

# DIFFERENTIAL EQUATIONS MAT22B

## SYLLABUS FALL 2026

**Professor:** Roger Casals - [casals@ucdavis.edu](mailto:casals@ucdavis.edu).

**Teaching Assistants:**

Can Gormez - [cgormez@ucdavis.edu](mailto:cgormez@ucdavis.edu),

Alex Simons - [asimons@ucdavis.edu](mailto:asimons@ucdavis.edu).

**Class schedule:** Lectures MWF at 11:00-11:50am at Giedt Hall 1001 by Roger Casals.

**Email.** My email address is [casals@ucdavis.edu](mailto:casals@ucdavis.edu). This is the fastest way to contact me. I strongly encourage you to come to Office Hours, mine, the Office Hours of the Teaching Assistants and the Support Hours by the Academic Assistance & Tutoring Centers.

**Course Website.** I will be maintaining the course website at the following URL

“<https://www.math.ucdavis.edu/~casals/Teaching/Fall26/Fall26MAT22B.html>”,

whose content includes this syllabus, the weekly assigned Problem Sets, the Math Diaries on the material covered in each lecture, and additional materials. The grades for the assignments and the exams will be administered through Gradescope and UC Davis Canvas.

**Grade.** The final grade of the class is computed as:

Final Class Grade =  $0.3 \cdot \text{PSets} + 0.4 \cdot \text{Final Exam} + 0.3 \cdot \max(\text{Midterm 1}, \text{Midterm 2})$ .

**Professor Office Hours.** My office is MSB 3214, in the Mathematical Sciences Building, ten minutes away from the lectures. I will have regular office hours on **Mondays 3:00-4:00pm**. Feel free to come and discuss the material on the Lectures and the Problem Sets. If you are planning to come with a large group (more than ten), let me know in advance and I can book a seminar room.

**TA's Office Hours.** To be announced soon.

**Support Hours.** Casey Davis of the Academic Assistance & Tutoring Centers will be offering MAT 22B support workshops **Tuesdays and Thursdays 2:10-3 pm** at 3218 Dutton Hall.

**Textbook.** We will use “Elementary Differential Equations and Boundary Value Problems” by W.E. Boyce, R.C. DiPrima and D.B. Meade. We only use Chapters 1,2,3,6 and 7 from their standard 11th Edition. Please note that there is an abridged and more affordable version of this textbook available for UC Davis students.

**Assignments.** The weekly assignments are due on **Friday at 11:00am** and must be submitted online through Gradescope by that time. The assignments will be posted in the course website as the course progresses. **The lowest grade from the Problem Sets will be dropped.**

**Exams.** There will be two in-class 50 minute Midterms on **Friday Oct 23** and **Friday Nov 20**. The Final Exam is on **Monday Dec 7**, at 3:30-5:30pm on the First Day of the Finals Week. The Midterm Test and the Final Exam will strictly follow the given date and time. There will be no make-up exams. So, please plan your schedule accordingly. Electronic devices, notes and books are not permitted during the exams. Please bring your UC Davis Student ID to the Exam Hall.

**Course.** This course is an introduction to Differential Equations, one of the fundamental branches within mathematics. Learning how to solve differential equations, both analytically and geometrically, and writing the solutions up in a clear and rigorous manner will be one of our main goals. It is primarily for students with no prior experience with this. It is assumed that the students have mastered Calculus in One-Variable, including derivation *and* integration, and Linear Algebra.

**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 [sdcc@ucdavis.edu](mailto:sdcc@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 [sdcc@ucdavis.edu](mailto:sdcc@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”*