

Math 123: College Algebra and Trigonometry, Fall 2025

Lectures: MW 12:20–2:00pm in 3S-107.

Professor: Tobias Johnson (tobias.johnson@csi.cuny.edu)

Office: 1S-225

Text: *Precalculus* 7th Edition, 2015, with WebAssign, by Stewart, Redlin, and Watson. You need to get the book for WebAssign access.

Calculator: You need a calculator for exams. You're welcome to use a graphing calculator and you certainly might find it useful, but it's not obligatory.

Homework: Homework in this class will be on WebAssign, an online homework system, so you need to purchase access as soon as possible. Our WebAssign class key, which you'll need to put in when you register with WebAssign, is `csi.cuny 4664 4098`.

Course Website: <http://www.math.csi.cuny.edu/~tobiasljohnson/123/>

This website will contain all of my announcements. It also has a calendar for the class, which I update as the class goes. This is especially useful if you miss a class and want to know what was covered during it. Brightspace will be used for posting grades, but not for anything else.

Office Hours: Monday 10am-12pm, Wednesday 10-11am in 1S-225. Office hours are a time when you can come to my office to get help on the homework, ask general questions, or discuss anything you'd like with me. You don't need to get permission to come or warn me in advance—just stop by. You can also usually catch me in our classroom for a while after class, since I teach a different course in the same room after our class.

Class overview: Broadly speaking, the point of this class is to give you the algebraic skills you need to study calculus or any other higher level of math. But what do I mean by “algebraic skills”? I'd say that there are two main parts. The first is centered on **equality**, more specifically on manipulating an expression into a simpler form that remains equal to the original one. For example, $2x + 5x$ can be manipulated into the simpler form $7x$. The other part is centered on **solving equations**, i.e., starting with some equation like $x^2 = x + 2$ and figuring out which values of x satisfy the equation (the answer is $x = 2$ and $x = -1$).

I'm emphasizing these two algebraic skills because they're often confused. In the first example, we'd say that $2x + 5x = 7x$. And in the second example, we might write $x^2 = x + 2$ and ask you to solve. In both cases, we have equations, and superficially they look very similar. But they're not. In the first, we're saying that $2x + 5x = 7x$ for *all* choices of x . In the second, we are asking *which* values of x does it work out that $x^2 = x + 2$.

There's more to the class than just these two skills. In particular, there's understanding functions and interpreting their graphs and using all of these tools to model and solve problems. But if you get good at those two algebraic skills, you'll find the rest of the class easy.

Class will mostly have a lecture format, but we'll often pause to work on a problem in groups. *This is the most important part of our classtime!* It's when you try to solve a problem that you really

learn the material, not when you listen to me lecturing about it. Similarly, doing the homework is more important than anything that happens in lecture (though paying attention in lecture will make it much easier to do the homework!).

Electronic devices: Please don't use phones, computers, or any other electronic device during class. Don't keep them out on your desk, either. It's hard enough to focus even without distractions. If you take notes with a stylus on an electronic device, that's fine. If you have some unusual circumstance that gives you a reason to keep your eyes on your phone—e.g., you're waiting for a call from a doctor or something like that—then it's fine to have your phone out, but please let me know at the beginning of class.

Grading: Here is how I will weight each graded component of the class:

Category	Date	Percentage
Homework	see website	10%
Quizzes	see website	15%
Midterm 1	October 15	15%
Midterm 2	November 19	20%
Final	tba	40%

For the midterms, I'll give a approximate grade scale to tell you which score ranges on the test correspond to which letter grades.

A warning: **there will not be any opportunities for make-up work after the fact or for extra credit.** This isn't meant to teach you a lesson or punish you or anything like that. Rather, it's that in my experience, if you lose the thread of the class, it's almost impossible to regain it.

I do understand that sometimes it can take a while before the course material starts falling together. This is why I've made the final worth so much of the grade (40%). Another policy that I have is that if you show strong improvement from the beginning to the end of the class, at my discretion I'll raise your grade by one step (e.g., from B+ to A-). I should note that this is only for students who show an extreme improvement, and that I've only done it for a small handful of students in all the time I've been teaching.

Quizzes: There will be a large number of short quizzes. These quizzes give you an opportunity to get feedback from me, so it's important that you take back your graded quizzes and read the comments.

Midterms and Final: You will have two midterms plus a final. On exams, you will be allowed to use a two-sided sheet of notes written in your own handwriting. You can use any sort of calculator, but you can't use a computer or phone (even if you promise that you'll only use the calculator on it). I'll give you lots of old sample exams so you know what sort of questions to expect on them.

Policy on illnesses and other excused absences: If you feel significantly sick, please stay home. We'll be following the textbook closely and you can learn what you missed on your own.

If you are forced to miss a quiz or exam due to illness or some other unavoidable circumstance, please contact me immediately and we will discuss the situation. The most likely solution is that your remaining exams will be weighted more heavily to make up for it. I do not typically give make-up exams: this policy allows me to return everyone's exams and post solutions as quickly as possible. Here are some other valid reasons to miss a test besides illness: observance of religious holidays, participation in certain university sponsored activities, and family emergencies. Please try to make arrangements at least a week in advance, if possible. Of course, if you have an emergency, just write to me as soon as you can.

Disabilities: If you have a documented disability and wish to discuss academic accommodations, contact me as soon as possible.

Bringing small children to class: If you're the caretaker of a small child and your plans for childcare break down, it's fine to bring the child to class. Just sit near the door in case you need to take the child out of the room.

The Unexpected: Unexpected things happen to everyone, and the policies in this syllabus might not treat your particular circumstances fairly. If that's the case, please don't be afraid to bring it up with me, and I'll do my best to accommodate them.