

Pre-Calculus

Course Description

Calculus is a powerful, useful, and versatile branch of mathematics. While the core ideas of calculus (derivatives and integrals) are not hard to understand, calculus is a demanding subject because it requires a broad and thorough background of algebra and functions. Study of the topics, concepts, and procedures of pre-calculus is very strongly recommended for all college-bound students. These topics, concepts, and procedures are prerequisites for many college programs in science, engineering, medicine, and business.

Pre-calculus is the preparation for calculus. The study of the topics, concepts, and procedures of pre-calculus deepens students' understanding of algebra and extends their ability to apply algebra concepts and procedures at higher conceptual levels, as a tool, and in the study of other subjects. The theory and applications of trigonometry and functions are developed in depth. New mathematical tools, such as vectors, matrices, and polar coordinates, are introduced, with an eye toward modeling and solving real-world problems.