Course Name: Probability
Course Number: 201.1.8001
Course web page: [https://www.math.bgu.ac.il/en/teaching/fall2023/courses/probability](https://www.math.bgu.ac.il/en/teaching/fall2023/courses/probability)
Lecturer: Prof. Tom Meyerovitch, <mtom@bgu.ac.il>, Office 313
Office Hours: [https://www.math.bgu.ac.il/en/teaching/hours](https://www.math.bgu.ac.il/en/teaching/hours)

Abstract

Requirements and grading

Course topics

An introduction to the basic notions of probability theory:
- sample spaces
- limits of events
- conditional probability
- independent events
- sigma algebras
- continuous spaces
- Lebesgue measure
- random variables and distributions
- independence
- expectation
- variance and covariance
- convergence of random variables: almost-sure, in $L^p$, in probability
- law of large numbers
- convergence in law
- central limit theorem

---

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