

SYLLABUS MATH 1111: College Algebra**“Lecture Class”**

This course will be delivered in-person this semester.

Instructor and Contact Information

Instructor: Yanli Hao

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Office: Skiles 014

Office Hours: Fridays 12:30-2:30pm and by appointment via Email

General Information and Course Description

Course Title: MATH 1111, College Algebra

Course Meeting Times: MTWR, 12:30-1:20pm

Course Institution: Georgia Institute of Technology

Course Location: Skiles 317

Textbook: College Algebra, Robert F. Blitzer, 8th Edition (optional)

Description: MATH 1111 provides an in-depth study of the properties of algebraic, exponential, and logarithmic functions as needed for pre-calculus and calculus. Emphasis is on using algebraic and graphical techniques for solving problems involving linear, quadratic, rational, polynomial, exponential, and logarithmic functions.

Course Objectives

As a result of completing this course, students will be able to:

- 1) Interpret numerical, analytical and graphical approaches to solution of problems that can be expressed algebraically.
- 2) Solve linear, quadratic, exponential, and logarithmic equations.
- 3) Develop mathematical knowledge for real world problems.

Course Websites

Course Information: Canvas (*required*)

Course Expectations

As your instructor, my role is to prepare you for future math courses at Georgia Tech, 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.

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

Course Information

WELCOME MODULE: Syllabus Quiz, Start of The Semester Survey, Discussion Post, Selfie Scavenger Hunt

KNOWLEDGE CHECKS: Knowledge Check assignments are to be completed online using Canvas for each section of material covered. Due dates are listed in Canvas. Knowledge Checks are graded on score, not completion. You have **2 attempts**. There is a 1% per day late penalty applied.

CANVAS QUIZZES: Canvas Quiz assignments are to be completed online using Canvas and can be found after every couple of sections of material to test your recall. Due dates are listed in Canvas. Canvas Quizzes are graded on score, not completion. You have **1 attempt**. There is a 1% per day late penalty applied.

IN-PERSON QUIZZES: There will be weekly quizzes administered in-person. The quiz will be 2-5 questions from lectures and previous assignments and will be graded on score. See calendar for dates.

CANVAS PRACTICE EXAMS: Practice Exam assignments are to be completed online using Canvas and can be found at the end of each module of material. Due dates are listed in Canvas. Practice Exams are graded on score, not completion. You have **1 attempt**. There is a 1% per day late penalty applied.

EXAMS: There will be five exams administered in-person. You may use 1 piece of paper of notes (front and back). The piece of paper must be handwritten. You can write anything on it, i.e. definitions, formulas, examples, etc. See calendar for dates.

FINAL: The final exam will cover all course materials and will be administered in-person. You may use 1 piece of paper of notes (front and back). The piece of paper must be handwritten. You can write anything on it, i.e. definitions, formulas, examples, etc. See calendar for date.

VIDEO LESSONS: Video Lessons are provided on each section of material in the event you miss class. They may also be completed for extra practice and reinforcement of concepts for review. These are not graded.

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

Grading System

Your final grade will be computed as follows:

Welcome Module	1%
Knowledge Checks	3%
Canvas Quizzes	3%
Canvas Practice Exams	3%
In-Person Quizzes	7%
Exams	65% (13% each)
Final Exam	18%

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%)

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 in class. The instructor is not responsible for re-teaching missed information. Students should refer to the class calendar to know what information was covered while they were not in class. Students are advised to get contact information from a fellow classmate who they can contact if they need to get copies of notes.

Students who are absent because of participation in approved Institute activities (such as field trips, professional conferences, and athletic events) will be permitted to make up the work missed during their absences. Approval of such activities will be granted by the Student Academic and Financial Affairs Committee of the Academic Senate, and statements of the approved absence may be obtained from the Office of the Registrar.

In the event of a medical emergency or an illness that is severe enough to require medical attention, students are responsible for contacting the Office of the Vice President and Dean of Students (Division of Student Life) as soon as possible to report the medical issue or emergency, providing dated documentation from a medical professional and requesting assistance in notifying their instructors.

More information can be found at <http://www.catalog.gatech.edu/rules/4/>

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.

Class disruptions of ANY kind will NOT be tolerated and may result in your removal from the classroom.

- **1st interruption = verbal warning**
- **2nd interruption = verbal warning and may be asked to leave the classroom**
- **3rd interruption = verbal warning, may be asked to leave the classroom, and reported to OSI**

Please show courtesy to your fellow classmates and instructor by adhering to the following class rules:

- Turn off and put away all food and electronic devices, unless you have a *documented* medical need or other need to use such devices for note-taking, during class. (An electronic device exception will be made when using math software such as Learning Catalytics which may be part of class discussion.)
- Come to class on time and stay for the entire class period.
- Refrain from conversing with your fellow students while the instructor is speaking.
- Put away any reading materials unrelated to the course.
- Students will raise their hand and wait to be addressed before speaking during lecture.
- No sleeping allowed.
- Light snacks only.

Cheating includes, but is not limited to:

- Using an unapproved calculator, books, or any form of notes on quizzes and tests.
- Copying directly from **any** source, including friends, classmates, tutors, internet sources (including Wolfram Alpha, Mathway, etc.), or a solutions manual.
- Allowing another person to copy your work.
- Sharing work with others.
- Taking a quiz or test in someone else's name, or having someone else take a test or quiz in your name.
- Asking for a regrade of a paper that has been altered from its original form.
- Using someone else's clicker to gain attendance points or to take quizzes or tests for them, or asking someone else to use your clicker for any graded or attendance submission.

Test Day Rules:

- Arrive 10 minutes early to get set up with instructions for the test.
- Keep eyes on your test and no soliciting for answers.
- No hats or items obstructing your face.
- No cell phones, laptops, smart watches, or other electronic devices (you may be asked to remove a watch if the instructor is uncertain whether it is a smart watch). Students caught with any electronic device may receive a zero on their test.
- No calculators are allowed.
- Please make sure all items needed for exam are out when testing begins. Retrieval of items after test begins is prohibited.
- No communication with other students during test for any reason, which includes verbal, non-verbal and electronic communication.
- Please use the restroom before coming to class. In the event of an emergency, please let the instructor know. You will be asked to leave your exam, cell phone, bag, etc. with the instructor while you leave the room.
- No earphones are allowed.
- Do not bring review pages into the classroom. If you want to review, then do that outside of the classroom. When you enter, all review material should already be put away in your backpack and be ready to take the test.
- Bring Buzz Card ID so I may verify your identity.

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 exam 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**, along with your paper, no more than *one week* after the papers have been returned in class. Should you wish to have your paper regraded, *do not change or add to the work on your paper!* If you must write on your returned paper, be sure to write in a different color ink and clearly indicate what you have added.

Make-Ups: Make-ups will be allowed for university-sponsored events, illness, and death in the family. To complete the make-up, written documentation from the Office of the Registrar or Division of Student Life must be received. The make-up **must not exceed 1 week** from missed assignment. Make-ups can be completed in office hours or at a scheduled time with the instructor.

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 are in need of classroom or testing accommodations, 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.

Calculators: While you may need a scientific calculator for help with some of the homework problems, the use of calculators is **NOT ALLOWED** on quizzes or exams.

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).

Additional Help: *Asking questions is a key to success!* Don't hesitate to reach out to me via e-mail! Free "walk-in" help is also available Monday-Friday in the "**Math Lab**." You can view the schedule at <https://tutoring.gatech.edu/drop-in/>.

Statement of Intent for Inclusivity

As a member of the Georgia Tech community, I am committed to creating a learning environment in which all of 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.

CIOS Incentive

To help encourage students to complete the CIOS survey, if the completion rate is above 85% for an entire class by the end of the semester, then the **lowest 1 quiz** will be dropped!

Course Content

- 1) Understand functions
- 2) Students will be able to interpret the slope and y-intercept of a line
- 3) Graph functions, determine domain and range, and describe increasing, decreasing or constant for each type
- 4) Graph transformations
- 5) Graph quadratic functions by determining vertex and intercepts
- 6) Relate algebraic solutions to the following types of equations:
 - a. Linear
 - b. Quadratic
 - c. Factorable Polynomial
 - d. Rational
 - e. Radical
- 7) Determine symmetry of graphs
- 8) Compose functions
- 9) Graph exponential functions
- 10) Define logarithm

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

7 Sept – Labor Day (No Classes)

5 and 6 Oct – Fall Break (No Classes)

31 Oct – Withdrawal

25, 26 and 27 Nov – Thanksgiving Break (No Classes)

7-8 Dec – Final Instructional Day

9 Dec – Reading Day

10- 17 Dec – Final Exam Week

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.

Academic Support

- Tutoring & Academic Support <http://tutoring.gatech.edu>
 - Knack Tutoring
 - Peer-Led Undergraduate Study (PLUS)
 - Commons/Drop-In Tutoring (Including the Math Lab)
- Undergraduate Advising & Transitions <http://advising.gatech.edu/coaching>
 - Academic Coaching
 - Exploratory Advising
- Residence Life's Learning Assistance Program
<https://housing.gatech.edu/learning-assistance-program>
 - Drop-in tutoring for many 1000 level courses
- OMED: Educational Services (<http://omed.gatech.edu/programs/academic-support>)
 - Group study sessions and tutoring programs
- Communication Center (<http://www.communicationcenter.gatech.edu>)
 - Individualized help with writing and multimedia projects
- Academic advisors for your major
<http://advising.gatech.edu/>

Personal Support

Georgia Tech Resources

- The Office of the Dean of Students: <http://studentlife.gatech.edu/content/services>; **404-894-6367**; Smithgall Student Services Building 2nd floor
 - You also may request assistance at https://gatech-advocate.symplicity.com/care_report/index.php/pid383662?
- The Center for Assessment, Referral and Education (CARE): care.gatech.edu; **404-894-3498**
- Counseling Center: <http://counseling.gatech.edu>; **404-894-2575**; Smithgall Student Services Building 2nd floor
 - Services include short-term individual counseling, group counseling, couples counseling, testing and assessment, referral services, and crisis intervention. Their website also includes links to state and national resources.
 - *Students in crisis may walk in during business hours (8am-5pm, Monday through Friday) or contact the counselor on call after hours at 404-894-2204.*
- Students' Temporary Assistance and Resources (STAR): <http://studentlife.gatech.edu/content/need-help>
 - Can assist with interview clothing, food, and housing needs.
- Stamps Health Services: <https://health.gatech.edu>; **404-894-1420**
 - Primary care, pharmacy, women's health, psychiatry, immunization and allergy, health promotion, and nutrition
- OMED: Educational Services: <http://www.omed.gatech.edu>
- Women's Resource Center: <http://www.womenscenter.gatech.edu>; **404-385-0230**
- LGBTQIA Resource Center: <http://lgbtqia.gatech.edu/>; **404-385-2679**
- Veteran's Resource Center: <http://veterans.gatech.edu/>; **404-385-2067**
- 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 P.1	8/26 P.2	8/27 Review Practice Quiz	8/28
8/31 P.3	9/1 P.4	9/2 P.5 Welcome Module Due	9/3 Review Quiz #1	9/4
9/7 Labor Day– No Classes	9/8 P.6	9/9 Exam Review	9/10 Exam #1	9/11
9/14 1.1	9/15 1.2	9/16 1.4	9/17 Review Quiz #2	9/18
9/21 1.5	9/22 1.5 Cont	9/23 1.6	9/24 Review Quiz #3	9/25
9/28 1.6 Cont	9/29 1.7	9/30 Exam Review	10/1 Exam #2	10/2
10/5 Fall Break – No Classes	10/6 Fall Break – No Classes	10/7 2.1	10/8 2.2	10/9
10/12 2.3	10/13 2.4	10/14 2.5	10/15 Review Quiz #4	10/16
10/19 2.6	10/20 2.7	10/21 2.8	10/22 Review Quiz #5	10/23
10/26 Exam Review	10/27 Exam #3	10/28 3.1	10/29 Review Quiz #6	10/30
11/2 3.2	11/3 3.3	11/4 3.4	11/5 Review Quiz #7	11/6
11/9 3.5	11/10 3.6	11/11 3.7	11/12 Review Quiz #8	11/13
11/16 Exam Review	11/17 Exam #4	11/18 4.1	11/19 Review Quiz #9	11/20
11/23 4.2	11/24 4.3	11/25 Thanksgiving Break – No Classes	11/26 Thanksgiving Break – No Classes	11/27 Thanksgiving Break – No Classes
11/30 4.4	12/1 Review Quiz #13	12/2 Exam Review	12/3 Exam #5	12/4
12/7 Final Exam Review	12/8 Final Exam Review	12/9 READING DAY	12/410	12/11
12/8 -----	12/9 -----	12/10	12/11 -----	12/12 -----

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

