THE COLLEGE OF STATEN ISLAND, CUNY
DEPARTMENT OF MATHEMATICS

MATH 125 COURSE OUTLINE

College Algebra and Trigonometry with Intermediate Algebra Review

Course Format
It is recommended for 2 hours of class time to be spent covering each topic in the table, and for the additional class time to be for group work and individuated instruction. This is to be adapted to the modality of the specific course.

Textbook
Algebra and Trigonometry, 7th Edition, by Robert Blitzer, Pearson (2021), eTextbook with customized College of Staten Island MyLabMath online homework platform.
ISBN-13: 978-0135905234
The online platform comes with many instructor resources, most notably:

- the Powerpoint slides, to be supplemented as needed with board writing;
- the Guided Practice worksheets – versions separated by section are available from CUNY Dropbox here.

Homework
Students are to complete assignments online on MyLabMath.

- It is recommended that the **due date** for each assignment be set to the end of the week following when the topic was completed to give students leeway when they need it, but that these be a hard deadlines.
- If students have trouble with MyLabMath, they are to direct them to Pearson Customer Support.

Student Supplies

- A graphing calculator is required. The TI-84, or a model with similar functionality is recommended.
- A notebook is required, and students should be writing their notes, not just taking pictures of the board.

Grading Policy:

Mid-Term Exams	60%*
Final Exam (departmental)	30%
Homework	10%

Attendance
Students missing more than 15% of the class meetings may result in a WU grade. For courses meeting 3 times per week, this means missing more than 6 meetings and for courses meeting 2 times per week, this means missing more than 4 meetings.

* It is recommended to count each midterm as 15%, but that if a student scores an A or B on the final exam, to drop the lowest mid-term grade. Instructor policies on this may vary.

Topic	Section	Content
1		Course Orientation
2	P.1	Algebraic Expressions, Mathematical Models, and Real Numbers
3	P.2	Exponents and Scientific Notation
4	P.3	Radicals and Rational Exponents
5	P.4	Polynomials
6	P.5	Factoring Polynomials
7	P.6	Rational Expressions
8	1.1	Graphs and Graphing Utilities
9	1.2	Linear Equations and Rational Equations
10	1.3	Models and Applications
11		Review for Exam 1
12		**Exam 1**
13	1.4	Complex Numbers
14	1.5	Quadratic Equations
15	1.6	Other Types of Equations
16	1.7	Linear Inequalities and Absolute Value Inequalities
17	2.1	Basics of Functions and their Graphs
18	2.2	More on Functions and their Graphs
19	2.3	Linear Functions and Slope
20	2.4	More on Slope
21		Review for Exam 2
22		**Exam 2**
23	2.5	Transformations of Functions
24	2.6	Combinations of Functions; Composite Functions
25	2.7	Inverse Functions
26	2.8	Distance and Midpoint Formulas; Circles
27	3.1	Quadratic Functions
28	4.1	Exponential Functions
29	4.2	Logarithmic Functions

30	4.3	Properties of Logarithms
31	4.4	Exponential and Logarithmic Equations
32	4.5	Exponential Growth and Decay; Modeling Data
33		Review for Exam 3
34		**Exam 3**
35	5.1	Angles and Radian Measure
36	5.2	Right Triangle Trigonometry
37	5.3	Trigonometric Functions of Any Angle
38	5.4	Trigonometric Functions of Real Numbers; Periodic Functions
39	5.5	Graphs of Sine and Cosine Functions
40	5.7	Inverse Trigonometric Functions
41	5.8	Applications of Trigonometric Functions
42	6.5	Trigonometric Equations
43	7.1	The Law of Sines
44	7.2	The Law of Cosines
45		Review for Exam 4
46		**Exam 4**
47		Review for Final Exam