

Math 21D: Vector Analysis Course Syllabus

UC Davis, Winter 2026

Instructor: Dan Romik

Document version: January 21, 2026 (office hour information updated from earlier versions)

1 General information

- **Course topics:** as described in the [Mathematics Department MAT21D syllabus](#)
- **Course textbook:** Thomas' Calculus Early Transcendentals, 15th Edition, by Joel R. Hass, Christopher E. Heil, Maurice D. Weir, Przemyslaw Bogacki. Pearson, 2022. ISBN: 978-0137559893.
- **Course prerequisites:** as described in the [Mathematics Department MAT21D syllabus](#)
- **Course assignments and grading:** Weekly homework (30%), 2 midterm exams (40%), and a final exam (30%). See Section 5 below for a detailed grading policy.

2 Contact information

| Name | Role | Email |
|---------------------|---------------------|--|
| Dan Romik | Instructor | romik@math.ucdavis.edu |
| Ángel Rodriquez | Section A01, A02 TA | arodriguezlopez@ucdavis.edu |
| Hannah Moon | Section B01 TA | hhmoon@ucdavis.edu |
| Chen Liang | Section B02 TA | cccliang@ucdavis.edu |
| Hyun Soo (Alex) Lee | Section B03 TA | hsalee@ucdavis.edu |
| Jorge Murillo | Section B04, B07 TA | joemurillo@ucdavis.edu |
| Ruan Kaldybayev | Section B05, B06 TA | rkald@ucdavis.edu |

Please contact your TA for all inquiries.

3 Course Calendar

| Activity | Place | Time |
|--|------------------------------------|---|
| A01–A02 Lecture | Wellman 26 | MWF 1:10-2:00 PM |
| A01 Discussion section (Ángel Rodriguez) | Olson 147 | T 6:10-7:00 PM |
| A02 Discussion section (Ángel Rodriguez) | Bainer 1132 | T 7:10-8:00 PM |
| B01-B07 Lecture | Social Sciences 1100 | MWF 10:00-10:50 AM |
| B01 Discussion section (Hannah Moon) | Olson 207 | R 7:10-8:00 PM |
| B02 Discussion section (Chen Liang) | Olson 205 | R 6:10-7:00 PM |
| B03 Discussion section (Alex Lee) | Hoagland 168 | R 6:10-7:00 PM |
| B04 Discussion section (Jorge Murillo) | Kerr 293 | R 5:10-6:00 PM |
| B05 Discussion section (Ruan Kaldybayev) | Teaching and Learning Complex 2218 | R 5:10-6:00 PM |
| B06 Discussion section (Ruan Kaldybayev) | Physics 130 | R 4:10-5:00 PM |
| B07 Discussion section (Jorge Murillo) | Kerr 293 | R 6:10-7:00 PM |
| Dan Romik office hours | MSB [†] 2218 | R 10-11 (A01–A02), R 11-12 (B01–B07) |
| Angel Lopez office hours | MSB 2139 | R 12-2 |
| Hannah Moon office hours | MSB 2139 | W 3-4 |
| Chen Liang office hours | MSB 3229 | F 2:30-3:30 |
| Hyun Soo (Alex) Lee office hours | MSB 2204 | F 12-1 |
| Jorge Murillo office hours | MSB 3204 | T 1-3 |
| Ruan Kaldybayev office hours | MSB 2232 | R 6:10-8 |
| AATC Mathematics tutoring | Shields Library | See here for details |
| Midterm 1 (Sections A01–A02) | Wellman 26 | Fri Jan 30, 2026, 1:10-2:00 PM |
| Midterm 2 (Sections A01–A02) | Wellman 26 | Fri Feb 27, 2026, 1:10-2:00 PM |
| Final Exam (Sections A01–A02) | Wellman 26 | Fri Mar 20, 2026, 8:00-10:00 AM ^{††} |
| Midterm 1 (Sections B01–B07) | Social Sciences 1100 | Fri Jan 30, 2026, 10:00-10:50 AM |
| Midterm 2 (Sections B01–B07) | Social Sciences 1100 | Fri Feb 27, 2026, 10:00-10:50 AM |
| Final Exam (Sections B01–B07) | Social Sciences 1100 | Thu Mar 19, 2026, 10:30 AM-12:30 PM ^{††} |

[†]MSB = Mathematical Sciences Building

^{††}Final exam dates are taken from the UC Davis [Final Examinations calendar](#)

4 Homework

Homework will be assigned weekly during weeks 1–10 of the quarter, and will be due each Friday. Homework should be uploaded via Gradescope.

In calculating the homework component of your grade, the 3 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 (March 13). 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 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: | 30% |
| Lower of the two midterm grades: | 10% |
| 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.

Final grade calculator. Click the link below to access a final grade calculator script that will allow you to input your (actual, or expected) assignment grades and see what final letter grade you should expect to receive in the course:

<https://www.math.ucdavis.edu/~romik/downloads/mat21d-gradecalc.html>

Example. A student named Darya received the scores 55, 77, 100, 95, 0, 35, 80, 0, 60, 100 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

$$0.3 \times \left(\overbrace{\frac{55 + 77 + 100 + 95 + 80 + 60 + 100}{7}}^{\text{homework}} \right) + \overbrace{0.3 \times 96 + 0.1 \times 91}^{\text{midterms}} + \overbrace{0.3 \times 79}^{\text{final}} = 85.9.$$

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, please note that the grading policy already makes allowance for the possibility of missing the occasional assignment through the mechanism of dropping the 3 lowest assignment scores. For this reason, **no additional allowance or adjustments to the grading scheme will be made.**

6 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, 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.

7 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 sdc@ucdavis.edu.

8 Frequently Asked Questions

- **Can I use AI to solve some or all of my homework problems?**

Short answer: Yes.

Detailed answer: Yes, but refer to the Ethics Policy section above to see what I am asking you to do on your own. You are not allowed to just copy and paste the AI's solution and submit that as your own. Second, if you use AI to solve your homework, **it is very likely that you will fail the class**, since you will not acquire the understanding and computational skills that solving the homework *by yourself* is designed to help you acquire. Ultimately it's your choice whether to put in the work required to succeed in the class.

- **Do you grade on a curve?**

Short answer: refer to Section 5 above.

Detailed answer: In my experience, students who ask this question do not always interpret what it means to “grade on a curve” in the same way as other students, or in the same way that I interpret what it means. Therefore answering the question “yes” or “no” creates a risk of confusion and misunderstanding. Instead, I have described my grading methodology in detail in Section 5 above. Refer to this section, and contact me if you have additional questions.

- **Why does your table of letter grades not include D grades? Do you give out D's?**

I almost never give out D's (due to past bad experience with UC Davis policies that make this grade worse than useless for many students), and most likely will not assign any D grades in this course.