Pre-Calculus Syllabus

Course Description/Goals:

Precalculus is the preparation for calculus. The course approaches topics from a function point of view, where appropriate, and is designed to strengthen and enhance conceptual understanding and mathematical reasoning used when modeling and solving mathematical and real-world problems. Students systematically work with functions and their multiple representations. The study of Precalculus deepens students' mathematical understanding and fluency with algebra and trigonometry and extends their ability to make connections and apply concepts and procedures at higher levels. Students investigate and explore mathematical ideas, develop multiple strategies for analyzing complex situations, and use technology to build understanding, make connections between representations, and provide support in solving problems.

Course TEKS/Objectives:

The Precalculus TEKS (Texas Essential Knowledge and Skills) are organized into reporting categories, each focusing on a specific area of algebra. These categories include: Functions; Relations and Geometric Reasoning; Numbers and Measurement; and Algebraic Reasoning. Each category contains specific standards (TEKS) that students are expected to master.
https://tea.texas.gov/sites/default/files/ch111c.pdf

Course Outline:

Semester 1	Semester 2
-Logarithmic Functions -Exponential Functions -Transformations and Power Functions -Compositions and Inverse Functions -Polynomials -Rational Functions -Basic Trigonometry	-Unit Circle -Trig Graphs -Trig Equations -Trig Identities -Right and Obtuse Triangles -Conics and Polar Equations -Parametrics and Vectors -Sequences and Series