

## The Department of Mathematics

2017–18–A term

**Course Name** Introduction to Differential Equations C

**Course Number** 201.1.9271

**Course web page**

<https://www.math.bgu.ac.il/en/teaching/fall2017/courses/introduction-to-differe>

**Lecturer** Dr. Saak Gabrielyan, <saak@bgu.ac.il>, Office 315

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

### Abstract

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

### Course topics

- .1 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 periodic ODE's.
- .3 The Laplace transform and applications to ODE's.

---

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