

## The Department of Mathematics

2022–23–B term

**Course Name** Differential and Integral Calculus IE2

**Course Number** 201.1.9621

**Course web page**

<https://www.math.bgu.ac.il/en/teaching/spring2023/courses/differential-and-integral-calculus-ie2>

**Lecturer** Dr. Irena Lerman, <lerman@post.bgu.ac.il>, Office מינוס 110

**Office Hours** <https://www.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, Taylor'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>1</sup>Information may change during the first two weeks of the term. Please consult the webpage for updates