

Fall 2024 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 1/202
- Exam 1: 9/25/2024 (Second half of class)
- Exam 2: 10/23/2024 (Second half of class)
- Exam 3: 11/25/2024 (Full class)
- Exam 4: 12/9/2024 (Full class)
- Final Exam: TBD

3 Lecturer Information

- Lecturer: Sebastian Ortiz
- E-mail: sortiz3@ccny.cuny.edu
- Office Hours: Monday and Wednesday 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. (Openstax)
- Title: Intermediate Algebra 2e. (Openstax)

5 Grading Policy

- Homework: 8%
- Quizzes: 12%
- Four In-Class Exams: 40%
- Final Exam: 40%

6 Homework

Homework will be regularly assigned and will correspond to each lecture. All homework assignments will be posted on MyOpenMath. 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 the Course ID: 245166 and Enrollment Key FA24MATH195MW
- Click on Sign Up

You may ask for up to 15 extensions on homework assignment due dates. Each extension gives you an extra 24 hours to complete and submit the assignment.

7 Quizzes

There will be regular quizzes throughout the semester based on homework assignments. These quizzes are short, taking up no more than the first 15 minutes of a lecture. Quizzes should be expected at the start of the lecture following a completed section. The 4 lowest quiz scores will be dropped.

8 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.

9 Changes to the Syllabus

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

10 Tutoring

The Artino Mathematics Tutoring Center offers free tutoring for this course. Tutoring hours during the week will be in-person in NAC 1/511, and hours during the weekend will be on Zoom. Tutoring hours are:

- Mondays and Wednesdays 10:00AM - 6:00PM
- Tuesdays and Thursdays 10:30AM - 8:30PM
- Fridays and Saturdays 12:00PM - 5:00PM
- Sundays 5:00PM - 10:00 PM

11 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.

12 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.

13 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.

14 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 Zeros of Polynomial Functions
 - 5.6 Rational Functions
 - 5.7 Inverse and Radical 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 Functions
 - 8.2 Graphs of Other Trigonometric Functions
 - 8.3 Inverse Trigonometric Functions

- **Chapter 9: Trigonometric Identities and Equations**
 - 9.1 Verifying Trigonometric Identities and Using Trigonometric Identities to Simplify Trigonometric

metric Expressions

9.2 Sums and Difference Identities

9.3 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