

# Precalculus, Spring 2023

Math 19500-BC, MW 10-11:40am, NAC 6/113



Intervals, inequalities, operations on functions, inverse functions, graphing polynomial functions, exponential and logarithmic functions, trigonometric functions and formulas. 4 hours/week, 3 credits. https://math.sci.ccny.cuny.edu/course/math-19500/

#### **Contact Information**

Instructor: John Adamski, PhD - jadamski@ccny.cuny.edu

Website: https://johnadamski.com/

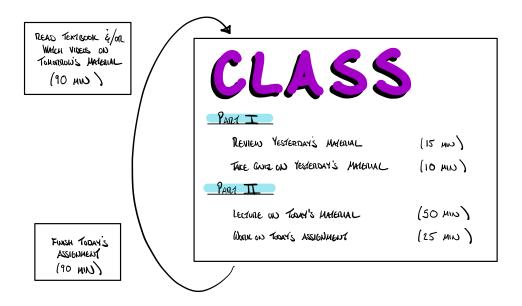
Office Hours Mon & Wed 11:45 am – 12:15 pm, NAC 8/134

## Access to Textbook, Homework, and Quizzes

We will be using the text *Precalculus*, 7th edition, by Stewart, Redlin, and Watson. You can purchase online access to this text and the WebAssign online homework/quiz platform by going to http://getenrolled.com and entering the following class key.

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Continue the enrollment process by following the instructions here. If you are creating a new account, please enter your first and last name as they appear on CUNYfirst. After this, your 14-day free trial will begin. When your free trial expires you will need to purchase access for the semester. The cost is approximately \$40. If you have taken this class before and previously purchased a WebAssign access code for this textbook, the same code will still work and you do not need to purchase access a second time.



#### Our Plan

Each day we will work our way through one or two new sections in the textbook, following the schedule posted to both <a href="https://johnadamski.com">https://johnadamski.com</a> and the Content page of our class Blackboard site. In order to make the best use of our time together, you must read these sections of the textbook before class. In addition, you should watch the corresponding video lectures with links posted to the Content page of our class Blackboard site. These videos will walk you through how to solve various problems. You should watch these videos with paper and pencil at hand, pause the video when a problem is presented, try to solve the problem on your own, then continue watching the video to check that you solved the problem correctly.

In class, I will spend approximately 50 minutes summarizing the material that you read about and practiced through videos. Afterwards, everyone will begin working together on the corresponding WebAssign homework assignment. You are highly encouraged to work in groups and to ask each other questions. I will walk around the room and check in with everyone, answering whatever questions you have. I may occassionally interrupt your work to discuss a frequently asked question with the class. Any homework questions that you do not complete during class should be completed before the next class. Thus, after every class your homework is to complete that day's WebAssign assignment *and* study the material for the next class (textbook and videos).

At the beginning of each class, we will spend approximately 15 minutes going over the material and homework from last class. After that, we will all spend approximately 10 minutes taking a WebAssign quiz on the material from last class before moving on to that day's new material (which you will have read and watched videos about before class).

Please note: You must bring a smartphone/tablet/laptop to each class.

#### **Grades**

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20% Quiz Average, Q
20% Exam 1, E_1 W 3/8
20% Exam 2, E_2 M 4/24
40% Final Exam, E_F TBD
 \text{Course Grade} = .2 \times Q + .2 \times E_1 + .2 \times E_2 + .4 \times E_F
```

To make exams less stressful, your Final Exam score  $F_E$  will replace all lower exam scores  $E_1$ , and/or  $E_2$ . In particular, if you miss a midterm exam, your Final Exam score will be used in its place. Your Quiz Average *cannot* be replaced by your Final Exam grade. There will be a quiz almost every class period. There will be no make-up quizzes. Instead your lowest four quiz grades will be dropped before computing your Quiz Average.

Quizzes will be taken in-class online through WebAssign. Exams will be taken in-class with paper and pencil/pen. Quiz and exam questions will be similar to assigned homework problems. Sample exams are available for practice at <a href="https://math.sci.ccny.cuny.edu/course/math-19500/">https://math.sci.ccny.cuny.edu/course/math-19500/</a>. The use of calculators, notes, and/or formulas sheets is not allowed on any quiz/exam.

#### Attendance

I want to help you all succeed in this course. I want you all to help each other succeed in this course. We can't do that if we don't all come to class and participate. So please attend every class. It is both the simplest and most important thing you can do. I will keep attendance records.

#### Resources

- The Math/Physics Tutoring Center offers free tutoring for all students in Marshak room 106 12-5 pm Mon-Thu and 12-4 pm Fri. In-person tutoring is available without an appointment and online tutoring can be arranged.
- The City Tutors is a volunteer tutoring and mentoring organization that began at the City College of New York. Its mission is to be a tutoring and mentoring hub that ensures historically underserved communities have equitable access to resources that are fundamental to educational and professional success. CT provides free online academic support in specific math and science courses for students at the City College of New York. To request a math tutor, please first create an account here.
- NAC 8/134 is a shared conference room where most math instructors hold their office
  hours. If you stop by this room, there is a high probability that at least one instructor
  will be there able to help you with anything math-related. It doesn't matter if they are
  your instructor or not. Please be patient if there are several students seeking help.

### **Academic Integrity**

From the university's website:

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.

Read more here.

#### **Disabilities**

Under the Americans with Disabilities Act, all members of the campus community are entitled to equal access to the programs and activities of CCNY. If you have (or think that you might have) a disability that may impact your participation in the activities, coursework, or assessment of this course, you may be entitled to accommodations through the AccessAbility Center/Student Disability Services. You can contact them at 212-650-5913, disabilityservices@ccny.cuny.edu, or by visiting NAC 1/218.

Whether or not you have documentation for accommodations, your success in this course is important to me. If there are aspects of this course that are not accessible to you, please let me know as soon as possible so that we can work together to develop strategies to meet both your needs and the requirements of the course.

## Schedule

Class	Date	Material
01	We 01/25	§1.1-2 Real Numbers, Exponents
02	Mo 01/30	§1.3-4 Algebraic And Rational Expressions
03	We 02/01	§1.5 Equations
04	Mo 02/06	§1.8 Inequalities
05	We 02/08	§1.9-10 Coordinate Plane, Lines
06	Mo 02/13	§2.1-2 Functions, Graphs
07	We 02/15	§2.3-4 Graph Info, Rate of Change
08	Tu 02/21	§2.6 Transformations
09	We 02/22	§2.7 Combining Functions
10	Mo 02/27	§2.8 Inverses
11	We 03/01	§3.1 Quadratics
12	Mo 03/06	§3.2 Polynomial Functions
13	We 03/08	Exam 1 (all sections listed above, §1.1-3.2)
14	Mo 03/13	§4.1-2 Exponentials
15	We 03/15	§4.3 Logarithmic Function
16	Mo 03/20	§4.4 Laws of Logarithms
17	We 03/22	§4.5 Exp/log Equations
18	Mo 03/27	§4.6 Exponential Models
19	We 03/29	§6.1-2 Right Triangle Trigonometry
20	Mo 04/03	§5.1 The Unit Circle
21	Mo 04/17	§5.2, §6.3 Trig Functions
22	We 04/19	§5.3 Trig Graphs
23	Mo 04/24	Exam 2 (all sections listed above after Exam 1, §4.1-5.3)
24	We 04/26	§5.4 More Trig Graphs
25	Mo 05/01	§5.5 Inverse Trig
26	We 05/03	§7.1 Trig Identities
27	Mo 05/08	§7.2-3 Trig Formulas
28	We 05/10	§7.4 Trig Equations
29	Mo 05/15	Review
	TBD	Final Exam (all sections listed above, §1.1-7.4)