

MATHEMATICAL THEORY OF PROBABILITY
Math 477, Section 01
Spring 2014

Instructor: Yusra Naqvi
Email: ynaqvi@rci.rutgers.edu
Office: Hill Center 606, Busch
Office Hours: M 3:30-4:30pm, and by appointment

Time and Location: MW 5:00-6:20pm, SEC 217, Busch

Prerequisite: Calculus III

Course topics: This course covers basic probability theory in both discrete and continuous sample spaces, combinations, random variables and their distribution functions, expectations, law of large numbers, central limit theorem.

Textbook: Sheldon Ross, *A First Course in Probability*, 9th edition, Prentice-Hall, 2012. (ISBN-13 978-0-321-79477-2)

Calculator: Students may have a calculator available in class and while doing homework. Note, however, that calculators may *not* be used during quizzes and examinations.

Absences: You are expected to attend every class. An absence due to emergency may be excused, provided that you can supply acceptable written evidence if required and that you notify the lecturer *as soon as possible*. Students who miss a significant number of classes may have their course grades lowered by one step (for example, from a B+ to a B). Attendance is very useful!

Homework: A list of homework problems for each chapter can be found on the course webpage. You are required to solve all of the problems, and quiz problems will typically be variants of these homework problems. Selected problems will periodically be collected for grading. It is very important to solve the homework for each lecture before the next one in order to keep up with the class. Students with low homework scores will have their course grades lowered by one step.

Quizzes: A fifteen minute quiz will be given almost every week, and no make-ups will be given for these. The lowest quiz grade will be dropped in order to accommodate unavoidable absences. In addition, there will be an informal two minute quiz during many of the lectures. These will primarily be used to keep track of attendance and to gauge student progress and understanding.

Exams: There will be two eighty-minute midterm exams and a three-hour final exam. Make-up exams will only be allowed if you can supply *acceptable* written evidence, and if you notify the lecturer *before the end of the missed exam*.

Midterm Exam 1: Wednesday, March 5
Midterm Exam 2: Wednesday, April 9
Final Exam: Friday, May 9, 4:00pm - 7:00pm

Grading: The term grade will be based on the results of the examinations, the scores on written homework and workshops, and on class participation, which will be measured in various ways, including quizzes. It will be determined using the following point distribution:

Quizzes	100
1st exam	100
2nd exam	100
Final exam	200
Total	500