## THE COLLEGE OF STATEN ISLAND, CUNY DEPARTMENT OF MATHEMATICS

## MATH 130 – PRECALCULUS COURSE OUTLINE

Text: Stewart, Redlin, Watson, <u>Precalculus, 6th Edition</u>, Enhanced WebAssign Edition. Custom edition with Chapters 1-7 and student access code for Enhanced WebAssign. Cengage Learning (2012). ISBN-10: 0840068077.

Calculator: A graphing calculator is required. The TI-82 is highly recommended.

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

Lesson	Section	Торіс	Homework Problems
1		Introduction and assessment	
2	1.7	Review: Inequalities	28, 32, 40, 42, 80, 84, 100, 102
3	2.1	Review: Domain	48, 50, 52, 56, 58, 60, 62, 64
4	3.1	Review: Quadratic functions	11, 16, 18, 21, 23, 31, 35, 43, 46, 54
5	2.6	Review: Combining functions	9, 12, 18, 21, 24, 26, 27, 36, 40, 53
6	3.2	Polynomial Functions and Their Graphs	8, 10, 22, 28, 46, 54, 64
7	3.2	Polynomial Functions and Their Graphs	72, 74, 75, 76, 78
8	3.3	Dividing Polynomials	10, 14, 20, 56, 60, 62, 68
9	3.5	Complex Numbers	8, 14, 19, 28, 38, 46, 54, 58, 64
10	3.6	Complex Zeros	12, 16, 20, 34, 40, 48, 54, 56, 60
11	1.4	Review: Rational Expressions	10, 20, 30, 44, 54, 69, 72, 76, 78
12	3.7	Rational Functions	12, 16, 28, 32
13	3.7	Rational Functions	48, 56, 62, 64
14	3.7	Rational Functions	68, 72, 85
15		Review	
16		Review	
17		Exam 1	
18		Exam 1	
19	5.1	Review: The Unit Circle	12, 18, 26, 32, 38
20	5.2	Review: Trigonometric Functions	6, 12, 32, 52, 68
21	5.3	Review: Trigonometric Graphs	20, 26, 32, 34, 46
22	5.4	Review: Trigonometric Graphs	12, 22, 28, 40, 52
23	5.6	Modeling Harmonic Motion	4, 8, 10, 14, 16, 18
24	5.6	Modeling Harmonic Motion	20, 22, 24, 26
25	6.1	Angle Measure	7, 17, 31, 39, 45
26	6.1	Angle Measure	46, 51, 56, 62, 65
27	6.2	Trigonometry of Right Triangles	3, 7, 10, 13, 16
28	6.2	Trigonometry of Right Triangles	23, 29, 32, 37, 42
29	6.2	Trigonometry of Right Triangles	47, 51, 53

30	6.3	Trigonometric Functions of Angles	5, 12, 19, 40, 44
31	6.3	Trigonometric Functions of Angles	48, 49, 51, 53, 63
32		Review	
33		Review	
34		Exam 2	
35		Exam 2	
36	2.7	Review: Inverse of a function	40, 42, 44, 52, 54, 56, 76, 78
37	6.4	Inverse Trigonometric Functions	4, 5, 15, 20, 22
38	6.4	Inverse Trigonometric Functions	27, 28, 33, 34
39	6.5	The Law of Sines	4, 10, 11, 14, 17
40	6.5	The Law of Sines	24, 30, 33, 35, 39
41	6.6	The Law of Cosines	6, 10, 11, 16, 22
42	6.6	The Law of Cosines	29, 32, 34, 41, 43
43	7.1	Trigonometric Identities	3, 7, 11, 15, 18, 23
44	7.1	Trigonometric Identities	25, 26, 31, 33, 37
45	7.2	Addition and Subtraction Formulas	4, 8, 12, 18, 20
46	7.2	Addition and Subtraction Formulas	33, 34, 55, 57, 59
47	7.3	Double-Angle and Half-Angle Formulas	3, 5, 7, 9, 21, 26
48	7.3	Sum-Product Formulas	30, 32, 37, 39, 69, 71
49	7.4	Trigonometric Equations	25, 26, 33, 43, 53
50	7.5	Trigonometric Equations	11, 17, 40, 43, 44
51		Review	
52		Review	
53		Exam 3	
54		Exam 3	
55		Final review	
56		Final review	