

Missouri State University
Department of Mathematics
Course Syllabus

TITLE OF THE COURSE: Trigonometry

NUMBER OF THE COURSE: MTH 181

COURSE DESCRIPTION

Prerequisites: "C" grade or better in MTH 135, or an approved score on a departmental placement test. Triangle trigonometry and its applications; trigonometric and inverse trigonometric functions; trigonometric identities and equations; Rational, exponential and logarithmic functions. A student may not receive credit for more than one of MTH 138, 181. Will not count toward mathematics major or minor. A grade of "C" or better is required in this course in order to take MTH 287. This course may not be taken pass/not pass.

PHILOSOPHY OF THE COURSE

The course is designed to provide students with a mastery understanding of the fundamental concepts of trigonometry and the abilities to use techniques of trigonometry. Emphasis is placed on reasoning and problem solving.

PURPOSE OF THE COURSE

To provide students with mathematical skills and concepts necessary for the study of trigonometry.

OUTCOMES OF THE COURSE

1. An understanding of the trigonometric functions and the inverse trigonometric functions.
2. An ability to prove trigonometric identities.
3. An ability to solve trigonometric equations.
4. An ability to solve applied problems using trigonometry.

OUTLINE OF THE COURSE

Trigonometric functions (10 days), trigonometric equations (5 days), trigonometric graphs (5 days), analytic trigonometry (10 days), applications of trigonometry (10 days).