

Math 20d Winter 2008 Syllabus ¹
MWF 1-1:50pm, Pepper Canyon Hall 106
Professor D. Rogalski

Prof. Rogalski's Office: 5131 AP&M

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Class web site:

www.math.ucsd.edu/~drogalsk/20d.html

Office hours: TBA

TA's: Please see the course website for complete information about the TA's for each section and their office hours.

• **Math 20d course description:** Math 20d covers the theory of ordinary differential equations. This is an important and basic subject for those intending to major in the physical sciences, engineering, or mathematics.

• **Prerequisite:** Math 20c or equivalent with a grade of C- or better. The material from Math 20a, 20b, and 20c will all be assumed.

• **Waitlists:** Note that all add/drops/wait lists are processed online. If you are on a waitlist, the best option is to register for another lecture which has space, if possible. If this is not possible, speak to the staff at the front desk on the seventh floor of AP&M, or wait until week two to see if space opens up.

• **Schedule of Lectures:** Please see the course calendar on the course website for the planned schedule of lectures. The schedule is open to change and the calendar will be updated accordingly.

• **Textbook:** Boyce and Diprima, *Elementary Differential Equations and Boundary Value Problems*, 8th Edition, John Wiley and Sons, 2005, Chapters 1-7.

• **Reading:** You should read the sections of the book as indicated in the course schedule. The reading is an important part of the course, as sometimes we may not have time in lecture to cover everything in the same depth that the textbook does.

¹Version of 1/7/08

- **Lecture:** The lecture is a very important part of the course, and attendance is strongly encouraged. Seeing the material several times, and with different viewpoints (the lectures, the book, and discussion section) will help cement your understanding. There may be material presented in lecture that is not in the textbook.

- **Discussion Section:** In section, you have the opportunity to see more worked problems and examples and ask questions about the material and homework problems. It is important to get to know your TA. He or she is there to help you! If you cannot attend the discussion section for which you are registered, talk to the TA for a section you can attend to see if they can accommodate you.

- **Lab Section:** In addition to discussion section on Thursday, this class has a lab section held on Tuesday at the same time. These lab sections complement the lecture portion of the course.

- **Calculus Tutoring Lab:** This is open daily from M-F in AP&M 2402. Undergrad tutors and/or TA's will be available to help you with questions about homework or the course material. See <http://www.math.ucsd.edu/resources/tutoring>

for the current schedule. Also at the same link, you can find information about OASIS, a university-wide tutoring program you might take advantage of.

- **Calculators:** *No calculators of any kind will be allowed during exams.* If you find calculators useful in doing certain homework problems, that is OK, but remember that you need to be able to do exam problems without the calculator.

- **Lecture Homework:** Doing the homework is the single most important part of your work for the course. *In my experience, students who do few homework problems almost always fail the course.* Please see the course calendar on the website for the dates that homework is due. Follow the links on the course calendar to the lists of assigned problems. Homework will be due on Fridays, and is to be turned into your section's mailbox on the 6th floor of AP&M by 5pm. You are welcome to work together with your classmates on your homework and/or ask the instructors, the TA's, or tutors in the calculus lab for help on assigned homework problems. However, the written work you turn in must be your own. No late homework assignments can be accepted, but the lowest homework score will be dropped. Please hand in neat homework; if your homework is hard to read it may not be graded.

- **Matlab Homework:** Each week in your lab sessions you will be assigned some computer problems. These will be due in your discussion section on Thursdays, and your TA will be available during your computer laboratory hour on Tuesday to help you complete these assignments. Complete information regarding the computer laboratories may be found at the computer homework web site

<http://www.math.ucsd.edu/~math20d/>

- **Exams:** There will be 2 in-class midterms on Wednesday 1/30/08 and Wednesday 2/27/08, and a final exam on Friday 3/21/08 from 11:30am-2:30pm. Bluebooks will not be needed; adequate space will be provided on the exam paper for your answers. No books or calculators are allowed during exams, but you can bring one normal-sized sheet (both sides) of notes. The Final Exam will be cumulative and roughly the length of two midterms. *Bring your student ID to the final exam; we will check everyone's ID.* No make-up exams will be given. It is your responsibility to make sure that you will be able to take the exams at the regularly scheduled time.

- **Regrades:** Very occasionally there might be a mistake in the grading of a midterm. You should bring this to the attention of your TA when the exam is handed back. Your TA will decide if the grading should be reviewed and we will award extra points if deserved. We will not usually consider a regrade once the exam is taken home.

- **Grading:** Your final average will be calculated using whichever of the following two schemes gives you the better score:

—10% lecture homework, 10% lab homework, 20% midterm 1, 20% midterm 2, 40% final exam.

—10% lecture homework, 10% lab homework, 20% best midterm, 60% final exam.

Note that if one of the midterms is missed for whatever reason, the second grading scheme automatically applies. Also, *your final exam must be of passing quality in order for you to pass the course.*

Final grades will be assigned based on the final averages, with your final grade *at least* as good as the grade given by the following standard scale:

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|
| 97 | 93 | 90 | 87 | 83 | 80 | 77 | 73 | 70 | 60 |
| A+ | A | A- | B+ | B | B- | C+ | C | C- | D |

Note that the final grading scale will usually be more lenient (“curved”) depending on the class average.

- **Academic honesty:** The university and I take academic honesty very seriously. Students caught cheating on an exam will receive a zero for that exam, and will be reported to the University. Cheating on an exam includes (but is not limited to) using a calculator, books or notes other than the allowed one page of notes, or consulting such materials when using a restroom, copying off of or talking to nearby students, or having someone else take the exam for you. Similarly, submitting a homework assignment that is not your own work is plagiarism and will be reported if discovered. The administration has recently gotten even stricter in its penalties for cheating and may choose to expel or suspend you. Trust me, it is not worth it.