#### CALCULUS 2: MATH 2300

## **SPRING 2020**

### All information for the course is available from the course website

http://math.colorado.edu/math2300/

Course Coordinator: Al Bronstein and email bral6467@colorado.edu

**Class Meetings:** MTWRF in

**Instructor:** See course website for your section's information.

**Office Hours:** 

Course Teaching Assistant: Course Learning Assistant:

**Prerequisites:** MATH 1300, or MATH 1310, or APPM 1345, or APPM 1350 with a grade of C- or better, or a score of 4 or 5 on AP Calculus AB or BC, or equivalent. Credit not granted for this course and MATH 1320 or APPM 1360.

**Textbook and WebAssign access:** We will use the textbook

Calculus: Concepts and Contexts, 4th Edition, by James Stewart.

You can purchase the textbook together with an access code to WebAssign (for on-line homework) directly from the publisher or from the University of Colorado bookstore. If you purchase the textbook elsewhere, make sure you also buy access to WebAssign for as many semesters as you intend to continue in the calculus sequence. You can find more information about purchasing the textbook and a WebAssign access code on the course website.

**Course website:** The course website for all sections of MATH 2300 is

http://math.colorado.edu/math2300

See the website for exam information, homework assignments, a link to WebAssign, the course schedule, lists of instructors and TAs, a copy of this syllabus, and links to additional resources.

Course structure: People learn mathematics best when they are actively participating. In other words, you learn by doing, not by watching. Therefore, MATH 2300 does not meet in a large lecture hall, but instead meets in small sections, which allows individual and group work in which you will be actively engaged, solving problems, making discoveries and understanding connections.

This course and the book we are using are designed for a classroom which does not always follow a traditional lecture format. Do not be surprised if your instructor often spends only half a class period at the board lecturing or solving problems: the rest of the time, you should expect to be working at your desk, either singly or in groups, or at the board, presenting your work.

In this vein, you will be expected to read a section in the book **before** it is discussed in class. Lectures are intended to highlight aspects of the text, not to replace it.

**Course content:** This course is a continuation of MATH 1300. Topics we will cover include techniques of integration, improper integrals, applications of integration, sequences and series, power series, Taylor series, differential equations, parametric equations and polar coordinates.

Calculators and other technology: You are required to have an electronic device for in-class activities. You are required to bring it to class. The device you use should be capable of graphing functions and doing numerical integration. Acceptable devices include a calculator such as a TI-83 or better, a graphing calculator application for a smartphone, software packages such as Maple or Mathematica, and web sites such as Wolfram Alpha. Absolutely no such devices will be allowed on exams or quizzes. Nor will they be needed on exams or quizzes.

**Assignments and assessments:** The only effective way to learn Calculus is to do lots and lots of problems. Besides working on problems in class every day, you will have assignments and assessments in this course to enhance your skills and understanding.

**Online homework:** WebAssign is an on-line system for doing homework. When you log on, you are given problems that you solve on paper and then enter the answers. These problems are generally straightforward or computational, and you can repeat them multiple times until you get the correct answer. The philosophy behind this is that instantaneous feedback is more effective than waiting days for a grade, and that doing a problem over if it's wrong is better than simply seeing the right answer. Because problems are graded by a computer, there are occasional technical issues, but we believe the trade-off is worthwhile. WebAssign can be accessed through the link on the main course webpage.

If you registered for the course by the Friday preceding the first day of class, then you should already have a WebAssign login. In this case, your username is the same as your Identikey username, and your password is your Identikey password. If you registered for the course after that date, then you will need to email math-help@colorado.edu to get a WebAssign login. Include your full name, your University of Colorado email address, your Identikey username and the course and section in which you are registered.

WebAssign includes a two week trial period (ending two weeks after the start of the course) that allows you to complete your assignments even if you have not bought access.

There will be a WebAssign assignment for each topic we cover, assigned when we begin that material. Please check the due dates regularly, as you are responsible for getting the assignments done on time. No late WebAssign will be accepted and no extensions will be granted.

However, we will allow you to miss 10% of the WebAssign problems for the semester with no penalty, so you don't need to panic if you miss a problem here and there.

You may email your instructor to ask about a WebAssign problem, but when you do, make sure to include "MATH 2300" in the subject line, give a clear statement of the problem you are trying to solve, say what you have already tried and why you think it should have worked. Ask your instructor for their particular policy regarding emailing questions.

**Thursday Recitation Projects:** The recitation is every Thursday and is supervised by a graduate Teaching Assistant (TA) and an undergraduate Learning Assistant (LA). In recitation you will work on projects in small groups with several of your classmates. Expect to be assigned to groups, which will be changed frequently. The TA and LA will be present during recitations to facilitate your work on the projects, but the goal is for you (and your group-mates) to **work through, and complete these projects on your own** as much as possible. Your LA and TA will be making sure that you participate in your group's explorations and discoveries. Your grade is partially based on participation, so *participate*.

Written homework: You will be assigned several conceptual problems each week. You are expected to write up complete, legible, and logical solutions to these problems, which will be graded by your Teaching Assistant. Each problem should be written using complete sentences to explain your steps. You may work together on homework to understand the problems and even to solve them (in fact, we recommend it). However, when you write up your solutions,

this should be done independently, and in your own words. Thus it is your own language and your own work. If you are wondering if you crossed the line, ask yourself "Could I start over and redo this on my own, and would it basically look like this?" If not, then you are submitting someone else's work (plagiarism). Copying homework solutions from the internet also constitutes plagiarism. All cases of plagiarized homework will be submitted to the Honor Code Board. Homework will be collected and returned in Thursday recitations. Your homework must be stapled and labeled with your section number to be counted for credit.

**Quizzes and in-class activities:** You will have regular quizzes and other in-class activities that will be evaluated for both correctness and participation. Your instructor will give you details about these activities.

**Midterms:** This course has three midterm exams and a final exam. They have already been scheduled. Calculators and cell phones will not be allowed during any portion of any exam. Use of any electronic device at any time during the exam will be considered cheating.

Plan your schedule now. There will be **no makeup exams** given under any circumstances. If you cannot attend an exam due to a documented emergency or illness, please see your instructor.

- Midterm 1: Monday, February 10, 2020 from 5:15pm to 6:45pm
- Midterm 2: Monday, March 9, 2020 from 5:15pm to 6:45pm
- Midterm 3: Monday, April 13, 2020 from 5:15pm to 6:45pm

Note that midterms are at night and not in your regular classroom. Exam locations will be announced by each instructor in class, and will be posted on the course website.

Final Exam: The final exam for the course is cumulative. It is scheduled for:

• Final Exam: Monday, May 4, 2020 from 10:30am to 1:00pm

You may not reschedule this exam even if you have three exams on the same day (university policy only allows for the third exam of the day to be rescheduled).

**Grades:** The grade distribution will be calculated based on the following weighting:

- Lowest Midterm 10%
- Middle Midterm 15%
- Highest Midterm 20%
- Final Exam 20%
- WebAssign 10%
- Written homework 10% (Lowest two grades dropped)
- Recitation projects 5% (Lowest two grades dropped)
- Quizzes and Weekly Work 10% (Lowest two grades dropped)

Grades for assignments will be entered into the Canvas system. You can find this here: http://canvas.colorado.edu

Late and missed exams and assignments: No late assignments of any kind will be accepted. You may miss an exam, project, assignment, etc., only in the case of an emergency. Your instructor will require a note from a doctor or your dean within **one week** of your return to class. In this situation you will be excused from the exam or assignment; there will be no make-up exams or assignments due to the large number of students in the course. If you are not excused, you will receive a zero.

Mathematics Academic Resource Center: You may seek assistance with your math questions in the Mathematics Academic Resource Center (MARC) in Math 175. This is a great place to meet other students in the course and work together. You may request help from any lab tutor.

Show up prepared, with your textbook and class materials. When you ask a question, begin with a clear statement of the problem, what you have already tried. The Center opens the first week of classes and runs through the last week of classes. The Center is open roughly during business hours and also several evenings a week. Check the schedule posted outside the room. The webpage for the MARC is: http://math.colorado.edu/marc/.

## **UNIVERSITY POLICIES AND STANDARDS**

**Religious Holidays** Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, if you have a conflict with a scheduled exam, or assignment, because of a religious observance, please submit to your instructor a letter within the **first two weeks** of class indicating this so that you may be excused; there will be no make-up exams or assignments due to the large number of students in the course. See the campus policy regarding religious observances for full details.

Classroom Behavior: Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Class rosters are provided to the instructor with the student's legal name. Your instructors, TAs, and LAs will gladly honor your request to address you by an alternate name or gender pronoun. Please advise them all of this preference early in the semester so that we may make appropriate changes to their records. For more information, see the policies on classroom behavior and the Student Code of Conduct.

**Accommodation for disabilities:** If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your instructor within the **first two weeks** of class so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the Disability Services website. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition or injury, see Temporary Medical Conditions under the Students tab on the Disability Services website and discuss your needs with your professor.

**Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation:** The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct intimate partner abuse (including dating or domestic violence), stalking, protected-class discrimination or harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, anonymous reporting, and the campus resources can be found on the OIEC website.

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

Honor code: All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the academic integrity policy. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, resubmission, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code Council as well as academic sanctions from the faculty member. Additional information regarding the academic integrity policy can be found at the Honor Code Office website.

More details on all of these policies can be found at

https://www.colorado.edu/academicaffairs/policies-customs-guidelines/required-syllabus-statements

# RECOGNITION OF POLICIES AND DATES SPRING 2020

Detach, fill out, sign, date, and return to your instructor

YOUR NAME:
SECTION:
I acknowledge that I have been informed that the midterm exams are scheduled for:
<ul> <li>Midterm 1: Monday, February 10, 2020 from 5:15pm to 6:45pm</li> <li>Midterm 2: Monday, March 9, 2020 from 5:15pm to 6:45pm</li> <li>Midterm 3: Monday, April 13, 2020 from 5:15pm to 6:45pm</li> </ul>
and that these exams are at night and not in my regular classroom. I have no schedule conflicts and can attend all of these exams.
Furthermore, I acknowledge that I have been informed that the final exam is scheduled for
• Final Exam: Monday, May 4, 2020 from 10:30am to 1:00pm
I have no schedule conflicts and can attend the final exam.
I have read and I understand the syllabus. I understand the system that will be used to evaluate my work in this course. I have checked my enrollment in WebAssign by logging in.
I have fulfilled the prerequisites for this course in the following way:
in the year 20
SIGN:
DATE: