The Department of Mathematics  
2022–23–A term

Course Name  Linear algebra 1

Course Number  201.1.1211

Course web page  
https://www.math.bgu.ac.il//en/teaching/fall2023/courses/linear-algebra-1

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