

Math 131 Section 002

Calculus I Syllabus

Spring 2008

CRN: 20444

MTWF 8:00-8:50am in Ross 2090

4 Credits



Instructor:	Joe Champion
E-Mail:	joseph.champion@unco.edu
Website:	www.unco.edu/nhs/mathsci/facstaff/Champion/
Office Hours:	Ross 2246, Mon & Wed 1:00-1:50pm; Thurs 10:10-11:00am.
Required Text:	Stewart, J. (2006). <i>Calculus: Concepts and Contexts (3rd ed.)</i> , CA: Thompson.
Required Materials:	<ul style="list-style-type: none">• A Graphing Calculator (TI 84's will be used in class)• The TI-Navigator® (supplied by the department)• Regular Internet Access

Course Description, Prerequisites, and Objectives

Calculus I is an introduction to the tools, methods, and applications of single-variable differential calculus. Topics include functions, limits, rate of change, tangents, derivatives, rules of differentiation, and related applications. An understanding of function-based college algebra and basic trigonometric functions is a prerequisite for the course.

As a General Education course at UNC, this class aims to satisfy the following outcomes in the area of Mathematics:

- The student will demonstrate proficiency in the use of mathematics to structure their understanding of and investigate questions in the world around them.
- The student will demonstrate proficiency in treating mathematical content at an appropriate level.
- The student will demonstrate competence in the use of numerical, graphical, and algebraic representations.
- The student will demonstrate the ability to interpret data, analyze graphical information, and communicate solutions in written and oral form.
- The student will demonstrate proficiency in the use of mathematics to formulate and solve problems.
- The student will demonstrate proficiency in using technology such as hand-held calculators and computers to support their use of mathematics.

Activities, Participation, and Quizzes

Expect to work actively every day in this class. Activities will often include small-group work and discussion, so please come to class energized and ready to learn. Daily "Quick Poll" exercises on the TI-Navigator® will also help you check your understanding of material, so regular attendance is essential. Quizzes (usually on Fridays) include tasks very similar to exercises and examples from the text and you may use any course materials on quizzes. So remember to bring your textbook and notes to class on quiz days.

You can earn high scores in this section if you attend class every day and work respectfully with your classmates.

Lab Assignments

Tuesdays will usually be Lab days in this class. On lab days, we'll meet in the Calculus Lab (Ross 2263) and work on using the mathematics program Mathematica® 6. Learning to use Mathematica will allow you to do work with and explore amazing mathematical ideas; accompanying lab assignments will ask you to complete and submit electronic reports.

Online Homework (WeBWork-- <http://mathit.unco.edu/webwork2/>)

I will assign regular web-based homework exercises to complement our class meetings. These automated problem sets are carefully picked to provide you with meaningful practice. The WeBWork site is set to allow **no late homework**, so plan to meet the announced deadlines. If you run into problems with the WeBWork site or cannot meet a deadline, you must contact me *before* homework is due.

Paper-based Homework

Paper-based homework will be assigned to complement the typically more procedural online homework. I encourage you to work with a classmate on these assignments, but make sure your final homework write-ups are clearly your own original work.

Midterm Exams

Three days are tentatively scheduled for midterm exams: **February 8th, March 7th, and April 18th**. The exams cover text, lab, and in-class content and are comprehensive. Before each exam, look for practice problems or other exam review material on the course website. If it benefits your overall grade in the course, your final exam score will replace your lowest midterm exam score. However, there are **no make-up exams or retake exams** in this course.

Final Exam

The comprehensive final exam is scheduled by the university for **Wednesday, May 7th at 8:00-10:30am**. If you have a conflict with the scheduled time, you must see me at least two weeks before the time to discuss options.

Grading

Overall grades will be assigned by weighting your averages in the sections according to the following scheme:

Activities, Participation, and Quizzes	10%
Lab Assignments	10%
Online Homework	10%
Paper-based Homework	10%
Exam 1	10%
Exam 2	15%
Exam 3	15%
Final Exam	20%

Final letter grades will be assigned based on the usual 90-80-70-60 scale:

A: 90% or higher B: 80%-89% C: 70%-79% D: 60%-69% F: 0%-59%

Course Website (Blackboard-- <http://bb.unco.edu/>)

The online home of the course on Blackboard contains class announcements, a link to online homework assignments (WeBWork), in-class activities, exam review materials, course documents, and all your scores in the class. I recommend that you visit the site often to check your scores and stay informed about the course.

Help

I encourage you to come see me for help early and often this semester, especially if you've struggled with math classes in the past. For tutoring help, here are some options:

- The **Math Lab**, located in Ross 1250, provides *free drop-in tutoring services* for Calculus. Available tutor hours are posted on the door and at <http://hopper.unco.edu/mathed/tutoring/>
- The university has a **Tutoring Center** in the Michener Library. Appointments are necessary for each *free* one hour appointment. To schedule an appointment, go to Michener L149.
- The **Math Department** in Ross 2239 maintains a list of private tutors that provide fee-based math tutoring.

UNC Honor Code

All members of the University of Northern Colorado community are entrusted with the responsibility to uphold and promote five fundamental values: *Honesty, Trust, Respect, Fairness, and Responsibility*. These core elements foster an atmosphere, inside and outside of the classroom, which serves as a foundation and guides the UNC community's academic, professional, and personal growth. Endorsement of these core elements by students, faculty, staff, administration, and trustees strengthens the integrity and value of our academic climate.

Academic Dishonesty

Behavior that appears to be cheating will not be tolerated and will be addressed according to University policy as outlined in the Student Handbook (www.unco.edu/dos/handbook/links.htm). Possible disciplinary actions range from earning no credit on an assignment to a failing grade in the class along with a notation on your permanent transcript stating that you failed due to academic dishonesty.

Changes

The instructor reserves the right to amend, adjust, or otherwise modify the syllabus at any time during the course.