

## DEPARTMENT OF MATHEMATICS SYLLABUS

Course # & Name: MAT 12: Precalculus

Recommended Text(s) & Price: "Precalculus: A Problem-Oriented Approach,"  
6th Edition, by Cohen (Custom Published)

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UPC Approval Date: Winter 1999  
(Updated Fall 2005)

Lecture(s)	Sections	Comments/Topics
1	Chapter 1, 2.1, and App. B.4	Interval notation, absolute value, factoring, completing the square, quadratic formula, and distance formula
0.5	1.6	Lines
0.5	1.7	Symmetry, circles
1.5	2.3 and 2.4	Inequalities
1	3.1	Functions; Emphasize finding domains and simplifying difference quotients
0.5	3.2	Graphs of functions
1	3.4	Translations, Reflections
0.5	3.5	Composition of functions
1	3.6	Inverse functions
0.5	4.2	Quadratic functions
1.5	4.4	Setting up functions in applications
1.5	4.5	Max-Min problems
0.5	4.6	Graphing polynomials
1.5	4.7	Graphing rational functions
1	5.1 and 5.2	Exponential functions; Assign Appendix B.3 to read.
0.5	5.3	Logarithmic functions
1	5.4	Properties of logarithms
1	5.5	Solving equations and inequalities with logarithms and exponentials
0.5	6.1	Trig functions of acute angles; Assign pp. 437-439.
0.5	6.3	Right-triangle applications
1	6.4	Trig functions of angles
1	7.1 and 7.2	Radian measure and geometry
1	7.3	Trig functions of real numbers
0.5	7.4	Graphs of sine and cosine; Assign pp. 562-567
1.5	8.1 and 8.2	Addition formulas, double-angle formulas; Assign pp. 538-540
1	8.4	Trig equations
1.5	8.5	Inverse trig functions
1	5.7	Exponential growth and decay (if time permits)

### Additional Notes:

Throughout the quarter, assign the class unsimplified derivative expressions to simplify.