

## The Department of Mathematics

2024-25-B term

Course Name Dffierential 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) dffierential 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.

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