

MA 581 - Introduction to Probability-Fall 2021

Instructor: Konstantinos Spiliopoulos

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Course web-page: <http://math.bu.edu/people/kspiliop/MA581Fall2021.html>

Meets: TuTh... 9:30-10:45AM at PSY B53

Office hours: Tuesday and Thursday 12:30-13:30

Text: *A course in probability*, Neil A. Weiss, Pearson

T.A. for the class: Qiuyun Zhu

TA Office hours: 12-1pm and 2-3pm on Wednesday at Mathematics and Statistics Department (111 Cummington Mall), Room MCS B25G.

TA Tutoring hour: 1-2pm on Wednesday at the tutoring room MCS B36

Prerequisites: Undergraduate Prerequisites: CAS MA 225 or CAS MA 230; or consent of instructor. Graduate Prerequisites: CAS MA 225 or CAS MA 230; or consent of instructor. The students are required to have a solid understanding of basic calculus.

Course Description: Basic probability, conditional probability, independence. Discrete and continuous random variables, mean and variance, functions of random variables, moment generating function. Jointly distributed random variables, conditional distributions, independent random variables. Methods of transformations, law of large numbers, central limit theorem. Cannot be taken for credit in addition to CAS MA 381.

Tentative grading policy: Your grade will be based on :(a) Homework (20%), (b) two midterm exams (25% each) and final exam (30%). The grading policy may change according to the progress of the class.

Exams: There will be two midterm exams and one final exam. The exam material for each one of the exams will be announced in class and posted on the webpage of the course/Blackboard. The final exam will be cumulative. Hence, make sure that you have learned from your mistakes of the midterm.

Homeworks: There will be several homeworks, both theoretical and more of applied flavor. The due date of each homework will be announced in class and it will usually be 7-10 days after. Needless to say, you should work on the homework on your own, unless otherwise instructed by me. The lowest homework will be dropped if you participate in class. Late homeworks will NOT be accepted.

Late homework policy: No late homeworks will be accepted.

Make-up policy: Make up exams will be given only in extreme circumstances, and only when accompanied by appropriate documentation. Any student with a valid reason to be given a make up exam must contact me prior to the exam, either by email or in person, and present documentation at the next class session attended.

Cheating: No form of cheating or plagiarism will be tolerated. University's policy and my policy are very strict here.