## MATH 19000-LM



College Algebra and Trigonometry

Tuesday/Thursday, 10:00 AM - 11:40 AM, NAC 4/115

## **Instructor**: Elliot Kimbrough-Perry

 $\mathbf{M}\mathbf{y}$  Email: ekimbro<br/>000@citymail.cuny.edu

My Homepage: https://math.sci.ccny.cuny.edu/person/elliot-kimbrough-perry/ My Office: MR 529

**Office Hours**: Tuesday 12:00 PM - 1:00 PM. Office hours are time for you to ask specific questions about course material, no appointment needed.

Marshak Math Help Desk: If you need additional help, visit the Marshak Math Help Desk (MR 106). Drop-in tutoring is available Mon-Thurs 12:00 PM - 5:00 PM and Friday 12:00 PM - 4:00 PM.

This syllabus is subject to change.

**Course Description:** Introduction to algebraic expressions and equations, rational expressions, exponents, functions and their graphs, trigonometric functions on the unit circle, and right triangle trig.

**Prerequisite(s):** Placement at college entry or by subsequent examination.

Course Homepage: https://math.sci.ccny.cuny.edu/course/math-19000/

**Note(s):** A minimum grade of C is required in this course to progress to MATH 195 (Precalculus). Credit Hours: 3

Text(s): Algebra and Trigonometry (enhanced WebAssign bundle), 4<sup>th</sup> Edition. The Webassign code for this course is ccny 4095 6014.

Author(s): Stewart, Redlin, and Watson; ISBN-13: 978-1305071759

### **Course Objectives:**

At the completion of this course, students will be able to:

- 1. Solve polynomial, rational, and exponential equations and inequalities in one real variable
- 2. Graph linear, polynomial, exponential, and logarithmic equations
- 3. Work with transformations of, and translate between, graphs and equations;
- 4. Determine whether a graph is the graph of a function
- 5. Demonstrate basic understanding with function notation, including composite and inverse functions
- 6. Become comfortable with basic algebraic techniques with exponents and simplifying rational expressions;
- 7. Find maximum /minimum values for a quadratic function
- 8. Understand basic exponential and log functions
- 9. Become comfortable using right triangle trigonometry

Grade Distribution:

Homework Average	3%
Quiz Average	17%
Midterm Exam 1	20%
Midterm Exam 2	20%
Final Exam	40%

## Letter Grade Distribution:

Letter Grade	GPA	Numerical Grade
A+	4.00	97-100
A	4.00	95-96
A-	3.66	90-94
B+	3.33	87-89
В	3.00	84-86
B-	2.66	80-83
C+	2.33	77-79
С	2.00	74-76
C-	<mark>1.66</mark>	<mark>70-73</mark>
D	1.00	<mark>60-69</mark>
F	0.00	<mark>0-59</mark>

## Course Policies/Info:

- General
  - No late assignments will be accepted.
  - Quizzes and exams are closed book, closed notes.
  - No makeup quizzes or makeup midterm exams will be given, except for religious holidays.
  - This course will be taught using what is called a **flipped classroom model**. Before each class, you will be expected to watch lecture videos. These videos can be found on Blackboard and on the course page.
- Grades
  - Homework and quiz grades will be given through WebAssign. Exam grades will be posted on Blackboard.
  - IMPORTANT: Since there are no makeups for midterm exams, your final exam grade may replace any lower exam averages. For example, if you get a 90 on quizzes, an 80 on the first midterm, a 70 on the second midterm, and an 85 on the final, the 85 will replace your first and second midterm marks. Your grade will then be computed as 0.2\*90 + 0.8\*85 = 86 (80 points from your final exam, 20 from your quizzes). This means that your final exam could potentially count for up to 80 points of your final grade; it must count for at least 40 points. You must take the final exam, but it is to your advantage to take all exams. Makeups for the final will only be allowed given a valid excuse.

#### • Quizzes and Homework

- Quizzes will be given at the beginning of each class through WebAssign; therefore, a computer is required to complete the in-class quizzes, as well as classwork and homework. If you don't have access to such a device, one may be borrowed from the iMedia desk on the first floor of the NAC.
- You must be present in class to receive credit for a quiz. Attendance will be taken at the beginning of each class.
- Classwork and homework will be given on WebAssign. Classwork is required, but will not count towards your final grade.
- You will get two attempts for each quiz question, and your lowest four quiz scores will be dropped at the end of the semester.

#### • Attendance and Absences

- Attendance is not strictly required. However, it is to your advantage to attend every class.
- If you miss class, it is your responsibility to get notes/other materials from either myself or your classmates.

#### Academic Integrity Policy:

Academic dishonesty is prohibited in The City University of New York. Penalties for academic dishonesty include academic sanctions, such as failing or otherwise reduced grades, and/or disciplinary sanctions, including suspension or expulsion. Example of academic integrity violations include cheating, plagiarism (passing someone else's work off as your own), and obtaining unfair advantage. Academic integrity violations may be reported to the Office of Academic Affairs.

#### **Benny's Food Pantry**

Benny's pantry, located on the ground floor of the NAC, is open to anyone within the CUNY community (students, staff, faculty), in need of support. Benny's is self-serve and open 10 am - 6 pm. Additional emergency support for financial, health and housing needs are also available through Benny's. Please contact Dee Dee Mozeleski at dmozeleski@ccny.cuny.edu or Charles Ramirez at cramirez@ccny.CUNY.edu for more details.

#### Accessibility Needs

In compliance with CCNY policy and equal access laws, appropriate accommodations are administered by the Access Ability Center. Students who register with Access Ability, and are entitled to specific accommodations, must request a letter from Access Ability to present to the Professor that states what their accommodations are. If specific accommodations are required for a test, students must present an "Exam Administration Request Form" from Access Ability, at least one week prior to the test date in order to receive their accommodations.

# Tentative Course Schedule:

Date	Topics Covered	Textbook Sections
1/26/23	Real numbers, exponents	P.2, P.3
1/31/23	Exponents	P.3, P.4
2/2/23	Algebraic expressions, factoring	P.5
2/7/23	Factoring	P.6
2/9/23	Rational expressions	P.7
2/14/23	Equations, linear systems	P.8, 10.1
2/16/23	Coordinate plane, graphs	1.1, 1.2
2/21/23	NO CLASS	
2/23/23	Lines	1.3
2/28/23	Quadratic equations	1.4
3/2/23	Midterm 1	
3/7/23	Other types of equations	1.6
3/9/23	Inequalities	1.7
3/14/23	Functions	2.1
3/16/23	Graphs of functions	2.2
3/21/23	Getting info from graphs	2.3
3/23/23	Average rate of change	2.4
3/28/23	Transformations	2.6
3/30/23	Combining functions	2.7
4/4/23	Inverses	2.8
4/6/23	NO CLASS	
4/11/23	NO CLASS	
4/13/23	NO CLASS	
4/18/23	Quadratics	3.1
4/20/23	Midterm 2	
4/25/23	Polynomial graphs	3.2
4/27/23	Exponentials	4.1, 4.2
5/2/23	Logs	4.3
5/4/23	Angle measure	5.1
5/9/23	Trig of right triangles	5.2
5/11/23	Trig functions of angles	5.3
5/16/23	Final review	