Spring 2025 MATH195 Precalculus GH

1 Course Description

Intervals, inequalities, operations on functions, inverse functions, graphing polynomial functions, exponential and logarithmic functions, trigonometric functions and formulas. Prereq.: A grade of C or above in MATH 19000 or placement. 4 hr./wk.; 3 cr.

2 Lecture Information

- Monday and Wednesday at 6:00PM 7:40PM, NAC 4/115
- Exam 1: 2/26/2025 (Sections 3.1 5.1) (Second half of class)
- Exam 2: 3/19/2025 (Sections 5.2 6.5) (Second half of class)
- Exam 3: 4/28/2025 (Sections 6.6 8.3) (Full class)
- Exam 4: 5/12/2025 (Sections 9.1 11.1) (Full class)
- Final Exam: TBD

3 Lecturer Information

- Lecturer: Sebastian Ortiz
- E-mail: sortiz3@ccny.cuny.edu
- Office Hours: Monday at 5:00PM 6:00PM, NAC 1/511 (Artino Lab)
- When e-mailing me, please have "MATH195" at the start of your subject line.

4 Texts

- Title: Algebra and Trigonometry 2e. (Available on Openstax)
- Title: Intermediate Algebra 2e. (Available on Openstax)
- MATH195 Student Workbook (Yet to be printed)

5 Other Materials

- MyOpenMath (Homework Assignments)
- Gradescope (Quizzes, and Evaluation Scores)

6 Grading Policy

- Homework: 8%
- Quizzes: 10%
- Four In-Class Exams: 33%
- Final Exam: 40%
- Weekly Tutoring Requirement: 9%

7 Homework

Homework will be regularly assigned and will correspond to each lecture. All homework assignments can be found on MyOpenMath, where they will be submitted. Below are steps to sign up for MyOpenMath.

- Go to myopenmath.com
- Click on "Register as a new student"
- Use your CUNY EMPLID as the username
- Make a password, and enter an email address. Prioritize using your citymail address
- Check all of the checkboxes
- Enter Course ID 265558 and Enrollment Key SP25MATH195MW
- Click on Sign Up

You have access to up to 20 extensions on homework assignment due dates. Each extension adds 72 hours, from the due date, to complete and submit the assignment.

8 Quizzes

Quizzes will be administered daily during lecture. They will be given on Gradescope via an electronic device, such as a phone, tablet, or laptop. These quizzes will be short, taking up no more than 15 minutes of a lecture, and will consist of multiple choice and free response questions. Any work done on paper will be uploaded to Gradescope as part of the submission. The 4 lowest quiz scores will be dropped.

9 Exams

There will be 4 in-class exams, each covering material since the last exam. The lowest exam score will be dropped. No make-up exams will be administered. There is also a final exam which will be cumulative. All exams are closed-book, and calculators are not permitted. Be sure to show all work that led to your final answer; correct answers with no work shown will receive no credit.

10 Weekly Tutoring Requirement

You are required to attend tutoring for MATH195. You can fulfill this requirement by going to the Artino Mathematics Tutoring Center (AMTC) in NAC 1/511 and scheduling one-on-one appointments, attending weekly topic-based workshops, or walking in and asking for an independent study session. For more information, visit www.artinomath.com.

You can also use the Marshak Physics/Math Tutoring Center in MR106. The Marshak Tutoring Center offers walk-ins.

When using either tutoring center, make sure you sign in. Every time you sign in, a record is kept, tracking weekly tutoring requirement progress. You will need 15 weekly sessions (1 per week) to satisfy the tutoring requirement. It will not count if you cram all sessions in towards the end of the semester.

11 Changes to the Syllabus

Events during the term may make cause changes to the syllabus. Any changes will be communicated to the students.

12 Attendance

As per the official College Attendance Policy, you are expected to attend all classes. If a student incurs more than five absences, they will receive a **WU** grade for the course.

13 Academic Integrity

As a City College student, you are a part of a community of scholars and learners guided by the basic values of civility, safety, and the discourse of ideas. Students are to be committed to the principles of honesty, trustworthiness, fairness, and respect for the human dignity of all persons. Students must abide by the CUNY Academic Integrity Policy and uphold the highest standards of academic integrity. Cheating, plagiarism, fabrication, academic misconduct, attempting or assisting with an academic integrity violation will not be tolerated. As the course instructor, if I become aware of a potential academic integrity violation, I will follow the rules and procedures outlined in the policy on Academic Integrity. It is your responsibility to be familiar with the College's policy on Academic Integrity.

14 Students with Disabilities

If you have a documented disability (or disabilities) that require(s) special accommodation(s), please contact the AccessAbility Center, NAC 1/218, via email at disabilityservices@ccny.cuny.edu. Use of services is voluntary and strictly confidential and free of charge. Once you have provided documentation to the AccessAbility Center, it will be reviewed to determine appropriateness of accommodations and you will receive a completed "Academic Accommodations" memo to present to me. It is your responsibility to initiate contact with the AccessAbility Center staff and follow the established procedures for having me informed of accommodation requests.

15 Sections

• Chapter 3: Functions (Algebra and Trigonometry 2e.)

- 3.1 Functions and Function Notation
- 3.2 Domain and Range
- 3.3 Rates of Change and the Behavior of Graphs
- 3.4 Algebraic Expressions
- 3.5 Transformations of Functions
- 3.6 Absolute Value Functions
- 3.7 Inverse Functions

• Chapter 4: Linear Functions

4.1 Linear Functions

• Chapter 5: Polynomial and Rational Functions

- 5.1 Quadratic Functions
- 5.2 Power Functions and Polynomial Functions
- 5.3 Graphs of Polynomial Functions
- 5.4 Dividing Polynomials
- $5.5~{\rm Zeros}$ of Polynomial Functions
- 5.6 Rational Functions
- 5.7 Inverse and Radial Functions

• Chapter 6: Exponential and Logarithmic Functions

- 6.1 Exponential Functions
- 6.2 Graphs of Exponential Functions
- 6.3 Logarithmic Functions
- 6.4 Graphs of Logarithmic Functions
- 6.5 Logarithmic Properties
- 6.6 Exponential and Logarithmic Equations
- 6.7 Exponential and Logarithmic Models

• Chapter 7: The Unit Circle: Sine and Cosine Functions

- 7.1 Angles
- 7.2 Right Triangle Trigonometry
- 7.3 Unit Circle
- 7.4 The Other Trigonometric Functions

• Chapter 8: Periodic Functions

8.1 Graphs of Sine and Cosine Functions8.2 Graphs of Other Trigonometric Functions8.3 Inverse Trigonometric Functions

• Chapter 9: Trigonometric Identities and Equations

9.1 Verifying Trigonometric Identities and Using Trigonometric Identities to Simplify Trigono-

metric Expressions9.2 Sums and Difference Identities9.3 Double-Angle and Half-Angle Formulas

• Chapter 11: Conics (Intermediate Algebra 2e.)

11.1 Distance and Midpoint Formulas; Circles 11.3 Ellipses

11.5 Solve System of Non-Linear Equations