

University of Houston
Department of Mathematics
Math 1330, Precalculus

[Course Policies](#) (pdf)

Prerequisite: The prerequisite for this course is to have met one or more of the following requirements:

1. Received credit for MATH 1310 or higher at UH;
2. Received transfer credit for MATH 1310 or higher taken at another institution;
3. Placed out of MATH 1310 with a score of 10 or better on the Advanced Algebra (AA) section of the UH Math Placement Exam; or
4. Placed out of MATH 1310 with a score of 13 or better on the Calculus Readiness (CR) section of the UH Math Placement Exam.

Students with prior credit for MATH 1432 are not permitted to enroll in this course.

Course Description: Functions, graphs, trigonometry, and analytic geometry.

Textbook: Online at <http://online.math.uh.edu/Math1330/>

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

Exponential and Logarithmic Functions

Exponential Functions
The Exponential Function $y = e^x$
Logarithmic Functions

Properties of Logarithms
Equations and Inequalities with Logs and Exponentials

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 $y = A \sin(Bx - C)$ and $y = A \cos(Bx - C)$
Graphs of the Tangent and the Reciprocal Functions

Analytical Trigonometry

The Addition Formula
The Double-Angle Formula
Trigonometric Equations
The Inverse Trigonometric Equations

Additional Topics in Trigonometry

The Law of Sines and The Law of Cosines
Conic Sections
Parabolas
Ellipses and Hyperbola