements(%):</u> 100

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

# Course/Module Content:

*Events, definition of probability, conditional probability, random variables, binomial distribution, normal distribution, central limit theorem, descriptive statistics: type of variables, frequency tables, graphical presentation, scale and dispersion parameters, percentiles* 

<u>Required Reading:</u> Eizenbach Ronit: Statistics for non-statisticians. Open university: Introduction to statistics and probability for social sciences students a (unit 1-8) Introduction to statistics and probability for social sciences students b (unit 9)

### <u>Additional Reading Material:</u> Sall: JMP Start Statistics Leviatan and Raviv: Introduction to probability and statistics (vol 1): Probability

<u>Grading Scheme:</u> Written Exam % 85 Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 5 % Other 10 %

#### Additional information:

The student should self-learn Excel. A test will be held in Excel, the weight of the test is 10%