

ABSTRACT LINEAR ALGEBRA MAT67

SYLLABUS SPRING 2024

Professor: Roger Casals (casals – at – ucdavis.edu).

Teaching Assistant: Tonie Scroggin (tmscroggin – at – ucdavis.edu).

Class schedule: Lectures are **MWF 9:00-10:00am** at Art 204 by Prof. Casals. Recitations take place on **T 4:10-5pm and 5:10-6pm** at Bainer 1128 by TA Scroggin.

Emails. By default, you must **contact your recitation instructor** (tmscroggin – at – ucdavis.edu) if you have any questions or requests. If your recitation instructor is not able to address your concerns, they will explicitly refer your case to Professor Casals. Grading is done by our reader and all re-grading requests must be done through **Gradescope**. You are always welcome to talk to Professor Casals before and after lecture and in Office Hours.

Course Website. I will be maintaining the course website at the following URL “<https://www.math.ucdavis.edu/casals/Teaching/Spring24/MAT67/Spring24MAT67.html>”, whose content includes this syllabus, the weekly assigned Problem Sets, Math Diary on the material covered in each lecture, and additional materials. The grades for the assignments and exams will be administered through UC Davis Canvas and Gradescope.

Professor Office Hours. I will have regular office hours twice a week, on **Mondays 2-3pm** and **Wednesdays 2-3pm**. Feel free to come and discuss the material on the Lectures and the Problem Sets. The only exceptions this Spring are MWF Apr 15, 17 and 19 when I will not hold office hours due to existing conflicts.

Course. The goal of the course is to develop the ability to solve both conceptual and computational problems in linear algebra. This includes learning to work with vector spaces, linear maps and eigenspace decompositions, as per the Department Syllabus.

Textbook. We use “**Linear Algebra As An Introduction To Abstract Mathematics**” by I. Lankham, B. Nachtergaele and A. Schilling. It is freely available online. Exercises and reading assignments numbered according to the online edition.

Important Dates. First Day (Apr 1), First Midterm Test (Apr 26), Second Midterm Test (May 31), Final Exam (June 13).

Grade. The Final Class Grade **G** is computed with the formula:

$$\mathbf{G} = 0.2 \cdot \text{PS} + 0.4 \cdot \max(\text{M1}, \text{M2}) + 0.4 \cdot \text{F} .$$

where PS is the grade from the homework problem sets (i.e. the average of all the grades obtained in the homeworks), $M1$ is the grade for the first Midterm exam, $M2$ is the grade for the second Midterm Exam and F is the grade for the Final Exam. Only once the quarter has ended and exams have been graded, a curve will be implemented to the distribution of final grades \mathbf{G} . This curve will be such that A-grades correspond to strong understanding of the material, B-grades indicate good working knowledge of the majority of the material and C-grades correspond to having developed the skill to solve standard problems in the topics covered. (In particular, if all students do well, all get good grades.)

Assignments. The weekly assignments are due on **Friday** by 9am and should be submitted online via **Gradescope**. The assignments will be posted in the course website as the course progresses.

You are allowed to ask for at most one *unexcused* extension directly to your recitation instructor and *it must be asked for 48 hours before the deadline*. Late homework will not be accepted under any other circumstances. Use this one extension wisely.

Exams. There will be two in-class one-hour Midterms on **Friday Apr 26** and **Friday May 31**. The Midterm Tests will strictly follow the given date and time. There will be no make-up exams. Please plan your schedule accordingly. You must bring your UC Davis Student ID to the Exam.

Use of calculators and electronic devices. No Problem Set nor exam in this course will require the use of a calculator or any other electronic device. Electronic devices are strictly forbidden in exams.

Cheating and Online Solutions. You must read, understand and act in accordance with the **UC Davis Code of Academic Conduct**. In particular:

- (i) It is *forbidden* to upload any of the Problem Sets, or pieces thereof, from any version of the MAT67 Course taught by Prof. Casals at UC Davis to the Internet. This includes sending the Problem Sets to any service for *homework help* or *tutoring*, including e.g. Chegg, CourseHero, Transtutor, Slader amongst others.
- (ii) It is *forbidden* to type a problem from any of the Problem Sets from any version of MAT67 taught by Prof. Casals for an answer from an outside source.¹ This includes sending problems to any service for *homework help* or *tutoring*, including e.g. Chegg, CourseHero, Transtutor, Slader.
- (iii) If you write a solution to a problem which you have not *entirely* developed yourself, you must *cite* the source of the material. In particular, if you are copying a solution from a source, you *must* clearly refer to the source and provide *immediate access* to the source to the Teaching Assistants and the Instructor of Record, whether the source is another person, a website, a book, an online service or any other mean.

¹That is any person or software which is not an official instructor of MAT67 Spring 2024.

Either of the three actions above will be considered a violation of the “UC Davis Code of Academic Conduct of Honesty, Fairness & Integrity”. Students incurring in either of the above behaviors will be reported to the **Office of Student Support and Judicial Affairs** (OSSJA). Note that you can be directly reported to OSSJA for an investigation. Such direct reporting to OSSJA will take place if the TAs or the Professor have clear evidence of cheating misconduct: there will be no tolerance for cheating in Problem Sets and Exams.

Academic Conduct. You must read, understand and act in accordance with the Code of Academic Conduct, available at <http://sja.ucdavis.edu/files/cac.pdf>. Inappropriate conduct will be reported to the Office of Student Support and Judicial Affairs.

Disabilities If you need special accommodation, please let me know, ideally in advance. The Student Disability Center (SDC) is here to help, and they can do so if you contact them.

Please be aware of the following message by the SDC:

“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.”

In addition, the SDC also shares:

“The Student Disability Center (SDC) asks that students interested in serving as paid note takers for this course please contact the Student Disability Center at sdc@ucdavis.edu.

Note takers are paid a stipend of \$25 per unit, but must have a social security number or have visa status to qualify for an SSN, have a GPA of 2.5 or better, and be in good Academic standing with UC Davis. Students should attach a sample of their notes to the email and put the following information in the subject line: ‘note taker’, the course code, CRN number, and instructor’s name. If selected, the SDC will offer the position to the Note Taker.*

Notes provided to SDC students needing note takers are not to be posted, sold, or otherwise distributed, either by the note taker or the SDC Student receiving the notes. Note takers and SDC students receiving notes are expected to comply with the UC Davis academic honor code. Thank you in advance for your time and consideration.

** You can volunteer in lieu of payment”*

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allow others to do so either. As emphasized above, in violating any such behavioral rules you may be subject to student conduct proceedings under the UC Davis Code of Academic Conduct.