

## The Department of Mathematics

2018–19–B term

**Course Name** Introduction to Differential Equations B

**Course Number** 201.1.9171

**Course web page**

<https://www.math.bgu.ac.il/en/teaching/spring2019/courses/introduction-to-differential-equations-b>

**Office Hours** <https://www.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