

MATHEMATICS 223
Calculus for Science and Engineering III
Summer 2026
General Information

Description. Math 223 is the third semester of a four semester sequence covering single and multivariable calculus and differential equations. It is a 3 credit-hour course meeting 4 times per week. The prerequisite for Math 223 is Math 122.

Text on Canvas.

Calculus Early Transcendentals Fourth Edition
Jon Rogawski / Colin Adams / Robert Franzosa
Freeman

Organization. Classes meet four times per week: Monday, Tuesday, Wednesday, and Thursday.

Syllabus. A daily Syllabus will be provided. This Syllabus is provisional in the sense that the pace of the course may be adjusted from time to time and small amounts of material added or omitted. The Tests are scheduled in the Syllabus. I do not anticipate any change in the Test dates. *Check your calendar to make sure that you can take all Tests. If there is a conflict, let me know at once. (See the policy on Tests below.)*

Homework. Daily assignments are listed on the syllabus. These provide practice, help fix ideas introduced in class or in the text, and constitute a partial guide as to what to expect on Quizzes or Tests. They are not graded.

Quizzes. There will be (24) 10 point Homework quizzes during the semester. I will keep your best 20, for 200 points in quizzes.

Tests. There will be three tests during the semester. The Homework questions provide a rough guide to the level and difficulty of Test questions. The class before a test will be devoted to review; no new material will be introduced. Tests are *cumulative*; that is, a given Test may contain material which appeared on an earlier Test. You must take all Tests at the required time unless specific alternative arrangements are made. (See MakeUps and Excuses below.)

Final Exam. The Final Examination will take place as on July 23, 2026. This will be a comprehensive examination covering the entire semester.

Calculators. Each student must have a calculator for use on Tests, and the Final Examination. It should be of the scientific type having, at least, the trigonometric functions, the inverse trigonometric functions, exponentials, natural logarithms. It is your responsibility to learn how to use your calculator. Ask for help if necessary.

Computers. Course information will be posted on Canvas:

<https://canvas.case.edu/courses/53025>

Grading Policy. There will be three tests each worth 100 points. I will take your best test score and double it, giving 400 points for tests. The final exam is worth 200 points and 200 points for Homework quizzes. There is total of 800 points for the course. An attempt is made to set performance levels so that 90% is an A (720 points), 80% is a B (640 points), 70% is a C (560 points), 60% is a D (480 points) and less than 60% is unsatisfactory. I do not always achieve this goal and sometimes adjustments are made.

MakeUps, Excuses, etc. *If you anticipate the problem, let me know at once or leave a message on my voice mail at 368-2881.*

Disability Resources: If you have a documented disability, you may be eligible to request accommodations from Disability Resources. In order to be considered for accommodations you must first register with the Disability Resources office. Please contact their office to register at 216.368.5230 or get more information on how to begin the process. Please keep in mind that accommodations are not retroactive.

Group vs Individual Efforts You are encouraged to work together in small groups for study and homework. Taken in the right spirit, this can be very productive. However, work that you turn in under your name must be your own. This course rests on Case's commitment to integrity and academic honesty. To preserve an atmosphere of fairness for all students, cheating will not be tolerated. Suspected violations of the Academic Integrity Policy will be reported.

Office Hours My normal office hours will be from 8:00-8:55am (before class) and 10:30-11:30am (after class). If these hours are not convenient, make an appointment to see me. If you need help, please see me, I am here to help.