

# The Department of Mathematics

2024–25–B term

**Course Name** Differential and Integral Calculus IE2

**Course Number** 201.1.9621

**Course web page**

<https://math.bgu.ac.il/en/teaching/spring2025/courses/differential-and-integral>

**Lecturer** Dr. Natalia Gulko, <gulko@post.bgu.ac.il>, Office

**Office Hours** <https://math.bgu.ac.il/en/teaching/hours>

## Abstract

## Requirements and grading<sup>1</sup>

## Course topics

The aim of the course is to learn basis of Calculus of functions of two and more variables. It includes: a) short study of vector algebra and analytic geometry in plane and space; b) differential calculus of two and more variables and its applications to local and global extremum problems, directional derivatives, Teylor's formula, etc.;c) Integral calculus (line, double and triple integrals) and its applications; d) vector field theory and in particular its applications for studying potential vector fields.

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