

# The Department of Mathematics

2018-19-B term

Course Name Introduction to Probability and Statistics A

Course Number 201.1.9091

#### Course web page

https://www.math.bgu.ac.il//en/teaching/spring2019/courses/introduction-to-probability-and-statistics-a

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

#### Abstract

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

### Course topics

(1) Probability space.(2) Conditional probability, independent events, Bayes's theorem, complete probabilities.(3) Random discrete variable, discrete distributions: unfiorm, binomial, geometric, hypergeometric, negative binomial, Poisson.(4) Random continuos variable, continuos distributions: unfiorm, exponential, normal.(5) Random discrete two dimensional variable, independence of variables.(6) Mean, variance, correlation coefficient.(7) Chebyshev inequality, large numbers law.(8) Central Limit Theorem, normal approximation.

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