

**MATH 1300: Calculus I, Spring 2008**  
**Syllabus for Section 003**

MTWThF, 9:00-9:50 am, MUEN E118

**General Information:**

**Instructor:** Dana Ernst

**Office:** MATH 340

**Email:** Dana.Ernst@colorado.edu

**Office hours:** M 12-2 (MATH 175); WF 10-11

**Recitation TA:** Stephanie Lage

**Office:** MATH 360 (office hours in MATH 175)

**Email:** Stephanie.Lage@colorado.edu

**Office hours:** W 10-11, 4-6; F 10-11

**Section Webpage:** <http://math.colorado.edu/~ernstd>

**Course Webpage:** <http://math.colorado.edu/~ernstd/Spring2008/1300A11.html>

**Course Information and Policies:**

**Prerequisites:** Two years of high school algebra, one year of geometry, and one half year of trigonometry, *or* MATH 1150.

**Purpose:** The primary objective of this course is to aid students in becoming confident and competent in solving problems that require techniques developed in Calculus. Successful completion of MATH 1300 provides students with skills necessary for upper division mathematics courses, such as Calculus II. Students will have a working understanding of limits and continuity. Students will also be able to utilize various techniques to differentiate and integrate numerous functions including logarithmic, exponential, and trigonometric functions. In addition, students will understand and be able to apply the Mean Value Theorem, the First and Second Derivative Tests, and the Fundamental Theorem of Calculus in both theoretical problems and applications. Also, the purpose of any mathematics class is to challenge and train the mind. Learning mathematics enhances critical thinking and problem solving skills.

**Text:** Anton, Bivens, & Davis: *Calculus: Early Transcendentals*, 8th ed. (Wiley). This text has been repackaged (at somewhat reduced cost) specifically for this course as *Single Variable Calculus: Math 1300/2300* (Wiley).

**Attendance:** Regular attendance is expected and is vital to success in this course. In particular, attendance in recitations on Thursdays is required (see below).

**Homework:** Homework will be collected *everyday* and every assignment is worth 6 points. For each assignment (except the homework assigned on Thursdays), we will designate *two* problems that may be graded. When you hand in your homework, your solutions to the two problems that we have designated should **appear first on the top page**. Your remaining solutions should follow these designated problems. Your homework will always be graded for completion and occasionally the designated problems will be graded for correctness. Most of the problems assigned will be odd-numbered problems. Since the answers to the odd-numbered problems are in the back of the book, it is each student's responsibility to verify their solutions to these problems. The homework assigned on Thursdays **must** be downloaded by each student from the course web page. These homework assignments will be similar to the worksheets completed during recitations on Thursdays (see below). During most classes your instructor will answer

one or two questions about the homework; for additional help on the homework you should go to the Undergraduate Mathematics Resource Center (see below). You are allowed and encouraged to work together on homework. However, each student is expected to turn in his or her own work. Late homework will *not* be accepted. Five of your lowest homework scores will be dropped at the end of the semester.

**Exams:** There will be 3 midterm exams (**Feb 6, Mar 5, Apr 9 at 5:15-6:45 pm**) and a final exam (**May 7 at 7:30-10:00 pm**). Each of these exams contributes equally to your final grade. We will substitute your final exam score for your lowest midterm score if it improves your average. There will be no *make-ups* for any midterm exam for any reason. The final exam will be cumulative.

**Recitations:** In each recitation section you will complete a worksheet that is designed to either introduce new material or reinforce previously introduced concepts. You must attend each recitation and actively participate during the entire session. Your worksheet will not be collected but you will be graded on your attendance and participation (you will receive 6 points if you attend **and** you will receive an additional 6 points if you participate; you will receive a 0 otherwise). You cannot make-up the recitation; we will drop your lowest two recitation grades to take into account any missed days. Both the homework due on Friday (which will cover the material covered in the recitation) and the complete solution to the worksheet **must** be downloaded from the course website by each individual student. The solutions to the worksheets will be posted to the course web page on Thursday afternoon following recitations.

**The Undergraduate Mathematics Resource Center:** This center is staffed by graduate students from the Department of Mathematics. You will be expected to go to the Center to get help with any course concepts or homework problems that are not addressed in your regularly-scheduled class. The Center is in MATH 175 and is open Mon-Thurs 8 am-6 pm and Fri 8 am-2 pm.

**About Calculators:** Calculators will not be allowed on any of the exams.

**Other Comments:** Turn off your cell phones!!! If you must be late, try not to disrupt class.

## Course Evaluation:

**Grading:** You will be graded on your written work, which will be judged on the basis of *correctness, completeness, and legibility*.

**Basis for Evaluation:** Your final grade will be determined by the scores of your homework and recitation grade, midterm exams, and final exam.

**Homework/Recitation Score:** 20%

**Midterm Exams:** 20% each (total of 60%)

**Final exam:** 20%

## Additional Information:

**Students with Disability:** If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities.

Contact: 303-492-8671, Willard 322, or

<http://www.Colorado.EDU/disabilityservices>.

Disability Services' letters for students with disabilities indicate legally mandated reasonable accommodations. The syllabus statements and answers to Frequently Asked Questions can be found at

<http://www.colorado.edu/disabilityservices>.

**Religious Obligations:** Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. See full details at

[http://www.colorado.edu/policies/fac\\_relig.html](http://www.colorado.edu/policies/fac_relig.html).

**Classroom Behavior:** Students and faculty each have responsibility for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Faculty have the professional responsibility to treat all students with understanding, dignity and respect, to guide classroom discussion and to set reasonable limits on the manner in which they and their students express opinions. For more informations go to

<http://www.colorado.edu/policies/classbehavior.html>.

**Honor Code:** All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at

<http://www.colorado.edu/policies/honor.html>

and

<http://www.colorado.edu/academics/honorcode>.

**Closing Remarks:** When does the learning happen? It might happen in class, but most likely it happens when you sit down to do your homework. Most of you can follow what I do on the board, but the question is, can you do it on your own? To learn best, you must struggle with mathematics on your own. It is supposed to be difficult. However, if you are struggling too much, then there are resources available for you. I am always happy to help you. If my office hours don't work for you, then we can probably find another time to meet. You can also get help from each other. Get a study buddy! Help each other learn. Go to the Undergraduate Mathematics Resource Center (see above). It is your responsibility to be aware of how well you understand the material. Don't wait until it is too late if you need help. *Ask questions!*