Class Meetings: Monday, Wednesday, Friday 2:30–3:20 PM, in STAD 135

Instructor: Eric Stade (email: stade@colorado.edu)

Office Hours: Mondays 9–10 AM, Tuesdays 2:30–3:30 PM, in MATH 305

Prerequisites: MATH 2400 or APPM 2350, and MATH 2130 or 3130 or MATH 2135 or 3135 (all minimum grade C-).

Course Canvas page: `https://canvas.colorado.edu/courses/105728`

Required Text: *A First Course in Probability*, tenth edition, by Sheldon Ross

This text is accessible online through our Canvas page. (Click on the "My Course Materials" link on the left side of our Canvas home page.) If you prefer a hard copy, these are available at the CU Bookstore, on Amazon, etc.

Additional readings: Various supplemental notes will be provided on our Canvas page, as they are needed.

In addition, **lecture notes** will be posted online, AFTER the class in which they are delivered. I make no guarantees as to how soon after class they will appear. (I will certainly try to have all notes relevant to any given in-class exam posted early enough that you can review them for that exam.)

You should come to class! Think of the posted lecture notes as a way of reviewing what you have learned in class. But you will miss **a lot** (not only in terms of points–see "Requirements and grades" below) if you skip class and rely only on the text and the posted lecture notes to learn the material. Learning is an *active* experience, and while reading is important (and any assigned reading is *critical* to the course), all by itself it's a somewhat passive way of learning.

Mathematics Academic Resource Center, also known as "The MARC." You may seek assistance with your math questions at the Mathematics Academic Resource Center, in Math 175. Hours and other details may be found at `https://math.colorado.edu/marc/`.

About the course. Probability is a fundamentally important mathematical discipline: it provides us with tools for quantifying events with uncertain outcomes, so that we can make rational decisions in a fickle world.

We will cover most of Chapters 1–5 of the text, skipping some sections here and there. We will also cover the occasional additional topic chosen by the instructor (that's me).

Requirements and grades. Your grade in this course will be computed on the basis of:

(1) Midterm exams and homework (60% of your final grade).

(a)   You will have two **in-class** midterm exams, one on **Wednesday, October 2** and the other on **Wednesday, November 6**.

(b)   Written assignments will be due **by the start of class on Wednesdays,** with the following exceptions: no homework will be due on the first Wednesday of classes, or on Wednesday, October 2 (the day of your first in-class midterm), or Wednesday, November 6 (the day of your second in-class midterm).

     You may hand in your homework either hard copy form, in person (please staple!!), or in

electronic form, online through our Canvas page.

All assignments will be posted on our Canvas page. Late homeworks will not be accepted.

Your lowest **two** homework scores will be dropped.

Whichever of the following three scores is lowest will be DROPPED: (a) the lower of your two midterm exam scores; or (b) your average grade (scaled out of 100%) on your HW (not including the two dropped homework scores). Each of the remaining two scores (that is, two exam scores or one exam score and one homework score) will make up 30% of your final course grade.

(2) Final exam (20% of your final grade). You will have an **in-class** final exam on **Monday, December 16, 1:30–4 PM.** This exam will constitute 20% of your course grade.

(3) Friday group or individual quizzes (15% of your final grade). Each Friday, there will be a *quiz* based on the material covered in class that week. Many of these quizzes will be completed in small groups; some you will be asked to complete individually. Some quizzes will be collected and graded; for some, you will get full credit just for completing the work in class. Some quizzes may take the entire period; some may only take 20 minutes or so. In other words, these quizzes might take various different forms.

Quizzes cannot be made up. However, you may miss up to **three** of these quizzes without penalty.

(4) Canvas discussions (2.5% of your final grade). On our Canvas page, there is a "Topics in Discrete Math" discussion that you will be asked to participate in every second week or so. If you make meaningful, thoughtful posts to this discussion each time, you will get the full 2.5 points for the semester.

Postings to "Topics in Probability" for a given week are due by 10 PM on the Sunday at the end of that week. You may miss one post without penalty.

There will be additional discussion threads set up for posting, or responding to, questions about class, homework, etc.

(5) Participation and attendance (2.5% of your final grade). Please come to class, on time, and be attentive and engaged. I will take attendance on occasional, random days, and will take note of repeated absence or lateness. If you're frequently absent or late, your grade in this category will suffer. Points will also be deducted if you are physically, but not mentally, present, e.g. spending the class period on social media and whatnot.

You will get the full 2.5 points for regular attendance and participation over the course of the semester.

Please see the "ADDITIONAL IMPORTANT COURSE INFORMATION" header on our Canvas home page, for:

- **Guidelines for written assignments.** Please **read** and **follow** these guidelines for written work, such as homework assignments, exams, and discussion posts. You will lose points on written work if you stray too far from these guidelines!!

- **Other general information, concerning:** classroom behavior; requirements for infectious diseases; accommodation for disabilities, temporary medical conditions, and medical

isolation; preferred student names and pronouns; the CU Honor Code; sexual misconduct, discrimination, harassment and/or related retaliation; religious holidays; and mental health and wellness.