

MATH 20D Syllabus: Spring 2023.

1 About the Instructor

- (1) Name: Finn McGlade
- (2) Office: HSS 4085 and virtual, via Zoom
- (3) email: fmcglade@ucsd.edu
- (4) Office Hours: Please see class canvas, also, by appointment
- (5) All days and times refer to US pacific time

2 Basic course information

- (a) Textbook: *Fundamentals of Differential Equations* (9th edition) by R. Nagle, E. Saff, and A. Snider. We will cover material from chapters 1,2,4,7,8,9, perhaps jumping around a bit.
- (b) Official class meeting time: MWF 3:00pm-3:50pm (Warren Lecture Hall 2005)
 - First day of lecture: Monday April 3rd.
 - Last day of lecture: Friday June 9th.
 - The default mode of instruction will be in-person lectures. There will be some occasions where there are pre-recorded lectures. When this is to occur you will be notified in advance via Canvas.
- (c) Holidays (no lecture):
 - Memorial Day Monday May 29th
- (d) Discussion Sections (you should be enrolled in one of the following six)
 - (1) C01 F 5:00pm-5:50pm (APM B402A)
 - (2) C02 F 6:00pm-6:50pm (APM B402A)
 - (3) C03 F 7:00pm-7:50pm (Remote, see canvas for Zoom links)
 - (4) C04 F 8:00pm-8:50pm (Remote, see canvas for Zoom links)
 - (5) C05 F 5:00pm-5:50pm (APM 2301)
 - (6) C06 F 6:00pm-6:50pm (APM 2301)
- (e) Scheduled final exam: **Wednesday June 14th, 3:00pm-5:59pm**
- (f) Midterms:
 - Midterm 1: Wednesday April 26th (During Class in WLH 2005)
 - Midterm 2: Wednesday May 24th (During Class in WLH 2005)
- (c) Homework: Available to download from the files Tab on Canvas or via Gradescope. Homework Will be due by 10pm on Gradescope on the days below. Late submissions are automatically enabled for 4 days after the original due date. There is a 5% cumulative penalty per day.

- Tuesday April 11th
- Tuesday April 18th
- Tuesday April 25th
- Tuesday May 2nd
- Tuesday May 9th
- Tuesday May 16th
- Tuesday May 23rd
- Tuesday May 30th
- Tuesday June 6th

3 MATLAB

MATLAB homework assignments can be found online at www.math.ucsd.edu/~math20d. Students are required to upload their MATLAB assignments to Gradescope by 11:59pm on the following days.

- Assignment 1: Introduction to MATLAB due Friday April 14th.
- Assignment 2: Visualizing Solutions to ODE due Friday April 28th.
- Assignment 3: Numerical Methods with 1st Order Equations due Friday May 12th.
- Assignment 4: Systems of ODE's due Friday May 26th.

Students will also be administered a virtual MATLAB test during weeks 10. Virtual tutoring services for MATLAB are available in the department. See Canvas for the schedule of virtual tutors. For questions concerning MATLAB students are referred to the Head MATLAB TA Itai Maimon who is available at imaimon@ucsd.edu.

4 Grading

Your grade percentage will be calculated by taking the best of options 1 and 2 below.

1. MATLAB Assignments (4%)+MATLAB test (6%)+ Sum of the best 7 out of 8 HW assignments (22%)+ Midterms (30%)+ Final (38%)
2. MATLAB Assignments (4%)+MATLAB test (6%)+Sum of the best 7 out of 8 HW assignments (22%)+ Sum of the best 1 out of 2 Midterms (15%)+ Final (53%)

The following final percentages will guarantee you the corresponding grade (although the actual grade cutoffs may be lower):

A+	A	A-	B+	B	B-	C+	C	C-
97	93	90	87	83	80	77	73	70

The above policies are guidelines. The instructor reserves the right to alter these in any all unusual circumstances (e.g., the pandemic takes an unexpected turn.)

4.1 Exam policy

Students may bring a **8.5 by 11 inch doubled side handwritten set of notes** to each of the three written exams; students are also advised to bring a **scientific calculator** to

each of the three written exams; no other notes, books, calculators or devices of any kind will be allowed at these exams. The final examination will be held at the date and time stated in the course calendar.

4.2 Homework Policy

The only way to learn the concepts and techniques, and to do well in this course is to work all the homework problems. Working with your peers on HW problems is acceptable. However, you must write up the solutions to the problems yourself. Students involved in an academic integrity violation could face administrative sanctions which may include suspension or, in very serious cases, expulsion from the university. Graphing calculators and computer programs (or online computing websites such as Wolfram-Alpha) are another acceptable resource to use when working through your homework. However, a calculator/computer should be used as an aid in learning concepts, not just as a means of computation. You can use these devices when working on math problems, but always keep in mind that any answers you give must be accompanied by accurate justification.

5 Admisinistrative policies

- (1) University-excused absences: If you will miss one of the exams due to religious observations or for representing the university in varsity athletics, you must **email** me at the above email addresses **no later** than two weeks before the absence, but preferably as soon as possible.
- (2) Students requesting accommodations for this course due to a disability must provide a current Authorization for Accommodation (AFA) letter (paper or electronic) issued by the Office for Students with Disabilities. Students are required to discuss accommodation arrangements with instructors and OSD liaisons in the department in advance of any exams or assignments.
- (3) Name and Gender Pronouns. UC San Diego is committed to supporting its students' name and gender preferences. Class rosters provided to your instructor and TAs have students' legal names, but we will strive to honor your request to be addressed using a preferred name or gender pronoun. Please let your instructor and TA know your preferences so that we can make changes to our records. (Certain university records may be beyond our ability to change, however.)
- (4) Equity, Inclusion, and Respect. We are committed to the UC San Diego Principles of Community (<https://ucsd.edu/about/principles.html>). To foster the best possible working and learning environment, UC San Diego strives to maintain a climate of fairness, cooperation, and professionalism. These principles of community are vital to the success of the University and the well being of its constituents. The principles of community include (but are not limited to): We affirm each individual's right to dignity and strive to maintain a climate of justice marked by mutual respect for each other. We reject acts of discrimination based on race, ethnicity, sex, gender identity, age, disability, sexual orientation, religion, and political beliefs, and, we will confront and appropriately respond to such acts. We promote open expression of our indi-

viduality and our diversity within the bounds of courtesy, sensitivity, confidentiality, and respect. We are committed to promoting and supporting a community where all people can work and learn together in an atmosphere free of abusive or demeaning treatment. Visit the Office for Equity, Diversity, and Inclusion for more information.