

Math 135B: Stochastic Processes

Course Syllabus

UC Davis, Spring 2025

Instructor: Dan Romik

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1 Contact information

- Dan Romik: romik@ucdavis.edu
- Travis Kulhanek: tkulhanek@ucdavis.edu

2 Summary

- **Course lectures:** MWF 9:00-9:50 in Wellman 212
- **Course sections:**
 - Section A01: Thu 5:10-6:00 PM in SocSci 80
 - Section A02: Thu 4:10-5:00 PM in SocSci 80
- **Course instructor:** Dan Romik
- **Course TA:** Travis Kulhanek
- **Course office hours:**
 - **Instructor office hours:** Wed 10:30-11:30 in MSB¹ 2218
 - **TA office hours:** Tue 10:00-12:00 in MSB 3137
- **Course assignments:** Weekly homework (30%), 2 midterm exams (40%), and a final exam (30%). Exam dates are listed in [Section 5](#) below. The detailed grading policy is described in [Section 6](#).
- **Course prerequisites:** as described in the [Mathematics Department MAT135B syllabus](#)
- **Course topics:** as described in the [Mathematics Department MAT135B syllabus](#)

¹MSB = Mathematical Sciences Building

3 Course textbook

- *Lecture Notes for Introductory Probability*, by Janko Gravner. A free textbook available at <https://www.math.ucdavis.edu/~gravner/MAT135A/resources/lecturenotes.pdf>

4 Homework

Homework will be assigned weekly on each Wednesday during weeks 1–9 of the quarter, and will be due the following Wednesday. In calculating the homework component of your grade, the three lowest assignment grades (which includes any missed assignments) will be dropped.

Late homework policy. You may submit one homework assignment during the quarter late by up to 24 hours beyond the indicated submission deadline. Such a late submission will be graded without any penalty. For any additional late submissions that are late by up to 24 hours, the assignment will be graded but a 25% late submission grade penalty will be applied. **No homework submissions will be accepted more than 24 hours after the submission deadline.**

Regrade requests. Submit requests for regrading of homework or midterm questions via Gradescope. Regrade requests will not be considered if submitted more than 2 weeks after you get your graded assignment back, or after the last day of instruction of the quarter (June 6). Note that the option for regrading is there only to correct genuine grading mistakes. In case of a purely subjective disagreement over how many points should be deducted for a less-than-fully-correct solution, your grade will not be changed.

There will be no regrading for the final exam, but if you believe a clerical error occurred with the grading of your final or with the calculation of your final course grade, email the instructor.

5 Exams

There will be two midterm exams and a final exam. Midterm exams will be given at the regular lecture time and place on the day of the exam. The final exam will be given according to the campus [final exam schedule](#). The exam dates and times are:

Midterm 1: Friday, April 18, 2025 at 9:00-9:50 AM, Wellman 212

Midterm 2: Friday, May 9, 2025 at 9:00-9:50 AM, Wellman 212

Final exam: Friday, June 6, 2025 at 3:30-5:30 PM, Wellman 212

IMPORTANT NOTE: No make-up exams or assignments will be given for any reason. See [Section 6](#) below for more details.

6 Grading structure and policy

Your final grade will be determined based on the weighted average of your different grade components (homework, midterm 1, midterm 2, final exam) according to the weighting scheme:

Homework:	30%
Higher of the two midterm grades:	25%
Lower of the two midterm grades:	15%
Final exam:	30%

The numerical weighted average, represented on a scale of 0-100, will be translated into a final letter grade at the end of the quarter, according to the following table of grade cutoffs:*

A final numerical average of will translate to a final letter grade of ...
90–100	A–, A or A+
80–89.999	B–, B or B+
65–79.999	C–, C or C+
0–64.999	F

* A disclaimer: at my discretion, the actual grade cutoffs may end up being shifted from the ones described above, but only in the direction that results in final letter grades being even higher than the ones listed above. But this most probably won't happen, and you should not count on it happening.

Example. A student named Darya received the scores 55, 77, 100, 95, 0, 35, 80, 0, 60 out of 100 on the homework assignments. She got the scores 91, 96 on the midterm exams, and a score of 79 on the final exam. (All scores are out of 100.)

Darya's final numerical score will be

$$0.3 \times \left(\frac{\overbrace{55 + 77 + 100 + 95 + 80 + 60}^{\text{homework}}}{6} \right) + \overbrace{0.25 \times 96 + 0.15 \times 91}^{\text{midterms}} + \overbrace{0.3 \times 79}^{\text{final}} = 84.7.$$

This puts Darya in the B–, B, B+ range of final letter grades.

IMPORTANT NOTE: No make-up exams or assignments will be given for any reason.

Please contact me as soon as possible if you missed an exam or assignment due to an **excused medical absence or similar emergency**, and I will determine (at my discretion) if an adjustment to the grading formula above is appropriate.

For other reasons for missed assignments or exams, no additional allowance or adjustments to the grading scheme will be made.

7 Ethics policy

- You are expected to be aware of the [UC Davis Code of Academic Conduct](#) and comply with it. Any violation will be reported to the [Office of Student Support and Judicial Affairs](#).
- You are allowed to use any online resource and computer software, including AI assistants such as Claude, ChatGPT, etc, for assistance when solving homework assignments. However, your solution must be typed or handwritten by you and phrased in your own words. Also, be advised that AI assistants are known to sometimes give incorrect answers, particularly to technical questions. Naturally, do not expect to get credit for an incorrect solution.
- **A note on responsible versus irresponsible use of AI.** I believe AI is a wonderful tool that can be used responsibly to help students learn more efficiently. However, If you are relying too much on AI assistance, you run the risk of cheating *yourself* out of valuable learning. Since I cannot police the extent of your AI use, I will not make a specific effort to do so, but your exam grades will in any case tell me how much you actually learned. Be advised that there is plenty of evidence that students who over-rely on AI can hurt themselves in the process. Here are links to a few relevant academic studies: [\[1\]](#), [\[2\]](#), [\[3\]](#), [\[4\]](#).

8 Students with disabilities

Any student with a documented disability (e.g., physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the [Student Disability Center](#) (SDC). Faculty are authorized to provide only the accommodations requested by the SDC. If you have any questions, please contact the SDC at 530-752-3184 or sdcc@ucdavis.edu.

9 Letters of recommendation

Each year I get many requests to write letters of recommendation for students applying to graduate programs. I do not have enough time to agree to all requests, so I must be selective. If you anticipate that you may ask me to write you a letter of recommendation in the future, here are some things to keep in mind:

- I will consider writing a letter of recommendation for you if your final grade in the course was a B+ or higher.
- Even if you received a high grade, I will only consider writing you a letter of recommendation if you have made an effort to stand out relative to your peers and give me something interesting (and positive) to write about you in my letter. If the only thing I can write in the letter is “this student attended my class and received a grade of __”, then that will be a useless letter: graduate programs will already see your grades in the transcript you will be submitting with your graduate program applications, so a letter of this type gives them no additional useful information they can use to decide whether to admit you into the program.