Mathematics 1300: Calculus 1, Fall 2025 Syllabus

Class Meetings. MTWThF at 12:20 PM - 01:10 PM

Location. MUEN D439 Instructor. Champ Davis

Instructor email. champ.davis@colorado.edu Office Hours. MTW 2-2:50pm (subject to change)

Office. MATH 237

Course Teaching Assistant. Eskil Irgens Course Learning Assistant. Ella Boettcher

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: Early Transcendentals," 9th Edition, by James Stewart.

The e-book and WebAssign comes with a Cengage Unlimited subscription through CU's Book Access program, for which you are automatically billed through your tuition \$259 (plus tax). This flat fee gains you access to the materials for ALL of your courses for Fall 2025. If you wish to opt-out of the Book Access program, you can opt-out by Friday, September 5, 2025, but you will lose access to your course materials and must purchase them separately.

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 <u>not</u> 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.
- 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. Check their website to see if they are offering any remote options. Visit their website https://math.colorado.edu/marc/ for updated hours and other 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 on or before Sunday, August 17, 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 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 6 attempts for each individual question. 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. If you have concerns about completing a WebAssign by the deadline, discuss your concerns with your instructor.

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 on Gradescope by 11:59 pm on the due date (Thursdays). Your lowest two homework scores will be dropped. If you have concerns about completing a written homework by the deadline, discuss your concerns with your TA.

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 <u>full</u> 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.

Students are not allowed to use advanced automated tools (artificial intelligence or machine learning tools such as ChatGPT or Dall-E 2) on any assignment for this course. Each student is expected to complete each assignment without assistance from AI. Use of AI will be treated as a form of academic dishonesty akin to plagiarism or cheating.

Weekly Work:

Each week you will receive a weekly work grade of 0 to 10 points based on your performance in your MTWF class. Your instructor will give you details about how this grade is determined for your section. This grade may be based on your performance on weekly quizzes, components of an ongoing project, in-class participation, or other forms of assessment. 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.** If you must miss a midterm unexpectedly due to illness, quarantine, family emergencies, schedule conflicts, etc., 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 15, 5:45 pm-7:15 pm (room TBD)

Midterm 2: Monday, October 13, 5:45 pm-7:15 pm (room TBD)

Midterm 3: Monday, November 10, 5:45 pm-7:15 pm (room TBD)

Final Exam: Monday, December 8, 7:30 am–10:30 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 <u>full</u> 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: While the allotted dropped or replaced grades in this course can be used for low grades or missed grades, the intended purpose of any drops or replacements is to alleviate the stress on your semester grade due to unpredictable or unavoidable non-academic circumstances. Do your best work so that you can reserve your drops for non-academic circumstances. However, if prolonged illness, family emergencies, or crisis situations cause you to miss a substantial number of classes or assignments, please contact the instructor and the course coordinator as soon as possible.

If your personal circumstances prevent you from completing a substantial number of assignments by the deadlines, then you are encouraged to contact Student Support & Case Management. A case manager can verify your circumstances and contact your instructor on your behalf.

Note 2: If you register late for this course (after August 17), notify your instructor as soon as possible to determine a plan of action to catch up on the missed material.

Note 3: 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 4: 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 5: 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

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 (including use of paper writing services or technology [such as essay bots]), 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. Understanding the course's syllabus is a vital part of adhering to the Honor Code.

All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution: StudentConduct@colorado.edu. Students found responsible for violating the Honor Code will be assigned resolution outcomes from Student Conduct & Conflict Resolution and will be subject to academic sanctions from the faculty member. Visit Honor Code for more information on the academic integrity policy.

Accommodation for Disabilities, Temporary Medical Conditions, and Medical Isolation

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 for further assistance. If you have a temporary medical condition, see Temporary Medical Conditions on the Disability Services website.

If you have a temporary illness, injury or required medical isolation for which you require adjustment, please notify your instructor as soon as possible so that we can offer advice and determine a reasonable accommodation. In many cases, we will encourage you to contact Disability Services and/or Student Support & Case Management who will then contact us with advice on reasonable accommodations.

Accommodation for Religious Obligations

Campus policy requires faculty to provide reasonable accommodations for students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please communicate the need for a religious accommodation in a timely manner. In this class, please notify your instructor as soon as possible, preferably at least two weeks prior to the conflict, to discuss options so that we can provide reasonable accommodations. See the campus policy regarding religious observances for full details.

Preferred Student Names and Pronouns

CU Boulder recognizes that students' legal information does not always align with how they identify. If you wish to have your preferred name (rather than your legal name) and/or your preferred pronouns appear on your instructors' class rosters and in Canvas, visit the Registrar's

website for instructions on how to change your personal information in university systems.

Classroom Behavior

Students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote, or online. Failure 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, marital status, political affiliation, or political philosophy.

Additional classroom behavior information:

- Student Classroom and Course-Related Behavior Policy.
- Student Code of Conduct.
- Office of Institutional Equity and Compliance.
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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 protected-class discrimination and harassment, sexual misconduct (harassment, exploitation, and assault), intimate partner abuse (dating or domestic violence), stalking, and related retaliation by or against members of our community on- and off-campus. The Office of Institutional Equity and Compliance (OIEC) addresses these concerns, and individuals who have been subjected to misconduct can contact OIEC at 303-492-2127 or email OIEC@colorado.edu. Information about university policies, reporting options, and OIEC support resources including confidential services can be found on the OIEC website.

Please know that faculty and graduate instructors are required to inform OIEC when they are made aware of incidents related to these concerns regardless of when or where something occurred. This is to ensure the person impacted receives outreach from OIEC about resolution options and support resources. To learn more about reporting and support a variety of concerns, visit the Don't Ignore It page.

Mental Health and Wellness

The University of Colorado Boulder is committed to the well-being of all students. If you are struggling with personal stressors, mental health or substance use concerns that are impacting academic or daily life, please contact Counseling and Psychiatric Services (CAPS) located in C4C or call (303) 492-2277, 24/7.