

C A L C U L U S 1 (M A T H 1 3 0 0 – 0 1 3) F a l l 2 0 1 1

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Office Hours: MTWF 1 – 2 or by appointment

Course webpages: <http://math.colorado.edu/~newberry/Fall111/MATH1300.htm>
<http://math.colorado.edu/math1300>

Class Meetings: **lecture:** MUEN D144 MTWF 12:00PM – 12:50PM
???????: MUEN D144 R 12:00PM – 12:50PM

Text: *Calculus, 5th Edition* by Hughes-Hallett, Gleason, McCallum et al. John Wiley & Son's, 2009.

Calculators: A calculator (TI-83 or equivalent) is *required* for this course. Calculators *will* be allowed on the midterm and final exams.

Prerequisite: Two years of high school algebra, one year of geometry, and one-half year of trigonometry; or MATH 1150: Precalculus.

About the course: Roughly speaking, calculus is the mathematics of *change*. In particular, calculus is a powerful tool for understanding change in physical quantities and phenomena that *depend on*, or are *related to*, each other. The dependence of a given quantity upon another (or others) is often described mathematically by a *function*. Thus, the heart of calculus is the study of functions, and how they change. Differential calculus studies the instantaneous change of a function as quantities vary, and integral calculus measures the cumulative effect of the change of a function.

Grading: Your grade in the course will be computed on the basis of exams, in-class work, and homework.

(a) Exams (60% of your grade total). You will have a total of four exams in this course: Three evening midterm exams, and a final exam during the final exam period. *The midterm exams.* Each of the three evening midterm exams is worth **15%** of your final grade. These are all from 5:15 until 6:45 PM, on the following **Wednesdays: September 14, October 12, November 9.**

We do not give makeup midterm exams for any reason. Instead if you miss an exam we will use your final exam score for your score on the missed exam. In general, if your final exam score is better than one of your midterm scores we will substitute your final exam score for the low score.

Final exam. You will also have a **final exam**, worth **15%** of your final grade, on **Monday, December 12, 10:30 AM - 1:00 PM.**

(b) Homework (worth a total 20% of your grade). There will be WeBWorK (on-line) homework as well as written, graded assignments. WeBWorK. The on-line "WeBWorK" homework assignments will be hosted on:

<https://webwork.colorado.edu/webwork2/Math1300-Fall-2011>

Online homework is a requirement of this course. To use the online homework system you will need to visit

https://webwork.colorado.edu/webwork2_files/webwork2_files/forms/signup.php

and create an account. Using the user name you entered you may visit WeBWorK to sign in and complete your online homework. Your initial password will be the user id you entered. The first thing you do when you sign-in for the first time should be to change your password. Homework will be posted for every lecture. It is your responsibility to check daily and make sure you complete the assignment by the posted due-date. Also make sure you register for the correct course and section, we will not look in other sections to find your name at the end of the semester when giving grades.

Written homework. The written assignments, typically due on **Friday**, will require that solutions be written in complete English sentences, with more-or-less correct grammar and spelling.

Late homework will not be accepted; if an assignment is not turned in on time, you will receive a zero for that homework grade. However, we will drop your lowest written assignment score.

WeBWorK assignments will account for **10%** of your course grade; written assignments will account for **10%**.

(c) Weekly tutorial "projects" (worth 10% of your course grade). There will also be one in-class, group project to be completed during each tutorial (we don't call them "recitations" anymore) on Thursdays.

These projects will be distributed in the tutorials, and you will work on them in small groups with several of your classmates. (The group to which you are assigned will change frequently.) A graduate Teaching Assistant (TA) and undergraduate Learning Assistant (LA) will be present during tutorials 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. You will be graded on your participation, so *participate*. Indeed, you will be graded on your participation during each tutorial. Each tutorial will be graded on a 5 point scale—you will receive 2 points for attending the entire tutorial, another 2 points for working on the project during the entire tutorial, and 1 additional point for working with the other students in your assigned group.

Missed projects cannot be made up; if you miss a Thursday tutorial, you will receive a zero for that Project grade. However, we will drop your lowest project score.

(d) In-class quizzes, worksheets, etc. (worth 10% of your course grade). Almost every week you will have an in-class quiz (usually on Tuesday). Each brief quiz will cover material quite similar to what was covered in the previous week (either from the homework or the tutorial project).

From time to time your instructor will distribute worksheets, additional quizzes, or other activities in class, for you to complete in the allotted time during that class period.

Missed quizzes, worksheets, etc. cannot be made up; if you miss an in-class activity, you will receive a zero for that activity grade. However, we will drop a few of your quiz scores and a few of your other in-class scores to make you for any missed classes.

UMRC:

Undergraduate Mathematics Resource Center. You may seek assistance with your math questions at the Undergraduate Mathematics Resource Center, which will open Monday, August 22 at 9 AM, and thereafter will be open (on school days only) Monday– Thursday 9 AM–6 PM, and Friday 9 AM–2 PM, in Math 175. (The Center closes for the semester at 2 PM on Friday, December 9.) You may request help from any lab tutor.

Please see our course webpage for important policy information regarding disabilities, religious holidays, classroom behavior, discrimination and harassment, and the CU Honor Code.