

**Course Description:** Algebraic expressions and equations, rational expressions, exponents, functions and their graphs, trigonometric functions on the unit circle, and system of equations.

**Prerequisite:** Placement at college entry or by subsequent examination. 4 hr./wk.; 3 cr.

**Contact:** A) you should email me at [rsoyk@ccny.cuny.edu](mailto:rsoyk@ccny.cuny.edu)  
B) you can also email me at [rsoyk000@citymail.cuny.edu](mailto:rsoyk000@citymail.cuny.edu) or [rachelsoykwork@gmail.com](mailto:rachelsoykwork@gmail.com)

\*I recommend when you email me, you email **all** the addresses mentioned above at once for a faster response time.\*

**Textbook:** Stewart-Redlin-Watson Alg. & Trig., 4<sup>th</sup> edition (enhanced WebAssign bundle) The ISBN is 9781305071742.

**Technology needed for the course:** You will need a computer and access to the internet for our synchronous sessions. It is going to be difficult to see what I am doing if you are on a phone.

- ❖ You will also need to download either “CAMSCANNER” or “GENIUS SCAN” which are free apps for taking pictures of your work and then the pdf document can be uploaded on blackboard. Please note jpg is not a valid format for uploading your work. Work must be submitted as a pdf for all exams (including the final exam). Quiz 1 will be used as a practice round for scanning.

**Online HW:** The platform we will be using for hw is **WEBASSIGN**. You will have to purchase this “online webassign homework” package that goes with the Math190 course. An ebook will be included in your purchase.

#### How to purchase a discounted webassign access code for \$40

If you have not already purchased an access code, you can purchase one for **\$40** by following each step until you reach step 5A in the [Strong Start Student Guide](#). This will take you through the process step-by-step so that you can sign up for the \$40 discounted price for WebAssign. If you already purchased a 190 WebAssign Access code in a previous semester, do NOT purchase another code. Your old code will work this semester. The access code remains valid even if you need to take Math 190 multiple times. **Before you purchase an access code, you should take advantage of the free trial before purchasing in case you need to drop the course.**

Quiz and Exam questions will be similar to the assigned homework questions. You should attempt all the assigned homework problems to learn the material and prepare for quizzes and exams. If you are taking courses outside the math department that also require a webassign access code, then Cengage Unlimited may save you money? You should then compute what is the best value for your semester.

Below is the class code for our Math190 course:

Course	Webassign code you will need to join the class
Math 19000--Section FG (4-5:40pm)	CCNY 7998 9128

Math 190 is a skills course. Like any skill, your ability will be directly proportional to the amount of practice you put in. Homework is the practice portion of the course and is the most important part of the course. Please make sure you are consistent with your HW and complete it in a timely manner. HW will be due almost every Thursdays & Saturdays by 11:59pm.

Plan to be proactive with your HW in case you have internet issues. The quizzes will be very similar to the homework. By not completing the homework, you will have an adverse effect on your quiz grades. I will not extend any of the webassign homework so please plan and organize your time accordingly.

#### **Important Dates:**

- ❖ Aug 31: Last day to add or change a class. Last day for a 75% tuition refund.
- ❖ Sept 6: No Class.
- ❖ Sept 8: No Class.
- ❖ Sept 14: Last day for a 25% tuition refund. Last day to drop w/o receiving a grade of “W”.
- ❖ Sept 15: No Class. (Also, assignment of ‘WN’ grades for non-attendance.)
- ❖ Sept 23: Immunization deadline for NYS residents.
- ❖ Oct 11: No Class, college closed.
- ❖ Dec 13: Last day to withdraw with the grade of ‘W’. Last day of class! (**Tentative Final Exam Day**)
- ❖ Dec 21: Final Exam Day (1:00-3:15PM) Please do not make TRAVEL plans for this date.

**Math 19000 Class ZOOM Link: (Every Mondays & Wednesdays from 4-5:40pm via zoom)**

<https://ccny.zoom.us/j/86389472955?86389472955?pwd=WklWRnBsY3g3Z1dxeG02RGYwVkpUdz09>

Meeting ID: 863 8947 2955

Passcode: Math190

One tap mobile

+13017158592, 86389472955# US (Washington DC)

+13126266799, 86389472955# US (Chicago)

Find your local number: <https://ccny.zoom.us/j/kcUtZZTTQL>

Dial by your location: +1 646 558 8656 US (New York)

**Office Hours: (Every Thursdays from 9-10pm via zoom)**

<https://ccny.zoom.us/j/87669817276>

Meeting ID: 876 6981 7276

One tap mobile

+16465588656, 87669817276# US (New York)

+13017158592, 87669817276# US (Washington DC)

Find your local number: <https://ccny.zoom.us/j/kchWTPftiX>

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**Attendance:** The best predictor for student success in any class starts with proper attendance. My teaching experience indicates that there is a high correlation between good grades and good attendance. There is nothing like being in the class, so please try to attend every class. If you miss a class, please let me know **ahead** of time. I will be **recording every lecture** so please plan to watch it later on.

Attendance will be recorded automatically through zoom for every class.

**Make-Ups:** I don't give make-up Exams. **If you miss a test, it will be computed as a zero.** The dates for the 3 exams are as follows so plan accordingly. All of these exams will be in person. As stated on CunyFirst, this is a hybrid course, so you are expected to show up in-person for some days throughout the semester. Please drop the course if you are unable to attend the in-person required dates. You need to make sure you are present for these below dates so you can take your exams without being penalized. All exams will be given in class during class time. **Each** exam will consist of **18 questions** and last no more than **1 hour and 30 minutes**. As always, IDs will be checked during the exams so please bring your CCNY Cuny ID card to each in-person exam.

**Exam Dates:**

Exam 1: September 29

Exam 2: October 27

Exam 3: December 1

Final Exam: Either Dec 13 (Monday) or Dec 21 (Tuesday!) -- held in-person from 1:00-3:15PM

**\*\*For Emergency Cases, make-up exams will be granted and will be administered orally with the instructor. This is on a case-by-case basis.\*\***

- ❖ Currently, all examinations are intended to be in-person, but, due to ramifications of the ongoing COVID-19 pandemic, it is possible that other examination methods may be required. This course may use online examination methods, may give some examinations as oral exams, and may require the use of video cameras during exams.
- ❖ If online examinations are given in this course, the exams will be given synchronously (at the time in which the class meets) on Blackboard.
- ❖ As stated earlier, at the department's or the instructor's discretion, any makeup exam, including a makeup final, may be administered as an oral examination carried out either in-person or using video-conferencing software (such as Zoom).

**Academic Integrity Policy**

It goes without saying that all work submitted for this course should be your own unless explicitly stated or acknowledged by you. This course follows the CUNY Policy on Academic Integrity Policy. All violations will be pursued through the appropriate campus mechanisms.

## Camera Policy

Although all exams will be held in-person, I strongly encourage one to have their cameras on for lecture classes. Not only will this make the class more fun and interactive, but studies show that students are significantly more attentive when their cameras are on while learning (they are less distracted this way). So please, please, please try to have your camera on for most classes if you are able to. :) If you are unable to, please email me ahead of time so that I am aware of your situation.

## Grading Rubric:

3 Exams	60%
Final Exam	40%

Letter Grade	GPA	Grade	Letter grade	GPA	Grade
A+	4.00	97-100	C	2.00	74-76
A	4.00	94-96	C-	1.66	70-73
A-	3.66	90-93	D	1.00	60-69
B+	3.33	87-89	F	0	Below 60
B	3.00	84-86			
B-	2.66	80-83			

**Please note that if you get C-, D or F you will be repeating this course.**

**Advice:** If you want to earn a high grade in this class, attend class regularly, take good notes, and complete the WebAssign homework consistently on a weekly basis.

**Math Department Website:** <http://math.sci.cuny.cuny.edu> (Please note that there is no “www” on this URL.)

## Syllabus for Math 19000, College Algebra

Text: Stewart, Redlin, Watson *Algebra and Trigonometry, 4th ed., Cengage.*

(Visit the Math190WebAssignInfo link on the CCNY Math 190 webpage before purchasing the textbook. You need not purchase the textbook. You must purchase a webassign access code instead.)

Section	Hours	Exercises
P.1 Modeling	1	3-23
P.2 Reals	1	29-38,47-66
P.3 Exponents (omit Scientific Notation)	2	1-7, 9-34
P.4 Rational Exponents	1	9-26, 49-62
P.5 Alg Expression	2	9-78
P.6 Factoring	1	7-36, 61-80
P.7 Rational Expression	2	1-64
P.8 Equations	2	1-78, 87-97
1.1 Coordinate Plane	0.5	21-30
1.2 Graphs	1.5	9-40, 47-56, 67-82
1.3 Lines	1	9-52, 57-78
1.4 Quadratic Equations	1	5-46
1.6 Other Equations	1	5-8, 25-30, 37-44
1.7 Inequalities	1	5-24, 33-54
2.1 Functions	2	17-65.
2.2 Graphs	2	2-28,33-46,49-56
2.3 Graph Info	1	7-16, 31-34, 43-46
2.4 Rate of Change	1	1-32
2.5 Linear Functions	1	1-41
2.6 Transformations	2	1-74
2.7 Combining Functions (Examples 3-6 only)	2	27-72
2.8 Inverses	2	1-74
3.1 Quadratics	2	1-44, 47,48,51,52
3.2 Polynomial Graphs	1	1-36, 51-54
4.1 Exponential Functions	2	1-6, 11-44
4.3 Log Functions (omit $e, \ln$ )	2	1-44 (skip $e, \ln$ ), 53-74
5.1 Angle Measure	1	1-70
5.2 Right Triangle Trig	1	15-33, 53-59
5.3 Trigonometric Functions of Angles	2	1-54
5.4 Inverse Trig Functions	1	1-34
10.1 Linear Systems	1	5-50, 59-64

**Department: Mathematics**

<p><b>Course Number:</b> MA19000</p> <p><b>Course Title:</b> College Algebra and Trigonometry</p> <p><b>Category:</b> Prerequisite to course required of all majors</p> <p><b>Term Offered:</b> Fall 2021</p> <p><b>Prerequisite:</b> Placement at college entry or by subsequent examination.</p> <p><b>Hours/Credits:</b> 4 hrs./week; 3 credits</p> <p><b>Date effective:</b> 8/25/2021</p> <p><b>Course Coordinator:</b> Matthew Auth</p>	<p><b>Catalog Description:</b> Introduction to algebraic expressions and equations, rational expressions, exponents, functions and their graphs, trigonometric functions on the unit circle, and system of equations.</p> <p><b>Required Text:</b> Algebra and Trigonometry, 4<sup>th</sup> edition; by Stewart, Redlin, Watson, ISBN 9781305071742</p>
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**Course Learning Outcomes:**

Please describe below all learning outcomes of the course, and indicate the letter(s) of the corresponding Departmental Learning Outcome(s) in the column at right (see detailed list at bottom\*\*).

<b>After taking this course, the student should be able to:</b>	<b>Contributes to Departmental Learning Outcome(s):</b>
1. Solve polynomial, rational, and exponential equations and inequalities in one real variable;	<i>a</i>
2. Graph linear, polynomial, exponential, and logarithmic equations;	<i>a, b</i>
3. Work with transformations of, and translate between, graphs and equations;	<i>a, b</i>
4. Determine whether a graph is the graph of a function;	<i>a, b, e1</i>
5. Demonstrate fluency with function notation, including composite and inverse function;	<i>a, b</i>
6. Become comfortable with basic algebraic techniques with exponents and simplifying rational expressions;	<i>a, b, c</i>
7. Find maximum /minimum values for a quadratic function and apply to optimization problems;	<i>a, b, c</i>
8. Understand basic exponential and log functions;	<i>a, b</i>
9. Become comfortable using right triangle trigonometry;	<i>a, b, c</i>
10. Solve other problems appropriate for a course in College Algebra and Trigonometry.	<i>a, b, c</i>

**\*\*The Mathematics Department, in its varied courses, aims to teach students to:**

- a. perform numeric and symbolic computations*
- b. construct and apply symbolic and graphical representations of functions*
- c. model real-life problems mathematically*
- d. use technology appropriately to analyze mathematical problems*
- e. state (e1) and apply (e2) mathematical definitions and theorems*
- f. prove fundamental theorems*
- g. construct and present (generally in writing, but, occasionally, orally) a rigorous mathematical argument.*

**Course Assessment Tools:**

- 1. In-class exams: 60%
- 2. Final exam: 40%

# Recorded Classes

**Question:** Will our classes be recorded and if so, where can I access them?

**Answer:** Yes, our classes will be recorded, however this is not a reason for you to skip out on our live sessions. Like I stated before, attendance will be taken during every online session in order to have a record of accountability for each student. Our online sessions will be recorded and accessible using the links below. If you have trouble opening the recordings, please reach out to me via email and I will be more than happy to assist you.

**The passcode to access any recorded class will always be: Math1234%**

**L1--Wednesday, August 25th, 2021**

**L2--Monday, August 30th, 2021**

**L3--Wednesday, September 1st, 2021**

**L4--Monday, September 13th, 2021**

**L5--Monday, September 20th, 2021**

**L6--Wednesday, September 22nd, 2021**

**L7--Monday, September 27th, 2021**

**L8--Wednesday, September 29th, 2021**

**L9--Monday, October 4th, 2021**

**L10--Wednesday, October 6th, 2021**

**L11--Wednesday, October 13th, 2021**

**L12--Monday, October 18th, 2021**

**L13--Wednesday, October 20th, 2021**

**L14--Monday, October 25th, 2021**

**L15--Wednesday, October 27th, 2021**

**L16--Monday, November 1st, 2021**

**L17--Wednesday, November 3rd, 2021**

**L18--Monday, November 8th, 2021**

**L19--Wednesday, November 10th, 2021**

**L20--Monday, November 15th, 2021**

**L21--Wednesday, November 17th, 2021**

**L22--Monday, November 22nd, 2021**

**L23--Wednesday, November 24th, 2021**

**L24--Monday, November 29th, 2021**

**L25--Wednesday, December 1st, 2021**

**L26--Monday, December 6th, 2021**

**L27--Wednesday, December 8th, 2021**

**L28--Monday, December 13th, 2021 (tentative Final)**

**L29--Final Exam Day--Tuesday, Dec 21st, 2021**

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(Visit the Math190WebAssignInfo link on the CCNY Math 190 webpage before purchasing the textbook. You need not purchase the textbook. You must purchase a webassign access code instead.)

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3.1 Quadratics	2	1-44, 47, 48, 51, 52
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4.1 Exponential Functions	2	1-6, 11-44
4.3 Log Functions (omit $e$ , $\ln$ )	2	1-44 (skip $e$ , $\ln$ ), 53-74
5.1 Angle Measure	1	1-70
5.2 Right Triangle Trig	1	15-33, 53-59
5.3 Trigonometric Functions of Angles	2	1-54
5.4 Inverse Trig Functions	1	1-34
10.1 Linear Systems	1	5-50, 59-64

## Syllabus for Math 19500, Precalculus

Text: Stewart, Redlin, Watson *Precalculus*, 7th ed., Cengage.

(Visit the Math195WebAssignInfo link on the CCNY Math 195 webpage before purchasing the textbook because you must also purchase a webassign access code.)

Section	Hours	Exercises
1.1 Reals	1	29–32,35–38,47–66
1.2 Exponents	1	9–82
1.3 Alg Expression	1	9–78
1.4 Rational Expression	1	1–96
1.5 Equations	1	2–116
1.8 Inequalities	2	7–90
1.9 Coordinate Plane	1	25–45,55–60,83–104
1.10 Lines	1	9–52
2.1 Functions (omit $[[x]]$ )	2	17–72
2.2 Graphs	2	2–28,33–46,49–68
2.3 Graph Info	1	7–16,43–46
2.4 Rate of Change	1	7–31
2.6 Transformations	2	1–74
2.7 Combining Functions	1	27–72
2.8 Inverses	2	7–74
3.1 Quadratics	1	1–44
3.2 Polynomial Graphs	1	1–44, 51–54
3.3 Dividing Polynomials	1	1–24
3.6 Rational Functions	1	9–22.
4.1 Exponentials	2	7–44
4.2 Natural Exp	0.5	3–16
4.3 Log Functions	2	1–78
4.4 Laws of Logs	1	7–58
4.5 Log and Exp Equations	2	1–68,77–88
4.6 Modeling	1	5–8,11–14
5.1 The Unit Circle (explain degrees from 6.1)	2	1–60
5.2 Trig Functions	2	1–70
5.3 Trig Graphs	2	1–54
5.5 Inverse Trig (sin, cos only)	1	1–10,23–48
7.1 Trig Identities	2	1–28,31–88
7.2 Add/Subtr Formulas	1	1–54
7.3 Double, Half Angle	1	3–10,17–42
7.4 Basic Trig Eqns	1	1–38
10.8 Nonlinear Systems	1	3–32,45–47.