האוניברסיטה העברית בירושלים THE HEBREW UNIVERSITY OF JERUSALEM



The Hebrew University of Jerusalem

Syllabus

ADVANCED STATISTICAL MODELS B - 52805

Last update 16-03-2021

HU Credits: 5

Degree/Cycle: 2nd degree (Master)

Responsible Department: Statistics

Academic year: 0

Semester: 2nd Semester

<u>Teaching Languages:</u> Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Pavel Chigansky

Coordinator Email: pavel.chigansky@gmail.com

Coordinator Office Hours: by appointment

<u>Teaching Staff:</u> Prof Pavel Chigansky, Ms. yulia slavutsky

<u>Course/Module description:</u> Introduciton to nonparametric statistics

<u>Course/Module aims:</u> Learning the basic principals and methods of nonparametric statistics

<u>Learning outcomes - On successful completion of this module, students should be</u> <u>able to:</u> Basic knowledge in nonparametric statistics, inlcuding theory and methods

<u>Attendance requirements(%):</u> None

Teaching arrangement and method of instruction: Lectures and Exercise Sessions

Course/Module Content: Estimation of distribution Estimation of statistical functionals and substitution estimators Bootstrap method Kernel estimators Local polynomial estimators Projection estimators Wavelets estimators Splines estimators Bayesian estimators Goodness-of-fit tests Tests based on ranks

<u>Required Reading:</u> none

<u>Additional Reading Material:</u> Additional recommended reading material will be distributed over the course of the semester

<u>Course/Module evaluation:</u> End of year written/oral examination 80 % Presentation 0 % Participation in Tutorials 0 % Project work 0 % Assignments 0 % Reports 0 % Research project 0 % Quizzes 20 % Other 0 %

Additional information:

The exam will take place in class in the usual way if possible