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

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