

Instructor name: Steve Mills

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Text: Calculus by Stewart, 6th Edition

E-Mail: Use E-Mail tool on Course Website. Emergency e-mail: *steve.mills@aims.edu*

Course Website:

1. Login at <http://www.aims.edu/student/index.php>
2. Click on **My Courses** tab.
3. Select this course from the list.

Please see the Course Website for this syllabus, course calendar, assignment list, lecture notes, practice tests, and other information..

Course location: Ed Beaty 131

Office Hours: See last page of this document or Course Website.

Catalog course description and prerequisites: Continuation of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals, and infinite series. This course is a state guaranteed transfer course GT-MA1. Prerequisite(s): MAT 201, assessment or permission of instructor. Five credits.

Grades:

Grading:	
4 Chapter Tests:	60%
Final Test:	20%
Homework:	20%

Grading scale:
90%-100% A
80%-89% B
70%-79% C
60%-69% D
Below 60% F

Chapter Tests: Your Test Grade is the average of your Test Scores (as a percent). I will drop the lowest Test Score.

Final Test: At the end of the course, there will be an in-class Final Test, at a specific time to be announced. Your Final Test Grade will be figured as a percent.

Homework: Virtually every day, you will submit (well-)written homework. Each assignment is worth 10 points. No late assignments will be accepted.

I will typically grade 3 exercises, when I grade an assignment.

A typical point system (rubric) I use:

Context of the question – 1 point per exercise (*Someone reading your work shouldn't need to open the book to know what's being asked and how it was answered.*)

Solid supporting work (clear, complete) – 1 point per exercise

Correct Answer – 1 point per exercise

On-Time Delivery – 1 point for the whole assignment

I will *not* grade work that...

- ... is written on the *back* of the homework. (I'm a grade-one-side-only guy.) This does NOT mean you will squeeze an entire assignment onto one page. When you use multiple pages, you will only use one side of each page.
- ... is sloppy or illegible.
- ... has a staple through it. (*Leave an inch at the top! Staple the **corner!***)
- ... has problems out of order. (I won't go chasing around looking for exercises. If you get stuck on a problem, start a fresh piece of paper.)

There are approximately 60 assignments. That's 60 opportunities to earn all the points needed. I plan to make 85% the cut-off for a perfect homework grade. Most hard-working students will max out this category with a week or two remaining in the course. It is not possible to pad your grade by earning more than 100% on homework.

Grades Miscellany:

Incomplete "I": You must successfully complete 75% of the course *and* have a compelling reason for an Incomplete.

Add/Drop: Last day to Add/Drop this course is January 28th.

Withdraw "W": The Grading System definition of a W is: "WITHDRAWAL: Indicates withdrawal from the course. Last day to withdraw is April 10th. No Ws given after that date!

Audit Grade: See the catalog. The student must obtain instructor approval by the Drop/Add deadline for the course.

Before Class:

- Always read the next section before class. The Course Outline pretty much tells you what's next (In general, we're starting in 1.1 and cruising straight through to 6.5.)
- Jot down the theorems and definitions that will be covered. This will leave you free to learn more about what they mean and how to *use* them, which is what *I* want to talk about.
- Attempt a few exercises, to see what you're up against. *If it's easy for you, I have no problem with your turning in your homework at the beginning of class and leaving to do something else. But I'd rather have you in the room, to help explain things to others, perhaps?*
- Budget some time to ask questions 1-on-1 (or in groups) in my office. While I am happy to answer a few homework questions, I *still* collect the homework at the beginning of class. *Right* before class (11-ish) is a popular time. If we get "too big," I will shift one or more office hours to a classroom.

After Class:

- Start the homework as soon as possible.
- Any exercise you can't do, start a whole new piece of paper and continue with the exercises. *Don't spend too much time on a problem that's a challenge. Instead, write down a few ideas about it, and move on!!!*
- Complete any self-assessments I've assigned. These might very well be the most valuable learning experiences you have during the semester.

Make-up test: I don't like doing make-up tests. Instead, I will drop your lowest test score.

Calculators: A scientific calculator is required for this class. A graphing calculator is recommended but not required. (Homework problems requiring a graphing calculator may be done using an online grapher instead.) Unless otherwise specified in class, calculators are to be used only to calculate: add, subtract, multiply, divide, and calculate logs, roots, powers, trig functions and factorials. You will be required to show all other work on homework and tests. I will not give credit for answers given without work shown. Graphing calculators are not allowed on tests; you will want a simple calculator for use on tests, *and you will need to know how to use it*. Cell phones are not allowed on tests, even if they have a built-in calculator.

Academic Honesty: You may get help with your homework, but work on a test is to be yours alone. You will not be given credit for any work that appears to be dishonest. (This includes copying, cribsheets, use of graphing calculators or cell phones, corrections made after the test is graded, as well as any other unauthorized source of information.) If there is a pattern of such work on a test, you will receive a grade of 0 on that test. If I have misjudged you in such an instance, please come and talk to me.

Student Conduct: (Aims Policy Manual #5-601) (see the college website for additional information about this policy): Students are expected to practice academic honesty. Each student is responsible for contributing to a positive learning environment in classroom situations. Students who conduct themselves contrary to the best interest of the class as a whole may be dropped from the roster. Students should refrain from expressing derogatory opinions concerning race, gender, ethnicity, disability, sexual orientation, or any other personal characteristic, and should avoid using obscene language. They must refrain from any form of cheating, plagiarism, or knowingly furnishing false information to the college.

Because respect for the learning process is critical, no behavior that disrupts another student's ability to learn will be tolerated. The first example of such behavior will result in a warning. The second incident will result in expulsion.

Cell Phone Policy: If you have a cell phone with you in the classroom, make sure the ringer or beeper is off unless you are expecting a call due to an emergency situation. In that case you must inform the instructor in order not to disrupt the class unexpectedly.

Children on Campus: (Aims Policy Manual #3-600) (see the college website for additional information about this policy): All children on campus under the age of sixteen (16) must be under the direct supervision of a parent or legal guardian unless they are involved in a specific College approved and supervised activity.

Tutoring: Tutoring is available to qualified students. Interested students should visit the Learning Commons or the tutoring services website.

Disabilities: Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Disability Access Services (DAS) office privately to discuss her/his specific needs. Please be aware that before most accommodations can be allowed in class they must be approved through the DAS office. Students should contact the DAS office at 970-339-6388 or disabilities@aims.edu to set up an appointment to discuss the process of requesting reasonable accommodations. DAS is located in the newly remodeled College Center in the One-Stop Shop area on the 1st floor.

General Education Competencies: This course satisfies the following State GE categories: Critical Thinking, Technology, and Mathematics.

Standard Competencies:

- I. Write and state clearly the definitions and properties, differentiate, and integrate logarithmic and exponential functions.
- II. Set up and solve applied problems involving logarithmic and exponential functions as selected by the instructor.
- III. Differentiate and integrate the inverse trigonometric functions.
- IV. Define, differentiate, and integrate hyperbolic functions as selected by the instructor.
- V. Use the appropriate algorithm(s), including integration by parts, trigonometric substitutions, partial fractions, numerical methods, etc., to integrate algebraic, logarithmic, exponential, trigonometric, and composite functions.
- VI. Use various limit theorems to evaluate improper integrals.
- VII. Determine the convergence or divergence of various sequences and series.
- VIII. Use Taylor and Maclaurin series to express selected functions.
- IX. Use Taylor's formula with remainder to approximate selected functions.
- X. Identify and graph equations involving a variety of conic sections.
- XI. Convert between Cartesian and polar coordinates.
- XII. Graph and determine the area of regions defined by polar equations.
- XIII. Read, analyze and apply written material to new situations.
- XIV. Demonstrate the ability to select and apply contemporary forms of technology to solve problems or compile information.

Existing students in current courses should use the Mail Tool on their respective Course Websites in AimsOnline (Course Shell) to send Calculus II-related e-mail.