

The Hebrew University of Jerusalem

Syllabus

Statistical Methods for Business Administration - 55805

Last update 05-07-2018

<u>HU Credits:</u> 3

Degree/Cycle: 2nd degree (Master)

Responsible Department: Business Administration

<u>Academic year:</u> 0

Semester: 1st and/or 2nd Semester

<u>Teaching Languages:</u> Hebrew

<u>Campus:</u> Mt. Scopus

Course/Module Coordinator: Dr. Assaf Sarig

Coordinator Email: assaf.sarig@mail.huji.ac.il

Coordinator Office Hours:

Teaching Staff:

Dr. Assaf Sarig

Course/Module description:

Thorough study of issues and concepts in statistics and probability. Focusing on statistical inference.

Course/Module aims:

To extend the knowledge in probability and statistics. To enable the students to recognize and to use the statistical tools' to understand and to critically investigate statistical data from all kind of media.

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

To explain statistical data . To evaluate quantitative information. To make statistical conclusions from data. To educatedly deal with uncertainty situations.

Attendance requirements(%):

none

Teaching arrangement and method of instruction: lectures

Course/Module Content:

Relearning basic concepts in probability. Random variables, 2D random variable. The normal distribution and its uses, central limit theorem. Statistical inference basic concepts, estimation, statstical tests, alpha, beta, p-value.

Chi-Square test for independence, spearman's rank correlation test.

Pearson correlation coefficient, and simple linear regression. Multiple linear regression.

testing of the difference between expected values in independent and dependent samples.

Wilcocson test and Mann-Whithney test.

ANOVA one and two way factor, aparametric tests.

Chi-Square test for independence. Chi-Square test goodness of fit test.

Hypothesis testing on the variance on one sample and on 2 samples.

Required Reading:

Readings from Hebrew books (as described in the Hebrew version)

<u>Additional Reading Material:</u> non relevant

<u>Course/Module evaluation:</u> End of year written/oral examination 100 % Presentation 0 % Participation in Tutorials 0 % Project work 0 % Assignments 0 % Reports 0 % Research project 0 % Quizzes 0 % Other 0 %

<u>Additional information:</u> Handing in at least 75% of the weekly exercises.

pre-requisite: Course 55797