CALCULUS MAT 21C

Syllabus Spring 2023

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

Teaching Assistants: Lead TA Kelli Loritsch (keloritsch-at-ucdavis.edu), Marco Ruiz (mru-at-ucdavis.edu), Ana Sammel (apsammel-at-ucdavis.edu), Haotian Sun (hatsun-at-math.ucdavis.edu), Oliver Yau (opyau-at-ucdavis.edu).

Class schedule: Lectures are MWF 9:00-10:00am at Rock Hall 194 by Prof. Casals. Recitations take place on Tuesdays as follows:

- (1) Section B01: taught by Ana Sammel on Tuesdays 6-7pm at Young 192.
- (2) Section B02: taught by Ana Sammel on Tuesdays 7-8pm at Young 192.
- (3) Section B03: taught by Marco Ruiz on Tuesdays 8-9pm at Young 192.
- (4) Section B04: taught by Oliver Yau on Tuesdays 5-6pm at Young 192.
- (5) Section B05: taught by Kelli Loritsch on Tuesdays 4-5pm at Young 192.
- (6) Section B06: taught by Kelli Loritsch on Tuesdays 3-4pm at Young 192.
- (7) Section B07: taught by Haotian Sun on Tuesdays 5-6pm at ART 217.
- (8) Section B08: taught by Haotian Sun on Tuesdays 6-7pm at ART 217.

Emails. By default, you must contact your recitation instructor if you have any questions or requests. If your recitation instructor is not able to address your concerns, please contact the lead Teaching Assistant Kelli Loritsch (keloritsch-at-ucdavis.edu). The email address of Professor Casals is casals – at – ucdavis.edu. Given the size of the class, with more than 400 students, please only contact the professor if you have already contacted your recitation instructor and the Lead TA and they have explicitly told you to e-mail the professor.

Course Website. I will be maintaining the course website at the following URL "math.ucdavis.edu/~ casals/Teaching/Spring23/MAT21C/Spring23MAT21C.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.

Professor Office Hours. I will have regular office hours twice a week, on **Mondays 3:30-4:30pm** and **Wednesdays 3:30-4:30pm**. Feel free to come and discuss the material on the Lectures and the Problem Sets. The only exceptions this Spring are Monday Apr 10 and Wednesday Apr 12 where I will not hold office hours due to existing conflicts.

TA's Office Hours and e-mails. The office hours of the recitation instructors are:

- Kelli Loritsch (keloritsch-at-ucdavis.edu): Tuesdays 12-2pm at MSB 2141.
- Marco Ruiz (mru-at-ucdavis.edu): Mondays 4-5pm at MSB 2232.
- Ana Sammel (apsammel-at-ucdavis.edu): **Wednesdays 4-5pm** and **Thursdays 2-3** at MSB 2117.
- Haotian Sun (hatsun-at-math.ucdavis.edu): **Thursdays 2-4pm** at MSB 3137.
- Oliver Yau (opyau-at-ucdavis.edu): **Thursdays 4-5pm** at MSB 2131.

Course. The goal of the course is to develop the ability to manipulate series, with a focus on Taylor approximations, and build the fundamental skills of multivariable calculus, as indicated by the Department Syllabus.

Textbook. We will use "Thomas' Calculus Early Transcendentals (15th Edition)" by G. B. Thomas, , and J. Hass, Christopher E. Heil, P. Bogacki and M. Weir. We will cover Chapters 10, 12, 13 and 14. Exercises and reading assignments will be numbered according to the 15th Edition.

Important Dates. First Day (Apr 3), First Midterm Test (Apr 28), Second Midterm Test (May 26), Final Exam (June 12).

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

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

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 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 these extensions wisely.

Exams. There will be two in-class one-hour Midterms on Friday Apr 28 and Friday May 26. 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 MAT21C 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 MAT21C taught by Prof. Casals for an answer from an outside source. 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.

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:

¹That is any person or software which is not an official instructor of MAT-21C Spring 2023.

"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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