

# Mathematics 1300: Calculus 1, Section 11, Fall 2022

## Syllabus

**Class Meetings.** MTWThF at 12:20 – 1:10.

**Location.** CLRE 302.

**Instructor.** Andrew Meier.

**Instructor Website.** [andrewpaulmeier.com](http://andrewpaulmeier.com).

**Instructor email.** [andrew.meier@colorado.edu](mailto:andrew.meier@colorado.edu).

**Office Hours.** MTW(F) 2:20 – 3:20.

**Office.** MATH 218.

**Course Teaching Assistant.** Hagg

**Course Learning Assistant.** TBA.

### Course Information:

#### Prerequisites:

Two years of high school algebra, one year of geometry, and one half-year of trigonometry with suitable placement data; or MATH 1150, Precalculus, with a grade of C– or better. Degree credit not granted for this course and APPM 1345 or APPM 1350 or ECON 1088 or MATH 1081 or MATH 1310 or MATH 1330.

#### Textbook and WebAssign Access:

We will use the textbook “Calculus - Concepts and Contexts,” 4th Edition, by James Stewart.

To keep the cost of your course materials as low as possible and access to those materials as convenient as possible, we have collaborated with the CU Book Store and the publisher to deliver those materials through a program called “Day 1 Digital Access,” which will appear on your tuition and fee bill as “Day 1 Digital Access.”

What does this mean for you?

- You will receive access to all your course materials, digitally, on the first day of classes.
- You will see a “Day 1 Digital Access” charge on your tuition and fee bill for: \$117.00.
- This is a guaranteed lowest price, discounted by the publisher, and not available outside this course.
- You have the option to opt out. This means: you won’t pay for anything, but you lose all access to the course materials.
- You can opt out by: using a link in a reminder email you will receive with the subject heading “Day 1 Digital Access.”
- You must opt out no later than September 7th, otherwise you will be charged for the materials.
- Please keep in mind that “opting out” means that your access to these materials will be turned OFF, and you will have no way to complete assignments.

Additional information:

- The Day 1 Digital Access is for Cengage Unlimited. One Cengage Unlimited subscription covers your textbooks for all of your courses this semester that use Cengage materials, and this one subscription covers all three Calculus courses if you continue on to Calculus 2 and 3 at CU Boulder.
- The subscription includes WebAssign access, the ebook, and auxiliary texts (e.g., student solutions manuals).
- If you have previously purchased a Cengage Unlimited subscription to MATH 1300 or APPM's Calculus, you do not need re-purchase a subscription. However, if you're transferring from APPM's Calculus, you will need to attend our Cengage representative's office hours to get your subscription transferred.
- The subscription includes an optional one-semester free rental for a hard-copy of the textbook; this costs \$7.99 for round-trip shipping.

**Equipment and Software:**

- **Smart phone (or tablet) and scanner app:** So that you can submit written assignments online as a single PDF file, you should download a scanner app for your smart phone or your internet-connected tablet, if your smart phone or tablet does not already have one. Many of these apps are available for free, such as CamScanner.
- **Calculators:** You do not need to purchase a graphing calculator. You can use the free graphing website Desmos. A basic scientific calculator or free online calculator will suffice when you need it on homework. **Absolutely no such devices will be allowed on exams.**
- **Computer, webcam, microphone, & Zoom:** Your instructor may choose to host office hours remotely on Zoom. In this case, you will need a computer equipped with a webcam, microphone, and Zoom. Zoom can be downloaded for free through CU's website at <https://oit.colorado.edu/services/conferencing-services/web-conferencing-zoom>.
- **Top Hat App:** Top Hat is a free software that I will use for attendance and warm-up activities. Please ensure that you have Top Hat downloaded and that your name matches that which appears on official university records.
- *Note:* If class must temporarily or permanently switch to a remote modality, then all students will be required to have a computer equipped with a webcam, microphone, and Zoom. If (and only if) the university must update guidelines and prohibit in-person exams, then all students will be required to download and use the free Google Chrome extension Proctorio for exams.

**Canvas:**

See our course's Canvas <https://canvas.colorado.edu> for up-to-date course information, practice exams, homework assignments, a link to WebAssign, the course schedule, lists of instructors and Graduate Teaching Assistants, a copy of this syllabus, and links to additional resources.

## Course Structure:

Research shows that people learn mathematics best when they are actively participating. In other words, you learn by doing, not by watching. Therefore, MATH 1300 does not meet in large sections, but instead meets in small sections, which allows individual and group work in which you will be actively engaged with solving problems, making discoveries, and understanding connections. This course is designed for a classroom which does not follow a traditional lecture format. Do not be surprised if your instructor often spends only half a class period lecturing or solving problems. The rest of the time, you should expect to be working at your desk, either individually or in groups, 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. In this course you will learn a number of useful formulas, though their mastery is not the primary purpose of calculus any more than correct spelling is the primary purpose of literature. Our goal is to have you learn how to understand calculus conceptually so you can build your own approaches to solving practical problems.

We will use a variety of recitation projects and in-class activities where you will collaborate in small groups to discover, extend, and apply calculus concepts.

### Course Content:

Topics include limits, derivatives of algebraic and transcendental functions, applications of the derivative, integration and applications of the definite integral.

### Mathematics Academic Resource Center:

The Mathematics Academic Resource Center (MARC) is a free service provided by the Department of Mathematics that offers students additional support for their CU Mathematics courses. They will be offering in-person assistance Monday-Thursday at 9 am-9 pm and on Fridays at 9 am-4 pm. They will also be providing a limited amount of assistance remotely after regular hours and on weekends. Visit their website <https://math.colorado.edu/marc/> for more information.

## 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 online 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 in Canvas.

If you added the course before 7:00am on Friday, August 19, then you are already enrolled in our WebAssign course. If you added the course after this time, or if you have switched sections, then contact Jeff Taylor at [math-help@colorado.edu](mailto:math-help@colorado.edu) so he can enroll you in WebAssign or switch your WebAssign access to the correct section. Include your first and last name, your CU email address, your IdentiKey username (not your password), and the course and section number you are enrolled in. You can find your WebAssign Assignments by clicking on the following link: <https://www.webassign.net/colorado/login.html>.

The weekly WebAssign assignments will be due throughout the week. There will be a WebAssign assignment for each topic we cover. Please check the due dates regularly, as you are responsible for getting the assignments done on time. You will have 10 attempts for each individual question. Generally there are no deadline extensions for WebAssign. However, we will allow you to miss 10% of the total WebAssign points 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 1300" 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 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 with your classmates. Expect to be assigned to groups. These groups 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 groupmates) 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*. Missed projects cannot be made up: if you miss a Thursday recitation, you will receive a zero for that project. However, your lowest three recitation grades will be dropped.

#### **Written Homework:**

You will be assigned several conceptual problems each week. These problems are posted in a PDF on Canvas. You are expected to write up complete, legible, and logical solutions to these problems, which will be graded by your TA. Your solutions should be written using complete sentences to explain your steps. Your work should be scanned as a single PDF file and submitted via Canvas by 11:59 pm on the due date (Thursdays). Generally there are no deadline extensions for written homework, but your lowest two homework scores will be dropped.

**Homework Honor Code Policy:** You may work together on homework to understand the problems and even to solve them (in fact, we encourage 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, which is an Honor Code violation. Copying homework solutions from the internet, such as from Chegg or other similar websites, is also an Honor Code violation. Posting homework questions to Chegg or other similar websites, even if you do not access the solutions, is

an Honor Code violation. Accessing solutions on the internet is an Honor Code violation, regardless of whether you use those solutions. **We have a zero tolerance policy regarding Chegg and other similar websites.** If you are found to be in violation of the Honor Code in any way on homework, the first infraction will result in a grade of zero on that homework. The second infraction will result in a full letter grade deduction on your semester grade (e.g., from a B+ to a C+). The third infraction will result in an F for the course. All infractions will be reported to the Honor Code Board.

**Weekly Work:**

Each week you will receive a weekly work grade of 0 to 10 points based on your performance in your MTWF class. These 10 points are distributed in three categories:

- [1 point] Attendance (recorded through Top Hat) for the MTWF classes. You will either receive 1 point if you've attended each class for that week or 0 points otherwise.
- [2 points] A weekly written assignment. This will be graded on completion. I only expect a few sentences. The prompt for the week can be found at my website: [andrewpaulmeier.com](http://andrewpaulmeier.com)
- [7 points] A quiz given during the last 15 minutes of class on Fridays.

Honor Code compliance is expected on Weekly Work. Your lowest two weekly-work grades will be dropped.

**Exams:**

There will be 3 in-person midterm exams given in the evening outside of class for 1.5 hours, and a 2.5-hour comprehensive final exam given in person during the final exam period. Absolute no computing/graphing technology will be allowed on exams, nor will they be needed. **Use of any outside resources at any time during the exams will be considered cheating.** Exams cannot be made up or rescheduled for any reason. Verify that you have no time conflicts with these exams. If you must miss a midterm unexpectedly due to illness, quarantine, family emergencies, schedule conflicts, or any other reason, then your final exam will replace one missed exam grade. If (and only if) the university must update guidelines and prohibit in-person exams, then exams will be given remotely on Canvas using the proctoring software Proctorio.

**Midterm 1:** Monday, September 12, 5:45 pm-7:15 pm (room TBD)

**Midterm 2:** Monday, October 10, 5:45 pm-7:15 pm (room TBD)

**Midterm 3:** Monday, November 7, 5:45 pm-7:15 pm (room TBD)

**Final Exam:** Tuesday, December 13, 7:30 am-10:00 am (room TBD)

**Exam Honor Code Policy:** If you are found to be in violation of the Honor Code on exams, the first infraction will result in a full letter grade deduction on your semester grade (e.g., from a B+ to a C+) or an F for the course (depending on the severity of the infraction). The second infraction will result in an F for the course. All infractions will be reported to the Honor Code Board.

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

- Midterms (45%)
- Final Exam (20%)

- WebAssign (10%)
- Written homework (10%)
- Recitation projects (5%)
- Weekly work (10%)

**Note 1:** The allowed number of drops and replacements in these categories can be used for low grades or missed assignments. It would be highly inappropriate and unfair to you if we were to play judge to determine which personal circumstances are or are not worthy of drops, replacements, or other accommodations. Furthermore, not all circumstances are verifiable through documentation, and asking for doctor's notes is against university policy and is a violation of your privacy. For these reasons, the intended purpose of the allotted drops and replacements is to alleviate the stress on your grade due to unpredictable non-academic circumstances, including, but not limited to, illness, quarantine, family emergencies, or technical issues. Thus, do your best work so that you can reserve your drops for unpredictable non-academic circumstances.

**Note 2:** To compensate for students having occasional bad days, the weighting of the midterms will be distributed as follows: 12% for your lowest midterm, 15% for your second lowest midterm, and 18% for your highest midterm. These weights will only be assigned after all three midterms have been given. Until that time, each midterm will weigh 15%. Also, if your final exam score is higher than your lowest midterm score, then your final exam score will replace your lowest midterm score, and the lowest midterm score will still weigh 12%. This replacement accommodation can only be applied to exactly one midterm, and it can be used for a low midterm grade or a missed midterm (but not both).

**Note 3:** If you miss exactly one midterm, your missed midterm score will be replaced by your final exam score and will weigh 12%. This replacement accommodation can only be applied to exactly one midterm. If you miss two midterms, then you must drop the class, or petition to drop the class. If you miss the final exam, you must petition for an incomplete. There is no guarantee that a petition for an incomplete will be approved.

**Note 4:** In the unlikely event that the university cancels the final exam, the weighting will be 65% for the three midterms combined, and the weighting for the other coursework will remain 35% as stated above. In the unlikely event that a midterm is cancelled, the weighting will be 45% for the remaining midterms combined.

## University Policies and Standards

### CLASSROOM BEHAVIOR

Both students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote or online. 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. For more information, see the [classroom behavior policy](#), the [Student Code of Conduct](#), and the [Office of Institutional Equity and Compliance](#).

**REQUIREMENTS FOR COVID-19**

As a matter of public health and safety, all members of the CU Boulder community and all visitors to campus must follow university, department and building requirements and all public health orders in place to reduce the risk of spreading infectious disease. CU Boulder currently requires COVID-19 vaccination and boosters for all faculty, staff and students. Students, faculty and staff must upload proof of vaccination and boosters or file for an exemption based on medical, ethical or moral grounds through the MyCUHealth portal.

The CU Boulder campus is currently mask-optional. However, if public health conditions change and masks are again required in classrooms, students who fail to adhere to masking requirements will be asked to leave class, and students who do not leave class when asked or who refuse to comply with these requirements will be referred to Student Conduct and Conflict Resolution. For more information, see the policy on classroom behavior and the Student Code of Conduct. If you require accommodation because a disability prevents you from fulfilling these safety measures, please follow the steps in the “Accommodation for Disabilities” statement on this syllabus.

If you feel ill and think you might have COVID-19, if you have tested positive for COVID-19, or if you are unvaccinated or partially vaccinated and have been in close contact with someone who has COVID-19, you should stay home and follow the further guidance of the Public Health Office ([contacttracing@colorado.edu](mailto:contacttracing@colorado.edu)). If you are fully vaccinated and have been in close contact with someone who has COVID-19, you do not need to stay home; rather, you should self-monitor for symptoms and follow the further guidance of the Public Health Office ([contacttracing@colorado.edu](mailto:contacttracing@colorado.edu)).

**ACCOMMODATION FOR DISABILITIES**

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner 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](mailto:dsinfo@colorado.edu) for further assistance. If you have a temporary medical condition, see [Temporary Medical Conditions](#) on the Disability Services website.

**PREFERRED STUDENT NAMES AND PRONOUNS**

CU Boulder recognizes that students’ legal information doesn’t always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors’ class rosters. In the absence of such updates, the name that appears on the class roster is the student’s legal name.

**HONOR CODE**

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the [Honor Code](#). Violations of the Honor Code may include, but are not limited to: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution ([honor@colorado.edu](mailto:honor@colorado.edu)); 303-492-5550). Students found responsible for violating the [Honor Code](#) will be assigned resolution

outcomes from the Student Conduct & Conflict Resolution as well as be subject to academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found on the [Honor Code website](#).

### **SEXUAL MISCONDUCT, DISCRIMINATION, HARASSMENT AND/OR RELATED RETALIATION**

CU Boulder is committed to fostering an inclusive and welcoming learning, working, and living environment. University policy prohibits sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, protected-class discrimination and harassment, and related retaliation by or against members of our community on- and off-campus. These behaviors harm individuals and our community. The Office of Institutional Equity and Compliance (OIEC) addresses these policies, and individuals who believe they have been subjected to misconduct can contact OIEC at 303-492-2127 or email [cureport@colorado.edu](mailto:cureport@colorado.edu). Information about university policies, [reporting options](#), and support resources can be found on the [OIEC website](#).

Please know that faculty and graduate instructors have a responsibility to inform OIEC when they are made aware of any issues related to these policies regardless of when or where they occurred to ensure that individuals impacted receive information about their rights, support resources, and resolution options. To learn more about reporting and support options for a variety of concerns, visit [Don't Ignore It](#).

### **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.

See the [campus policy regarding religious observances](#) for full details.