MATH 318 - Probability

Home   Homework   Exams   Lectures

Announcements

- We are using a discord forum this term. The TA and I will answer questions there, and post course related announcements. It is open for all students to join.

Syllabus

This course is an introduction to probability theory. MATH 318 is aimed at Physics and Engineering students; it is more condensed and has a faster pace than MATH 302/303. Topics include:

- Probability spaces
- Independence and conditional probability
- Discrete and continuous random variables
- Expectation, variance, moments
- Generating functions and characteristic functions
- Convergence of random variables
- The law of large numbers and central limit theorem
- Confidence intervals and hypothesis testing
- Discrete Markov chains
- Random walks
- Poisson processes

Course details

Instructor: Omer Angel. Contact me through discord or by email. Please include "**math344**" in the subject line.

Class times: MWF 14:00-14:50. Lectures will take place at Woodward 5. It is possible that some lectures will also be accessible through zoom.

Office hours: Office hours will take place Monday and Friday 10:30 at MATX 1210, or by appointment.

Online forum: We will use a discord forum this term. You can ask any questions regarding the course there. You are encouraged to ask questions there on lectures, assignments, and any course related topic. You are also encouraged to answer other students' questions. Significant participation may merit extra credits. Obviously, **do not** share solutions to assignments (on discord or elsewhere) before assignment due dates.

Textbook: The main book we will follow is **Ross**, *Introduction to Probability Models* Many other books on probability theory exist, and may be helpful.

Evaluation

The final mark will be based on:

- 1/6 homework
- 1/3 midterm
- 1/2 final exam

Additional credits may be given for significant participation in class or on discord.

Missed work: There are no make-up midterms or assignments. Missing a midterm for a valid reason normally results in the weight of the midterm being transferred to the final exam. Personal travel and work conflicts are not considered valid. A student who misses the midterm must submit UBC's self-declaration form as soon as possible. See the UBC Senate's Academic Concession Policy V-135.