



The Department of Mathematics

2024–25–A term

Course Name Introduction to Differential Equations B2

Course Number 201.1.9471

Course web page

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

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

Abstract

Requirements and grading¹

Course topics

First-Order PDE Cauchy Problem Method of Characteristics The Wave Equation: Vibrations of an Elastic String D'Alembert's Solution Fourier Series Fourier Sine Series Initial-Boundary Value Problems The Wave Equation .Separation of Variables Fourier Series Solution of the Heat Equation The Heat Equation. Duhamel's Principle. Laplace's Equation. Dirichlet Problem for a Disc

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