

# The Department of Mathematics

2024–25–A term

**Course Name** Introduction to Differential Equations B

**Course Number** 201.1.9171

**Course web page**

<https://math.bgu.ac.il/en/teaching/fall2025/courses/introduction-to-differentia>

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

## Abstract

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

## Course topics

Ordinary differential equations: explicit solutions of first order equations. 2nd order equations. Higher order ordinary differential equations. Systems of ordinary differential equations. .2 Fourier series: Review of series of functions, Fourier expansions and properties of Fourier series, convergence of Fourier series, Gibbs phenomenon. Application to the heat conduction equation. .3 Additional applications as time permits.

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