

MATH 2550 Syllabus

Introduction to Multivariable Calculus, Section A, 2 credit hours

Fall 2026

Note: this syllabus is subject to change without notice through Monday, August 24. Any changes made after that date will be communicated through a Canvas announcement.

Instructor Information

Instructor: Dr. Chris Jankowski

Email: cjankowski3@gatech.edu

Office: Skiles 261

Office Hours: Mondays 2:00-4:30 PM and Tuesdays 2:30-4:00 PM

General Course Information

Description

The essential topics of the course are vectors in three dimensions, curves and surfaces in space, functions of several variables, partial derivatives, optimization, and integration of functions of several variables.

Course Learning Outcomes

Prerequisites

Concepts from algebra, precalculus, differential calculus, integral calculus, and linear algebra are fundamental building blocks for the course. As just one example, solving a problem in Math 2550 may require the student to apply integration by parts. The prerequisite courses are listed on the School of Math website.

Required Course Materials

Students are not required to purchase any materials for this course, but students have the option of purchasing the most recent edition of Thomas' *Calculus*, which will be available for purchase through Canvas when the course begins.

Grading Policy

The components of the class are weighted as follows.

- 3% Studio Participation (4 drops)
- 12% Homework (bucket points policy, see “Description of Graded Components”)
- 15% Quizzes (1 drop)
- 15% Midterm 1
- 15% Midterm 2
- 15% Midterm 3
- 25% Final Exam

If you score higher on your final exam than on one of your midterms, then the final exam will count for 30% and the lowest midterm will count for 10% of your grade. However, any student found guilty of academic misconduct of any kind in Math 2550 is ineligible for this policy.

After all grades are in and all overall percentage scores for students have been computed using the weights described above, grades are assigned. The standard cutoffs are as follows.

A: [90%, 100%] B: [80%, 90%) C: [70%, 80%) D: [60%, 70%) F: [0%, 60%)

So, to guarantee an A, get 90% or better overall. (90 means 90, not 89.99)

To guarantee at least a B grade, get 80% or better overall, etc.

These cutoffs might be adjusted, but only in the downward direction (to make letter grades higher). In the event of a curve, only your final overall percentage grade for the course will be curved. Individual assessments will not be curved as we go along.

CIOs Incentive: If 85% of the lecture completes CIOs evaluations for the lecture component by December 8 (Tuesday) at 1:00 PM Atlanta time, then we will drop the 2 lowest quizzes instead of just the lowest quiz.

Description of Graded Components

Studio Participation. Starting the week of August 31, we will take a grade for in-person participation in each studio. Each grade will be 0/1 or 1/1. Any student who arrives more than five minutes late for studio or leaves before the TA ends studio may be given a 0. We drop up to 4 grades of zero in studio participation. There are no makeups for missed studios. However, the policy of 4 drops for just 13 graded studios means that a student will receive a perfect score in studio participation unless they get a zero on more than 35% of our studios. With this in mind, a student should easily get a perfect score in this category even if they must occasionally miss a studio due to illness or another reason. If you have extraordinary circumstances that will lead you to miss more than 4 studios (for example, if you will have many absences due to Institute-mandated travel due for athletics, or ODS accommodations for absences), please schedule an appointment with Prof. Jankowski to discuss these.

Homework. Our homework is through Webwork, which is accessible in Canvas in the Assignments tab. It operates under a bucket points system where students only need to get roughly 70% of the total points in order to get a perfect homework score. There are 186 total points available on our Webwork assignments throughout the semester, but the final homework grade will be taken as a grade out of 125 points (capped at 100%). For example, if you receive 150 points out of the possible 186 (150/186 is about 80.6%), this will go into the final gradebook as a grade of 125 out of 125 which would result in a grade of 100% in the homework category, so the grading scheme gives tremendous leeway. Late homework will not be accepted, and homework extensions will not be given except under extreme circumstances such as long-term hospitalization.

Below, we will describe quizzes and exams. All quizzes and exams must be taken in person, and there is no option for online proctoring.

Quizzes. There are seven quizzes given on various studios throughout the semester, with dates and topics listed on the course calendar. They will be 10 minutes each, given at the end of studio. We will drop the lowest quiz.

Midterm Exams. We will have three midterm exams, given in person during class on the following dates:

1. Wednesday, September 23.
2. Wednesday, October 21.
3. Wednesday, November 18.

The course calendar tentatively lists the topics that are covered on each quiz and exam. If a change in schedule pace requires the topics list to change, then this will be updated on the course calendar and the students will be notified through a Canvas announcement.

Final Exam. Our final exam is cumulative and will be held on Friday, December 11, from 8:00-10:50 AM.

Course Policies

Attendance and Participation

Students are expected to come to class and engage with the material. Class disruption will not be tolerated.

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review Georgia Tech's Honor Code and the student Code of Conduct.

Any student suspected of cheating or plagiarism on any assessment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Any evidence of violations of the Georgia Tech Honor Code will be submitted directly to the Office of Student Integrity, including but not limited to:

1. Using a calculator, books, or any form of notes on quizzes and tests. Use of cell phones is not allowed on any assessments. Putting a cell phone on your desk, or on your lap, or in sight at all, will result in a zero on the quiz or exam. Smart watches, smart glasses, ear buds, and headphones are also not allowed and will result in a zero.
2. Using Chat GPT (or any AI / LLM) on any assessment or copying directly from any source, including friends, classmates, tutors, internet sources (including Wolfram Alpha), or a solutions manual.
3. Allowing another person to copy your work.
4. Taking a test in someone else's name, or having someone else take a test in your name.
5. Asking for a regrade of a paper that has been altered from its original form.
6. Communicating with another student in any manner regarding an exam during the time period when the assessment is available.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgment, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Missed Work Policy

Homework and studio participation operate on a bucket-points system designed for enormous flexibility, where students can get a perfect score while completing only roughly 70% of the total work. With that in mind, it does not make sense to give makeups for those categories except for extreme situations such as long-term hospitalization. In such extreme circumstances, please reach out to Prof. Jankowski and arrange for the Office of the Dean of Students to send him a letter of confirmation.

Excused absences for quizzes and exams require **advance notice** and also require **documentation** provided

through the Office of the Dean of Students once it is available. Excused absences for quizzes and exams are only possible under the following circumstances.

- Institute-approved absence: Please give Prof. Jankowski notice by Wednesday, September 2, or as soon as possible once your absence has been approved.
- Accommodations: Students with accommodations for flexibility with attendance, extended deadlines, or a similar accommodation, must discuss these with Prof. Jankowski in advance.
- Religious holiday: By the end of class on Wednesday, September 2, you must notify Prof. Jankowski of all classes and studios that you will miss due to religious holidays.
- Illness, medical appointment, etc.: You must notify Prof. Jankowski in advance and be prepared to provide official documentation to the Dean's office or to some other appropriate Georgia Tech contact that will stay in accordance with privacy laws.
- In case of an emergency leading to an extended absence, please have your academic advisor or the Dean's office contact Prof. Jankowski.

Please keep in mind that students are generally only permitted to take one makeup exam. In the event that a student requests more than one makeup exam, they will need to with Prof. Jankowski to discuss next steps.

Makeup quizzes and exams

Please note that there are no early makeups for quizzes and exams for any reason, including already-purchased plane tickets.

In the event of an excused absence for a quiz, the makeup time period is 3:00-5:00 PM on the following Wednesday in Skiles 261, and the student will need to indicate which 10-minute period they will take it during that time. In the event that the student cannot take the makeup quiz during this period due to an excused absence, the next quiz will count double.

If a student has an excused absence for an exam, the student may take the makeup exam either from 5:00-5:50 PM or 6:00-6:50 PM the following Monday in Skiles 261 (or an alternate announced location if necessary). In the event that the student cannot take the makeup exam due to an excused absence, the score for that exam will be computed by taking the average percentage scores for that student on the remaining midterms and the final exam. As an example: if a student has an excused absence for midterm 2 and its makeup, then the student's score for midterm 2 will be computed by taking the average of the student's percentage scores on midterm 3 and the final exam.

Core IMPACTS

Not applicable to this course.

Campus Resources for Students

Undergraduate Student Academic Success Resources

A list of resources for undergraduate students' academic success and information about advising can be found at Success at Tech.

The Math Lab offers tutoring, and there is also **1-to-1 tutoring**. If appointments are full when you are available, you may request additional tutoring. A comprehensive list of tutoring resources is available at <https://tutoring.gatech.edu>.

Student Well-Being:

At Georgia Tech, we are concerned about your overall physical, social, and mental well-being. A comprehensive list of wellness related resources has been compiled and maintained by the Office of the Vice President for Student Engagement and Well-being.

Statement for Belonging

As members of the Georgia Tech community, we are committed to creating a learning environment in which all of our students feel safe and included. Because we are individuals with varying needs, we are reliant on your feedback to achieve this goal. To that end, we invite you to enter into dialogue with us about the things we can stop, start, and continue doing to make the classroom an environment in which every student feels valued and can engage actively in our learning community.

Additional policies

Extra credit, Canvas grades, reminder on electronic devices

1. There is **no extra credit**, and there are no quiz re-takes or exam re-takes.
2. You can use calculators to check your computations when doing homework. You are **not** allowed to use any electronic devices on quizzes or exams.
3. Once a quiz or exam has been graded (or studio participation has been recorded), the grades will be entered on Canvas. Please check that the grade on your assessment is not blank and that it matches the grade recorded on Canvas. If it does not, please contact your instructor within two weeks of the assessment to correct the error. With this in mind, if you participated in a studio but have a blank score listed more than a week later, you need to contact your TA to resolve the issue or this blank will become a 0.

Email policy

Please read the syllabus first. Before sending an email, please check the syllabus closely! Homework due dates, quiz dates, exam dates, policies, etc. are available on the syllabus or course calendar.

Let's not discuss grades by email. Any questions about letter grades (including "the curve") should be asked during office hours or in an appointment outside of office hours, but never by email. We must deny all requests that ask for a special grading arrangement of any kind. The only reason for sending a grade-related email is an incorrect score in Canvas. In that case, please email Prof. Jankowski detailed computations for what you believe is your correct score.

Let's not discuss math by email. Let's use Piazza instead! This will open the question to the entire class, including all TAs, instructors, and other students who may be able to provide insight. We can also discuss questions during office hours, or at a scheduled appointment outside of office hours.

Lecture and Studio

Students are expected to come to lecture. In the event of an absence, students are responsible for all missed materials, assignments, and any additional announcements or schedule changes given in class. Class disruptions of any kind will not be tolerated. Please show courtesy to your fellow classmates and instructor.

Inclement Weather and Digital Learning Days

If Georgia Tech closes campus or decides to cancel in-person classes for a day due to weather or analogous circumstances, or if there is a personal emergency for the professor, we may hold lecture remotely on that date through MS Teams or Zoom.

Missing Grades and Hard Copies of Exams

On Canvas, if your grade is not reported, that means we do not have a submission from you for that assignment. It is every student's obligation to check Canvas regularly and report grading errors promptly to their instructor.

This is especially important with regard to our midterm exams. Once the regrade request period for a midterm exam has passed, we may discard the physical copies of the midterms, so all that will remain is the digital copy on Gradescope. With this in mind, it is the student's responsibility to take a close look before the regrade request

deadline to ensure that their exam is present in Gradescope and to check that there was not a scanning issue that affected how a problem was graded.

Regrade requests

The grading of quizzes and exams is an important component of the course, and we take it very seriously. However, we are human and may make grading mistakes. After each quiz or exam is released on Gradescope, we have a regrade request period of at least 72 hours, in order to ensure every student has the opportunity to take a close look at their graded assessment. Please keep in mind the following about regrade requests.

1. Regrade requests must be made through the appropriate form in Gradescope. Requests that are frivolous or late are a violation of course policy and will result in point deductions on the exam.
2. When making a regrade request, the student must state specifically what they believe was misgraded in the problem. Students are responsible for reading the solutions key very carefully before sending a regrade request. Do not submit a regrade request to ask how to do the problem or what was wrong with your answer (that is what the solution key is for). We give some examples of inappropriate regrade requests below.
 - “i feel like the answer key is wrong”
 - “howww”
 - “I am confused on this one”
 - “how did I get 2/4” (the rubric stated the reason for each of the two 1-point deductions)
 - “I lost 1 point but I think my answer is correct” (student did not view solutions key to see their answer was incorrect)
3. **It is possible for a student’s grade to decrease** if the grader had originally made an error in the student’s favor. This has happened on the final exam for students who were near a letter grade cutoff.
4. Regrade requests may lead the grader to regrade the full problem in question, not just a specific part. We give examples below.
 - A regrade request made for part (a) of may lead the grader to realize that they had accidentally hit the wrong rubric button and had meant to subtract points in part (b).
 - A student had a legitimate regrade request for part (a) of a problem, but the request led us to notice that the grader had made an egregious error in the student’s favor in part (b) of the problem. The end result was a net decrease in the student’s score.