

MATH 181 - Calculus I (4 Credits)

DESCRIPTION:

Differentiation and integration of algebraic and transcendental functions with applications. Prerequisite: Math 126 AND Math 127 or Math 128 all with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

TEXT:

Calculus of a Single Variable; 9th Edition; Larson, Edwards

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

OUTLINE:

Ch 01 - All Sections

Ch 02 - All Sections

Ch 03 - Sections 3.1 - 3.7

Note: Sections 3.8 and 3.9 are optional.

Ch 04 - Sections 4.1 - 4.5

Note: Section 4.6 is optional.

Ch 05 - Sections 5.1, 5.2, 5.4 - 5.7

OUTCOMES:

- a. Analyze the concept of function limits and continuity.
- b. Differentiate functions using fundamental rules.
- c. Perform differentiation techniques such as the general power rule, chain rule, product rule and quotient rule.
- d. Evaluate definite and indefinite integrals.
- e. Differentiate and integrate transcendental functions.
- f. 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.