

The Department of Mathematics

2023–24–A term

Course Name Introduction to Differential Equations B

Course Number 201.1.9171

Course web page

<https://www.math.bgu.ac.il/en/teaching/fall2024/courses/introduction-to-differe>

Lecturer Prof. Arkady Poliakovsky, <poliakov@bgu.ac.il>, Office 314

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

Abstract

Requirements and grading¹

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.

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