



The Hebrew University of Jerusalem

Syllabus

LINEAR ALGEBRA A - 71747

Last update 01-10-2024

HU Credits: 3

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Environmental Economics & Management

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Rehovot

Course/Module Coordinator: Dr. Hezi Halawi

Coordinator Email: hezi.halawi@mail.huji.ac.il

Coordinator Office Hours: TBA

Teaching Staff:

Dr. Hezi Halawi,
Dr. Anna Gourevitch

Course/Module description:

Solution of linear equations, The gaussian method of elimination, vectors ,inverse matrix, determinants, norm, scalar product and orthogonal vectors, applications in economy.

Course/Module aims:

Studying the basic concepts of Linear Algebra enables to understand its applications in sciences. In particular it refers to applications in the economics studies.

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

*Solve linear system of equations. Calculate determinants.
Relate dependence/independence of vectors to the relevant system of linear equations.
Find the inverse matrix if exists.
Relate the linear algebra to its applications in sciences, in particular the ones required in the economics studies, when linear behavior of the relevant functions is in issue.*

Attendance requirements(%):

80

Teaching arrangement and method of instruction: Lecture + exercise

Course/Module Content:

Solution of linear equations, The gaussian method of elimination, vectors ,inverse matrix, determinants, norm, scalar product and orthogonal vectors, applications in economy.

Required Reading:

None

Additional Reading Material:

Linear Algebra 20109 (in Hebrew), The Open University of Israel.

Grading Scheme:

Written / Oral / Practical Exam 100 %

Additional information:

*The students must submit at least 80% of the exercises.
Attendance: at least 80% of lectures.*