האוניברסיטה העברית בירושלים THE HEBREW UNIVERSITY OF JERUSALEM



The Hebrew University of Jerusalem

Syllabus

LINEAR ALGEBRA (1) - 80134

Last update 14-04-2020

HU Credits: 6

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Mathematics

Academic year: 0

Semester: 1st and/or 2nd Semester

<u>Teaching Languages:</u> Hebrew

Campus: E. Safra

Course/Module Coordinator: Alex Gurevich

Coordinator Email: gurevich@math.huji.ac.il

Coordinator Office Hours: By appointment

Teaching Staff:

Dr. Ori Parzan Mr. Itamar Cwik Mr. Muhamad Abu-Radi Mr. Noam Kolodner Dr. GILI SCHUL-GANZ Mr. Tzoor Plotnikov Mr. Behar Amir Mr. Pavel Giterman Mr. Elad Kosloff Dr. Alex Gourevich Mr. Mr. Raz Or Mr.

Course/Module description:

Fields. Complex Numbers. Vector Spaces. Linear Equations. Determinants. Matrices and Linear Transformations.

<u>Course/Module aims:</u> Introduction to Linear Algebra.

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

Familiarity with the definition of a Field, a Vector Space, a Basis, and a spanning set.

To prove theorems regarding the basic properties of vector spaces.

The concept of a linear transformation and its matrix representation, and the concept of a determinant.

Applications of linear spaces and transformations to analyze solutions to systems of linear equations.

<u>Attendance requirements(%):</u> 0

Teaching arrangement and method of instruction: Lecture + exercise

<u>Course/Module Content:</u> Fields. Complex Numbers. Vector Spaces. Linear Equations. Determinants. Matrices and Linear Transformations.

<u>Required Reading:</u> none

<u>Additional Reading Material:</u> K.Hoffman, R.Kunze, Linear Algebra

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

Additional information:

If necessary, an examination will be conducted by electronic means. If an examination is not possible, the evaluation will be based on the exercises.