BRONX COMMUNITY COLLEGE of the City University of New York

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

SYLLABUS: MTH 30 - Precalculus (4 Credits - 4 Hours per week)

Prerequisite: MTH 06 or equivalent

Precalculus Essentials (Second Edition) by Robert E. Blitzer, Prentice-Hall **TEXT:**

SECTION TOPIC

SUGGESTED EXERCISES

Functions and Graphs

1.2	Basics of Functions and their Graphs	149/11-31, 45, 47, 53 -57		
1.3	More on Functions and their Graphs	163/15-37, 39, 43, 51, 75, 77		
1.6	Transformations of Functions	206/ 1-87		
1.7	Combinations of Functions;	219/ 5-11, 17-33, 49-57, 81-88		
	Composite Functions			
1.8	Inverse Functions	231/ 1-5, 11-25, 29-37		
Polynomial and Rational Functions				
2.2	Quadratic Functions	284/ 9-55		
2.3	Polynomial Functions and			
	Their Graphs	297/ 3-7, 15-20, 21, 25, 27-33, 37, 39, 41-47		
2.4	Dividing Polynomials;			
	Remainder and Factor Theorems	310/13, 15, 17-25, 33-41		
2.5	Zeroes of Polynomial Functions	322/ 1-17, 19, 21, 23		
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2.6 Rational Functions and Their graphs 342/1-7, 9-14, 21-35, 37, 41, 49, 55, 63 354/1-23, 39-41, 51-53

Polynomial and Rational Inequalities 2.7

Exponential and Logarithmic Functions

3.1	Exponential Functions	384/11-17, 19-24, 25-31, 35-37, 41, 43
3.2	Logarithmic Functions	397/1-29, 43, 44, 47-53, 55, 59, 63, 71,
		75-79, 81-89
3.3	Properties of Logarithms	407/ 1-27, 35, 37, 41-57, 67, 71-77
3.4	Exponential and Logarithmic	
	Equations	418/1-21, 27-43, 49-57, 67-69, 85, 87

Trigonometric Functions

4.1	Angles and Radian Measure	458/1-10, 13-28, 41-56, 60-63
4.2	Trigonometric Functions:	
	The Unit Circle	472/ 1-55
4.3	Right Triangle Trigonometry	484/ 3-15, 21-31
4.4	Trigonometric Functions of	
	Any Angle	499/1-21, 23-27, 35-43, 61-73
4.5	Graphs of Sine and Cosine Functions	518/1-23
4.7	Inverse Trigonometric Functions	547/ 1-11, 19-41, 47-53, 63-67
Analytic	Trigonometry	
5.1	Verifying Trigonometric Identities	578/ 1-35
5.2	Sum and Difference Formulas	587/1,3,5, 13, 15, 21, 23, 33, 33

- 5.5 Trigonometric Equations
- 587/ 1,3,5, 13, 15, 21, 23, 33, 35 619/ 11, 15, 19, 25, 39, 41, 57, 59

8/06 (MM) 12/06 (AW)