

The Department of Mathematics

2021–22–B term

Course Name Introduction to Probability and Statistics A

Course Number 201.1.9091

Course web page

<https://math.bgu.ac.il/en/teaching/spring2022/courses/introduction-to-probability>

Lecturer Dr. Luba Sapir, <lsapir@post.bgu.ac.il>, Office -109

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

Abstract

Requirements and grading¹

Course topics

(1) Probability space.(2) Conditional probability, independent events, Bayes's theorem, complete probabilities.(3) Random discrete variable, discrete distributions: uniform, binomial, geometric, hypergeometric, negative binomial, Poisson.(4) Random continuous variable, continuous distributions: uniform, 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.

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