## Math 1330: Precalculus <br> Course Syllabus

Section number: This information applies to ALL face-to-face sections
Delivery format: face-to-face lecture
Prerequisites: MATH 1310: College Algebra or a passing score on the test for placement out of College Algebra.

Textbook: Available in electronic form (PDF) through CASA for all enrolled students.
The information contained in this class outline is an abbreviated description of the course. Additional important information is contained in the departmental policies statement at http://www.math.uh.edu/~dog/13xxPolicies.doc and at your instructor's personal webpage. You are responsible for knowing all of this information.

Upon successful completion of this course, students will be able to apply algebraic rules and transformations to simplify or elaborate on mathematical expressions. Students will understand and be able to apply methods of solution of polynomial, rational, and trigonometric equations and will understand the properties of solutions of such equations. Students will be familiar with properties of conic sections and other elementary curves and will be able to simultaneously exploit graphical and analytical techniques in solving problems. They will be able to translate ordinary language descriptions of a problem into mathematical expression and explain in English the important elements of a mathematical solution.

A student in this class is expected to complete the following assignments:
14 Regular Exams
2 Final Exam
3 Online Quizzes - one per week.
4 Homework - on each section of the textbook covered in class
5 Poppers - in-class quizzes given daily starting the 3rd week of classes.
Test 1: 10\%
Test 2: 15\%
Test 3: $15 \%$
Test 4: 15\%
Final Exam: 15\%
Online Quizzes: 10\%
Daily Classroom Quizzes (Poppers): 10\%
Homework: 10\%
Total: 100\%
Text The learning materials for Math 1330, including the textbook, are found online on the CourseWare site at www.casa.uh.edu. Students are required to purchase an access code at the Book Store to access the learning materials.

## Precalculus Topic List

## Functions

Definition and Graphs
Techniques in Graphing
Methods of Combining Functions
Inverse Functions

Polynomial and Rational Functions
Linear Functions
Quadratic Functions
Applied Functions - Setting up Equations
Polynomial Functions
Rational Functions

Conic Sections
Parabolas
Ellipses and Hyperbolas
Trigonometric Functions of Angles
Trigonometric Functions of Acute Angles
Algebra and the Trigonometric Functions
Right-Angle Trigonometry
Trigonometric Functions of Angles
Trigonometric Identities
Trigonometric Functions of Real Numbers
Radian Measure
Radian Measure and Geometry
Trigonometric Functions of Real numbers
Graphs of the Sine and Cosine Functions
Graphs of $y=A \sin (B x-C)$ and $y=A \cos (B x-C)$
Graphs of the Tangent and the Reciprocal Functions
Analytical Trigonometry
The Addition Formula
The Double-Angle Formula
Trigonometric Equations
The Inverse Trigonometric Functions

## Additional Topics in Trigonometry

The Law of Sines and The Law of Cosines

Whenever possible, and in accordance with 504/ADA guidelines, the University of Houston will attempt to provide reasonable academic accommodations to students who request and require them. Please call 713-743-5400 for more assistance.

