

## The Department of Mathematics

2024-25-A term

Course Name Introduction to Dffierential 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.

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