

MATH 127 - Precalculus II (3 Credits)

DESCRIPTION:

Topics include an in-depth investigation of trigonometric functions and their graphs, analytic trigonometry, solutions of triangles, vectors, and analytic geometry. Prerequisite: Math 126 with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

NOTE: This course is essential for students planning to take calculus.

TEXT:

Precalculus (A Right Triangle Approach), Sullivan and Sullivan

NOTE: Full-time instructors have the right to use no text or a different text.

OUTLINE:

Ch 05 - Sections 5.1 - 5.8

Ch 06 - Sections 6.1 - 6.8

Ch 07 - Sections 7.1 - 7.3

Ch 08 - Sections 8.1, 8.4, and 8.5

Ch 09 - Sections 9.1 - 9.4, and 9.7

OUTCOMES:

- a. Analyze trigonometric and parametric function properties.
- b. Graph trigonometric and parametric functions.
- c. Verify trigonometric identities.
- d. Solve trigonometric and parametric equations.
- e. Solve triangles using the Laws of Sines and Cosines.
- f. Analyze the concept of vectors and polar coordinates.
- g. Investigate properties of conic sections.
- h. Apply and extend all concepts.

EVALUATION:

Grades will be determined by student performance in one or more of the following areas: in-class tests, take-home tests, homework assignments, quizzes, special projects, papers, attendance, and class participation.

Degree of importance and types of assessment used will depend on the instructor. However, at least 50% of the course grade used is to be determined by proctored individual exams/assessments.

This course satisfies or partially satisfies the Math component of a degree or certificate program at CSN.