

**COLUMBUS STATE COMMUNITY COLLEGE  
MATHEMATICS DEPARTMENT  
COURSE SYLLABUS**

Course Number: MATH 151

Course Name: Calculus and Analytic Geometry I

Credit Hour: 5

Quarter Offered: Autumn, Winter, Spring, and Summer

Prerequisite: MATH 150 with a grade of "C" or higher

**COURSE DESCRIPTION**

Introduction to differential calculus: functions, limits, continuity, derivatives, differentiation rules, derivatives of the trigonometric and transcendental functions, related rates, extrema, curve sketching, optimization. Applications to problems in science and engineering. Introduction to antiderivatives.

**TEXTBOOK**

Calculus: Early Transcendental Functions, 4<sup>th</sup> Edition, Larson/Hostetler/Edwards, Houghton-Mifflin, 2007

**UNITS OF INSTRUCTION**

2.1 - 2.5, 3.1 - 3.8, 4.1 - 4.8, 5.1