Math 351 – Probability – Fall 2021

Dates/Times MW 10:30-11:45

Location Buchanan D005

Textbook A first course in probability, Sheldon Ross

Instructor Matt Holzer, Exploratory Hall 4458

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Online Office Hours, T online TBD, F in person 11:00-12:00 (others by appointment)

Course Description This course is an introduction to the mathematical theory of probability. We will discuss probability, conditional probability, independence, random variables in both the discrete and continuous settings, expectations and touch on some limit theorems.

Attendance Attendance is not an explicit requirement for this course, but as you will see below it is an implicit requirement.

Recap/Reflection Assignments Each day a one page reflection is due. The point is to highlight the main concepts and examples studied during the previous lecture. The goal is not to regurgitate the lecture material, but to try and synthesize it and distill the main ideas. At the beginning of each lecture one student will be called on randomly to present their recap. The recaps are worth one point each and the presentation is worth four.

Weekly homework assignments A homework assignment will be distributed every week. These problems will be due the following week. The homework will be divided into several parts. The first will ask you to review your lecture notes or contain shorter problems. The second will contain more analytical problems. The first part will be graded on a 1/0 scale. The second portion is graded check/rewrite/zero. A check counts as one point. A rewrite is zero, but the problem may be rewritten and resubmitted for full credit. A zero is a zero.

Final Exam or Final Project There will be a comprehesive final exam.

All homework submissions will be done virtually via Blackboard.

Online Resources For most of the questions that I ask this semester, the solution can likely be found online with enough searching, or computer packages can be used to expediate your calculations. I request that you not do either of these things (see Academic Integrity below).

Important Dates

Monday September 6th : Labor Day (no class) Monday September 27 : Midterm #1 Monday October 11th: Columbus Day (no class) Tuesday October 12th: Monday class is held on Tuesday this week Monday November 15: Midterm #2 Wednesday November 24th: Thanksgiving Holiday (no class) Monday December 8th : Final Exam 10:30-1:15

Grade Each midterm is worth 15 percent of you grade. The Final/ Final Presention is worth 20 percent. Homework will be worth 50 percent of the final grade. Grades will be determined according to the proportion of points earned throughout the semester. Final grades will be given according to the standard breakdown (94 for an A, 90 for an A-, 87 for a B+, etc). I reserve the right to shift these gradelines lower, but they will not be raised.

COVID-19 All students taking courses with a face-to-face component are required to follow the university's public health and safety precautions and procedures outlined on the university Safe Return to Campus webpage (https://www2.gmu.edu/safe-return-campus). Similarly, all students in face-to-face and hybrid courses must also complete the Mason COVID Health Check daily, seven days a week. The COVID Health

Check system uses a color code system and students will receive either a Green, Yellow, Red, or Blue email response. Only students who receive a "green" notification are permitted to attend courses with a face-to-face component. If you suspect that you are sick or have been directed to self-isolate, please quarantine or get testing. Faculty are allowed to ask you to show them that you have received a Green email and are thereby permitted to be in class. Students are required to follow Mason's current policy about facemask-wearing. As of August 11, 2021, all community members are required to wear a facemask in all indoor settings, including classrooms. An appropriate facemask must cover your nose and mouth at all times in our classroom. If this policy changes, you will be informed; however, students who prefer to wear masks either temporarily or consistently will always be welcome in the classroom.

Recording of Lectures I do not plan to record my lectures. However, if you are sick and unable to attend class please email me (several hours in advance of the start of class) and I can record the lecture on that day so that you can catch up.

Academic Integrity You are bound by the Mason Honor Code and its policies related to Academic Integrity. Violations will be taken seriously.

Disability Services Students may be eligible for accommodations through the Office of Disability Services

Communication All email communication is to take place through your gmu email account.