

SYLLABUS DISTANCE MATH 1113QH: Pre-Calculus

Lecture on M/W Synchronous at 8:25 – 9:15am via Zoom
Studio on T/R Synchronous w/ TA at 8:25 – 9:15am via Zoom
Fridays Quiz/Exam Time

Welcome to Georgia Tech! All our students play an important role in our educational mission. We hope that students taking this course will find this to be a useful, fundamental course for their future studies.

This course is part of the Distance Mathematics program, which offers mathematics courses to high school students in Georgia through distance education.

Although instructors strive to supply accurate information, items on the syllabus are subject to change. Any changes to the syllabus will be relayed to students through Canvas announcements.

This course will consist of a hybrid format. You are expected to attend all scheduled sessions. Lecture will be taught in a “synchronous” manner on Mondays and Wednesdays via Zoom. A Teaching Assistant (TA) will review course material and facilitate activities on Tuesdays and Thursdays via Zoom. You will also be required to do some “asynchronous” learning by watching the lesson videos, completing the Knowledge Checks and Buzzers for each section of material.

Free tutoring is available to all Georgia Tech undergraduate students in-person or online. For more details, visit <https://tutoring.gatech.edu/>.

Instructor and Contact Information

Instructor: Stephanie Reikes

E-mail: stephanie.reikes@gatech.edu

Office: Skiles 228

Office Hours: Will be updated in Canvas.

General Information

Course Number and Title: Math 1113QH, Pre-Calculus

Course Institution: Georgia Institute of Technology

Credit Hours: 4

Semester: Fall 2026

Class Time/Zoom Sessions: Monday-Thursday, 8:25 – 9:15am, link to Zoom sessions in Canvas

Course Goals

The primary goal of Math 1113QH is to prepare students to succeed in upper-level courses that require this course as a pre-requisite. To this end our course is designed to:

1. Prepare students to apply fundamental concepts of Algebra and Trigonometry
2. Help students refine their learning strategies to help them succeed in a college level math course

This course helps students make a transition between high school and college level through course activities that ask students to reflect on their learning strategies, and to review course and institute policies and procedures.

Students are also supported in making this transition by encouraging them to ask questions during studio sessions, during office hours, and with their peers. All these strategies are valuable methods that are transferable to higher-level courses.

Course Description

Course designed to introduce and solidify the concepts needed for their first calculus course. Topics include properties of real numbers, functions, polynomial, rational and trigonometric, systems of equations and equalities as well as with expressions involving exponential and logarithmic functions.

Course Learning Objectives

Learning objectives articulate what students are expected to do in a course. The learning objectives for this course are as follows:

- Identify and apply basic skills such as adding/subtracting, fractions, order of operations, multiplying, and factoring throughout the course
- Solve linear, quadratic, exponential, logarithmic and trigonometric equations
- Compare functions and their inverses
- Graph a polynomial, rational and trigonometric functions
- Refine learning and study strategies for college level mathematics courses.

Regarding the last item: for most students in this class, MATH 1113QH is their first college level mathematics course. Students may find that to reach their individual learning goals they must adapt their study strategies and become familiar with a set of expectations and policies that are different than what they may have been used to in high school. There are a small number of activities that are designed to help students make this transition.

Course Content

- 1) Two Units of Algebra Skills
 - Main Topics: Exponent Rules, Quadratics, Graphing Polynomials & Rational Functions
- 2) Two Units of Trigonometry Skills
 - Main Topics: Trig Functions, Unit Circle, Graphing Trig Functions & Solving Trig Equations

Course Technical Support

Students can receive technical support by completing the following online form: <https://gatech.service-now.com/technology>

Course Materials

Course Website: Canvas (*required*)

Textbook: Precalculus: A Unit Circle Approach, by Ratti and McWaters (optional)

Course Expectations

As your instructor, my role is to prepare you for future math courses, provide you with ample assignments and assessments to gauge your understanding and knowledge of the subject matter, provide feedback on your

performance, and be available for assistance when needed.

As students, you are expected to take your responsibility seriously, attend and participate in all of the class meetings, behave in a respectful manner to your instructor and fellow students at each class meeting, complete all assignments in a timely and professional manner, study the subject matter outside of class time, and ask for help when necessary.

Students are expected to:

- View lecture recordings
- Attend live sessions led by TA and Instructor
- Complete all assignments in a timely and professional manner
- Study course materials to prepare for exams
- Review the course syllabus
- Uphold the GT Honor Code
- Review graded work in a timely manner for potential marking errors and to review where mistakes were made (if any)
- Ask questions and seek help when needed in a timely manner
- Read announcements placed on our course website (Canvas)
- Alert the instructor of any conflicts with exam dates as soon as possible so that appropriate accommodations can be made

Teaching Assistants (TAs) are expected to:

- Review content and facilitating learning activities during studio
- Hold office hours
- Grade student work
- Respond to questions from students via email and contribute to the discussion forum

Instructor is expected to:

- Provide learning objectives that define what students are expected to be able to learn
- Coordinate with teaching assistants to grade student work and facilitate learning activities
- Provide students with assessments that both develop and measure your understanding and knowledge of the subject matter
- Provide feedback on your performance
- Be available for assistance when requested

Student-Faculty Expectations guidelines can be found at <http://www.catalog.gatech.edu/rules/22/>.

Course Structure

All Lecture and Studio sessions are held via Zoom. They are recorded and automatically posted to the Canvas page. Links to recordings typically appear in Canvas within 48 hours after the session is held.

Lectures

Lecture sessions are facilitated by the course instructor.

Studio

Studio sessions are facilitated by a Teaching Assistant (TA).

In addition to live synchronous zoom sessions, mini lectures are pre-recorded and are available for the duration of the semester in the course Canvas page under the Modules section.

Additional lecture videos, if added, will be announced through Canvas so that students are aware of them. If your high school administrators have placed a block on the website where the lecture videos are hosted, they may need a URL to unblock the website. In that situation you can ask that the administrators unblock kaltura.com, as per <https://knowledge.kaltura.com/help/what-urls-does-the-kes-access>. Alternatively, if that does not resolve the issue, your administrator can also add [canvasgatechtest.kaf.kaltura.com](https://www.youtube.com/@math_lecturer) to the list of exceptions. In addition, videos can be found by topic on your Instructor's YouTube page here: https://www.youtube.com/@math_lecturer. If these methods do not work, then please contact your instructor.

Course Information

Welcome Module: Syllabus Quiz, Start of The Semester Survey, Introduce Yourself Post. These assignments are submitted in Canvas and are meant to help students familiarize themselves with course expectations, develop community, and help your instructor be more aware of student needs. **There is a 3% per day late penalty on these assignments. No Welcome Module scores are dropped.**

Academic Skills: There will be several skill assignments on Time Management, Study Strategies, and Test Taking Strategies throughout the semester. These activities can be found in Canvas Modules. They support one of the primary goals of our course, namely, to help students refine their learning strategies so they can succeed in more advanced college level math courses. **There is a 3% per day late penalty on these assignments. No Academic Skills scores are dropped.**

Knowledge Checks (KC): Each lesson has a short knowledge check. Questions may be asked about content from the lesson videos and notes. These are short graded "quizzes" on each lesson. I will drop your lowest 3 scores. (If you are out of town for a school sponsored event, I expect you to still complete the KC on time.). **There will be a 3% per day late penalty applied.**

Buzzers: There will be several "Buzzer" assignments to be completed asynchronously. The "Buzzer" assignments will be posted on Gradescope. They will comprise of true/false, multiple choice and/or short answer questions. I will drop your lowest 3 scores. (If you are out of town for a school sponsored event, I expect you to still complete the Buzzers on time.) **No make-ups. No late Buzzers allowed.**

Graphing Projects (GP): There will be 4 graphing project assignments. Check course calendar for deadlines. These activities are meant to help prepare students for exams, which will have graphing questions. These assignments are submitted in Gradescope and instructions will be posted on a separate page in Canvas. **No make-ups. No late Graphing Projects (GPs) allowed.**

Quizzes: Quizzes will be completed asynchronously. Check course calendar for quiz deadlines. Quizzes are graded on accuracy, not completion. Quizzes will be submitted via Gradescope and graded by your TA. **No make-ups. No late Quizzes allowed.**

Exam: There will be 4 exams to be completed. Exam procedures are explained below.

Final: There will be a comprehensive proctored written final assessment in two parts. The final exam will cover all course material. Exam procedures are explained below.

Showing work is required on all written assignments. As writing mathematics properly is part of learning Pre-Calculus, points will be deducted for incorrect or missing mathematical steps and notation. Problems containing correct answers, but no work will receive 0 points.

Please see calendar and Canvas for all due dates.

Optional Activities: Each lesson has an associated activity. These assignments will not be graded this semester but are highly encouraged to be completed to be prepared for quizzes and exams.

Grading System

Your final grade will be computed as follows:

Welcome Module	2%
Academic Skills	3%
Knowledge Checks	5%
Buzzers	5%
Graphing Projects (GPs)	8% (2% each)
Quizzes	7%
Exams	56% (14% each)
Final Exam Part 1	7%
Final Exam Part 2	7%

Note: No exam grades will be dropped.

The standard 10-point scale will be used to assign letter grades, but the cut-offs may be lowered to arrive at a standard distribution for the course:

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

FERPA

Instructors and teaching assistants are NOT ALLOWED to share ANY grade data for a particular student with anyone other than the student whose grades pertain to. There are no exceptions to this policy.

CIOS Incentive

Please take a few moments towards the end of the semester to complete the Course Instructor Opinion Survey (CIOS) survey. The School of Math is currently discussing how we might better offer courses in the Distance Math Program, how to better support our students, teaching assistants, and instructors, as well as a range of other items related to this course.

CIOS survey results have informed many improvements to this course in recent years, and your results will help the School of Math decide how to allocate resources to this course and what directions we should take in the near future. Your instructor also uses CIOS data to help improve their teaching from course to course. To help encourage students to complete the CIOS survey, if the completion rate is at least 85% for the entire class, by the Friday at noon before final grades are due to the GT Registrar, then your **lowest 1 quiz** will be dropped.

Note that a response rate of over 85% is unlikely to be met before the final exam. Some students understandably wait the final exam to complete the CIOS. So, if the response rate goes above 85%, it usually does so after the final exam. While the CIOS survey is open, the instructor will announce the current CIOS response rate to the class in weekly announcements. Please do not ask for updates on the CIOS completion rate during office hours, or over email. Instructors do not check the CIOS completion rate every day.

In the last few weeks of the semester, instructors are busy coordinating their grading so that we can process grades before grade submission deadline that the Registrar has for all GT courses.

Generally, the CIOS survey is released by the Office of Academic Effectiveness (OAE) at the end of November. Students will receive several announcements from the OAE asking you to complete the CIOS in their GT email. More information about the CIOS is available [here](#).

Course Advice

Your instructor and the broader GT community want every MATH 1113 student to succeed in reaching their own learning goals and meeting the learning objectives of this course. While the pathways that students may need to take to reach these goals may differ from student to student, there are general guidelines that apply to all students.

1. Do not wait until the last minute to complete any course assignment. Unanticipated issues can get in the way of your learning progress and make it harder for you to stay on top of your course.
2. Learning mathematics can take time: pace yourself so that you are giving yourself enough time to understand the material you are learning.
3. Schedule time in a digital and/or physical calendar for learning course content and completing course activities.
4. Ask for help throughout the semester.
5. Let your instructor know of any scheduling conflicts and/or accommodations you might need to succeed in this class as soon as you can.
6. This course requires that students be able to read and comprehend mathematical terminology.
7. Take care of yourself: do what you can to place your own physical and mental health as a high priority.

Exam Policies

- Exams
 - All Exams will be on paper proctored by an individual at your high school
- Students cannot take exams on the GT campus
- Exam dates can be found on the course calendar
- Each exam is 50 minutes in length
- The final exam should be taken in two separate parts (both 50 minutes in length)
- Exam #1-4 will be returned to students
- Final Exam Part 1 and 2 will NOT be returned to students

Make-up Policy

- If a student cannot take an exam on the day it is scheduled, or at the same time that the other students at their school are taking the exam, then they should contact their instructor as soon as they can, and at least one week before the exam is scheduled using their GT email account to let them know why they

cannot take the exam on the day it is scheduled.

- Situations will be handled on a case-by-case basis.
- Any make-up tests should be taken within **one week** after the exam is held.
- Students who do not show up to take their exam because of a conflict with a school activity usually receive a grade of zero on the exam.

During the Exam

- You will need to know your GTID number. But your proctor/facilitator should be able to tell you your GTID number if you do not remember it.
- Students will need to write their names and GTID number on every page in the space provided.
- Students should not have their facilitator or anyone else complete their name and GTID on their behalf. To be consistent with the GT Honor code, students should write this information themselves.
- The exam is closed book: notes, books, calculators, cell phones and other electronic devices are not allowed.
- Use dark and clear writing: your written exams will be scanned into Gradescope.

Class Policies

Attendance: You are expected to come prepared and actively participate in every class session. In the event of an absence, you are responsible for all missed materials and any additional announcements or schedule changes given. Students should refer to the class calendar to know what information was covered while they were not in class.

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. All students are expected to comply with the Georgia Tech Honor Code.

The honor code can be found at <http://www.policylibrary.gatech.edu/student-affairs/code-conduct>. **Any student suspected of cheating or plagiarizing on an assignment, quiz, or assessment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.**

Re-grading of Papers: If a problem has been graded in error, you must submit a regrade request to me **in writing via Gradescope**, no more than **one week** after the papers have been returned in class. **Note, when turning in a regrade request, your entire assessment will be subject to regrade, and not a single problem. In addition, a request can result in points being deducted and/or increased from your assessment.**

Accommodations for Students with Disabilities: Georgia Tech complies with the regulations of the Americans with Disabilities Act and offers accommodations to students with disabilities. If you need classroom or testing accommodation, please make an appointment with disability services to discuss your needs and to obtain an accommodations letter. More information is available on their website, <http://disabilityservices.gatech.edu/>. Please also make an appointment with me to discuss your accommodation and learning needs.

- Students can work with the staff at their high school to meet their need for accommodations are welcome and encouraged to do so. Be aware, however, that school staff can require documentation from Georgia Tech before making any exam (or other) accommodations.

- The Georgia Tech Office of Disability Services (GT ODS) can issue official accommodation letters that specify student needs during testing and other course activities.
- GT ODS can be reached at (404) 894-2563 or online at <https://disabilityservices.gatech.edu/>.
- Students are encouraged to request accommodations by filling out the application on the ODS website, (note an active GT email account is required). A meeting will be scheduled to discuss your needs and any appropriate accommodations.
- Any student who obtains an accommodation letter from GT ODS should send a copy of the letter to the GT Professional Education Dual Enrollment coordinators at dualenrollment@pe.gatech.edu. Professional Education needs the letter to coordinate exams with facilitators at your school to help them proctor and administer exams.
- Students are also encouraged to e-mail their instructor to discuss any learning needs and accommodations they may have.

Artificial Intelligence (AI) Policy: The use of Artificial Intelligence (AI) tools (such as ChatGPT, Copilot, or similar programs) must comply with the expectations of academic integrity and the learning goals of this course. Unless explicitly permitted for a specific assignment, students may not use AI tools to generate, edit, or complete any portion of their work. This includes, but is not limited to, producing written responses, solving problems, creating images, or rephrasing text.

If AI use is permitted for an assignment, the following applies:

- You must clearly document how and where AI tools were used.
- You are responsible for verifying accuracy and ensuring all ideas, explanations, and language reflect your own understanding.
- Submitting AI-generated work as your own without disclosure constitutes academic misconduct under institute policy.

In summary:

- ☒ You may use AI only when explicitly authorized.
- ☒ You may not use AI to generate or edit graded work without permission.
- 💡 When in doubt, ask the instructor before using AI.

Accessibility: I am committed to providing both physical accessibility and access to information resources and technologies to individuals with disabilities. The Institute's vision is to create a culture of access for an inclusive learning and working environment. Accessibility ensures that people with disabilities can perceive, understand, navigate, and interact and contribute with the course material and websites. It encompasses all disabilities that affect access, including visual, auditory, physical, speech, cognitive, and neurological disabilities. I am happy to work with you and the Office of Disability Services regarding class materials.

Calculators: The use of calculators is **NOT ALLOWED** in this course.

Announcements: I will frequently update the class pages with class information and materials. *You are responsible for obtaining any announcements or materials placed on Canvas* (canvas.gatech.edu).

Missing Grades: On Canvas, if your grade is not reported, that means we do not have a submission from you for that assignment. If your submission score is listed as "0" or is not posted on Canvas, you will also have one week to inform the instructor for correction. It is every student's obligation to check Canvas regularly and report grading errors promptly to their instructor.

Additional Help: *Asking questions is the key to success!* Free “drop-in” help is available in the **Math Lab**. The Math Lab is staffed by math Graduate Teaching Assistants (GTAs) in Clough 280. A live schedule can always be found on the Tutoring & Academic Support website: <https://tutoring.gatech.edu/drop-in/>.

One-to-one tutoring is also available free of charge via Knack at <https://tutoring.gatech.edu/>.

Statement of Intent for Inclusivity

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

Important Dates

24 Aug – First Day of Classes

28 Aug – Last day to register, make schedule changes, and/or drop courses without a "W" grade

31 Oct – Withdrawal/Grade Mode/ Grade Substitution Deadline

8 Dec – Final Instructional Day

9 Dec – Reading Day

10 - 17 Dec – Final Exam Week

Campus Resources

In your time at Georgia Tech, you may find yourself in need of support. Below you will find some resources to support you both as a student and as a person.

- Tutoring & Academic Support <http://tutoring.gatech.edu>
 - Knack Tutoring
 - Peer-Led Undergraduate Study (PLUS)
 - Commons/Drop-In Tutoring (Including the Math Lab)
- Communication Center <http://www.communicationcenter.gatech.edu>
 - Individualized help with writing and multimedia projects
- Academic Success and Advising <https://www.success.gatech.edu/>
- The Office of the Dean of Student <https://studentlife.gatech.edu/>
- Center for Mental Health Care and Resources <https://mentalhealth.gatech.edu/>
- Students' Temporary Assistance and Resources (STAR) <https://star.studentlife.gatech.edu/>
 - Can assist with interview clothing, food, and housing needs.
- Stamps Health Services: <https://health.gatech.edu>
 - Primary care, pharmacy, women's health, psychiatry, immunization and allergy, health promotion, and nutrition
- Georgia Tech Police; **404-894-2500**

Tentative Course Calendar

Please use this as an approximate class schedule; section coverage may change depending on the flow of the course.

Monday	Tuesday	Wednesday	Thursday	Friday
8/24 Syllabus Day	8/25 PRE-TEST	8/26 A.1, A.2 KCs Due	8/27 Studio: Worksheet Buzzer #1	8/28 Welcome Module Due
8/31 A.6, A.8 KCs Due	9/1 Studio: Worksheet Buzzer #2	9/2 1.1, 1.2 KCs Due	9/3 Studio: Worksheet Buzzer #3	9/4 Quiz #1 Due
9/7 Holiday – No Classes	9/8 Holiday – No Classes	9/9 1.3, 1.4 KCs Due	9/10 Studio: Worksheet Buzzer #4	9/11 Quiz #2 Due
9/14 1.5, 1.6 KCs Due	9/15 Studio: Worksheet Buzzer #5	9/16 1.7, 7.1 KCs Due	9/17 Studio: Worksheet Buzzer #6	9/18 Quiz #3 Due
9/21 Exam Review	9/22 EXAM #1	9/23 2.1, 2.2 KCs Due	9/24 Studio: Worksheet Buzzer #7	9/25 Quiz #4 Due
9/28 2.3 KCs Due	9/29 Studio: Worksheet Buzzer #8	9/30 2.4 KCs Due	10/1 Studio: Worksheet Buzzer #9	10/2 Quiz #5 Due
10/5 Fall Break – No Classes	10/6 Fall Break – No Classes	10/7 3.1, 3.2 GP #1 Due KCs Due	10/8 Studio: Worksheet Buzzer #10	10/9 Quiz #6 Due GP #2 Due
10/12 Fall Break – No Classes	10/13 Fall Break – No Classes	10/14 Fall Break – No Classes	10/15 Fall Break – No Classes	10/16 Fall Break – No Classes
10/19 3.3, 3.4 KCs Due	10/20 Studio: Worksheet Buzzer #11	10/21 Exam Review	10/22 Exam Review	10/23 EXAM #2
10/26 4.1, 4.2, 4.3 KCs Due	10/27 Studio: Worksheet Buzzer #12	10/28 4.4 KCs Due	10/29 Studio: Worksheet Buzzer #13	10/30 Quiz #7 Due
11/2 4.5 KCs Due	11/3 Studio: Worksheet Buzzer #14 GP #3 Due	11/4 4.6 KCs Due	11/5 Studio: Worksheet Buzzer #15 GP #4 Due	11/6 Quiz #8 Due
11/9 Exam Review	11/10 EXAM #3	11/11 5.1, 5.2	11/12 Studio: Worksheet Buzzer #16	11/13 Quiz #9 Due
11/16 5.3, 5.4 KCs Due	11/17 Studio: Worksheet Buzzer #17	11/18 5.5 Buzzer #18	11/19 Studio: Worksheet Buzzer #19	11/20 Quiz #10 Due
11/23 Thanksgiving – No Classes	11/24 Thanksgiving – No Classes	11/25 Thanksgiving – No Classes	11/25 Thanksgiving – No Classes	11/26 Thanksgiving – No Classes
11/30 5.5 Cont. KCs Due	12/1 Studio: Worksheet Buzzer #20	12/2 Exam Review	12/3 Exam Review	12/4 EXAM #4
12/7 Final Exam Review	12/8 Final Exam Review	12/9 No GT Classes – Reading Day	12/10 Final Exam Part 1	12/11 Final Exam Part 2

Please note: Items on the syllabus and course schedule are subject to change. Any changes to the syllabus and/or course schedule will be relayed to the students in class and through Canvas.