## SYLLABUS

## Math/Stats 525 - Fall 2019

- Instructor: Michael Zieve
- Class web page: http://www.math.lsa.umich.edu/~zieve/math525.html
- Text: Introduction to Probability Models, 11th edition, by Sheldon Ross
- Contacting the instructor:
  - Email: zieve@umich.edu
  - Office: 3835 East Hall
  - Office Hours: Mondays, 7pm–10pm

**Course Content:** This course is a thorough study of the mathematical theory of probability. No measure theory is assumed. Topics include: probability spaces, discrete and continuous random variables, joint distributions and conditional expectations, characteristic functions, limit theorems, Markov chains, and Poisson processes.

**Prerequisites and related courses:** Math 451 or 450. This course has substantial overlap with Math 425, but this course uses more sophisticated mathematical tools and has a greater emphasis on the proofs of major results.

## Grading:

- Homework and quizzes (30%), most Tuesdays, in class.
- Midterm #1 (35%), Thursday, October 17, in class.
- Midterm #2 (35%), Tuesday, December 10, 6pm–8pm, in CHEM 1210.

## There will be no final exam.

The course will *not* be graded on a curve, so for instance the number of A's has not been determined in advance. Every student with a total score of at least 90% (respectively, 80%, 70%, 60%) is guaranteed a final grade of at least A- (respectively, at least B-, C-, D-).

**Quizzes:** There will be quizzes at the start of class on most Tuesdays, for approximately 10 minutes. Each quiz will be based on the homework assigned the previous week. There will be no make-up for the quizzes for any reason. One quiz with the lowest grade will be dropped. Quizzes are closed-book and closed-notes, but you may bring one sheet of (normal-sized) paper with notes to use on the quiz.

**Homework:** Homework will be assigned every class, and posted on the course webpage. The homework assigned in a given week is to be handed in at the start of the Tuesday class in the following week.

**Exams:** Both exams are closed notes and closed book. No electronic devices are permitted. You may bring one 3x5-inch index card with *hand-written* notes on both sides. There will be no make-up exams.

Late enrollment: For students who enrolled in the course after the first day of classes, I will not count against you any quizzes or homework that occurred before you enrolled.