

THE COLLEGE OF STATEN ISLAND, CUNY  
DEPARTMENT OF MATHEMATICS  
**MATH 123 – COLLEGE ALGEBRA AND TRIGONOMETRY**  
**COURSE OUTLINE**

Text: Stewart, Redlin, Watson, Precalculus, 7th Edition with WebAssign.  
Brooks/Cole, Cengage Learning (2015). ISBN# 978-1305071759

Calculator: A graphing calculator is required. The TI-84 is highly recommended.

Note: Below, each lesson corresponds to a one-hour class. Homework problems must be submitted online using WebAssign.

Week	Lesson	Section	Topic	Homework Problems
I	1	1.2	Exponents and Radicals	35,42,44,65,68,70,76,95
	2	1.3	Algebraic Expressions	23,52,73,81,96,121,127
	3	1.4	Rational Expressions	12,22,32,44,54,73,76,80,82
	4	1.4	Rational Expressions	
II		<b>WA1</b>	<b>Weekly Assessment 1 (Sections 1.2-1.4)</b>	
	5	1.5	Solving Equations	22,28,29,38,51,89,90,99,113
	6	1.5	Solving Equations	
	7	1.7	Modeling with Equations	25,31,39,43,53,55,64,71,75,90
	8	1.7	Modeling with Equations	
III		<b>WA2</b>	<b>Weekly Assessment 2 (Sections 1.5 and 1.7)</b>	
	9	1.8	Inequalities	34,35,37,51,53,83,85,101,102,121
	10	1.8	Inequalities	
	11	1.10	Equations of Lines	17,19,22,28,34
	12	1.10	Parallel and Perpendicular Lines	43,46, 47, 50,51
IV		<b>WA3</b>	<b>Weekly Assessment 3 (Sections 1.8 and 1.10)</b>	
	13	2.1	Functions	23,31,36,55,56,85,90
	14	2.1	Functions	
	15	2.2	Graphs of Functions	17,24,28,34,49,51
	16	2.2	Graphs of Functions	53,69,70
V		<b>WA4</b>	<b>Weekly Assessment 4 (Sections 2.1 and 2.2)</b>	
	17	2.5	Slope as Rate of Change	41,42,45,46,49,50
	18	2.6	Transformations of Functions	7,8,21,22,48
	19	2.6	Transformations of Functions	63,65,67,68,74,77,78,85
	20	3.1	Quadratic Functions	11, 15, 17, 19, 25
VI		<b>WA5</b>	<b>Weekly Assessment 5 (Sections 2.5, 2.6 and 3.1)</b>	
	21	3.1	Max/Min Values of Quadratic Functions	51, 56
	22	Focus	Modeling with Functions	(p.242) 19,20,21,24,26,29
	23	3.1	Modeling with Quadratic Functions	51,52,53,63,65
	24	3.1	Modeling with Quadratic Functions	
VII		<b>WA6</b>	<b>Weekly Assessment 6 (Section 3.1)</b>	
	25		<b>Review for Midterm Exam (weeks I-VI inclusive)</b>	

	26		Review for Midterm Exam (weeks I-VI inclusive)	
	27		Midterm Exam	
	28		Midterm Exam	
VIII	29	4.1	Exponential Functions	22, 23, 32, 34, 46
	30	4.2	Natural Exponential Functions	13, 14, 23, 34, 35, 37
	31	4.3	Logarithmic Functions	16,24,29,31,44,56,90,98
	32	4.3	Logarithmic Functions	
IX		WA7	Weekly Assessment 7 (Section 4.1,4.2 and 4.3)	
	33	4.4	Logarithmic Expressions	17, 40, 32, 34, 46, 47, 53, 56, 63
	34	4.4	Logarithmic Expressions	
	35	4.5	Exponential Equations	19, 21, 23, 25, 39, 41
	36	4.5	Logarithmic Equations	51,66,67,87,90,91
X		WA8	Weekly Assessment 8 (Section 4.4 and 4.5)	
	37	4.6	Exponential Growth	2, 6, 10, 13, 14, 16
	38	4.6	Exponential Growth	
	39	4.6	Radioactive Decay	18,22,23,24,26
	40	4.6	Radioactive Decay	
XI		WA9	Weekly Assessment 9 (Section 4.6)	
	41	6.1	Angle Measure	10,19,33,41,47,48,54,59,64,68
	42	6.2	Trigonometry of Right Triangles	3, 7, 10, 17, 20
	43	6.2	Trigonometry of Right Triangles	33, 38, 43, 48
	44	6.2	Trigonometry of Right Triangles	53, 57, 59, 60
XII		WA10	Weekly Assessment 10 (Sections 6.1 and 6.2)	
	45	6.3	Trigonometric Functions of Angles	7, 14, 21, 42, 46
	46	6.3	Trigonometric Functions of Angles	50, 51, 53, 55, 65
	47	6.4	Inverse Trigonometric Functions	7, 8, 9, 13, 19, 39, 40
	48	6.4	Inverse Trigonometric Functions	
XIII		WA11	Weekly Assessment 11 (Sections 6.3 and 6.4)	
	49	6.5	The Law of Sines	4, 10, 17, 24, 30, 31, 33, 37
	50	6.6	The Law of Cosines	6, 11, 16, 22, 32, 34, 41, 43
	51	Ch. 6	Applications of Trigonometry	(p.531) 10,21
	52	Ch. 6	Applications of Trigonometry	(p.534) 1,2,3,4,6,7
XIV	53		Final Review	
	54		Final Review	
	55		Final Review	
	56		Final Review	