The Department of Mathematics
2023–24–A term

Course Name  Linear algebra 1

Course Number  201.1.1211

Course web page  https://www.math.bgu.ac.il/en/teaching/fall2024/courses/linear-algebra-1

Office Hours  https://www.math.bgu.ac.il/en/teaching/hours

Abstract

Requirements and grading

Course topics

• Complex numbers. Fields: definition and properties. Examples.

• Systems of Linear equations. Gauss elimination process.

• Matrices and operations on them. Invertible matrices.


• Vector spaces and subspaces. Linear spanning and linear dependence. Basis and dimension. Coordinates with respect to a given basis.

• Linear transformations. Kernel and Image. Isomorphism of vector spaces. Matrix of a linear transformation with respect to given bases.

• The space of linear transformations between two vector spaces. Dual space

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1 Information may change during the first two weeks of the term. Please consult the webpage for updates