COLUMBUS STATE COMMUNITY COLLEGE MATHEMATICS DEPARTMENT COURSE SYLLABUS

Course Number: MATH 254

Course Name: Multivariable Calculus

Credit Hour: 5

Quarter Offered: Autumn, Winter, Spring, and Summer Prerequisite: MATH 153 with a grade of "C" or higher

COURSE DESCRIPTION

Introduction to multivariable calculus: Vector valued functions and motion in the plane and in space, functions of several variables, partial derivatives, directional derivatives, gradients, extrema, multiple integrals, line integrals and Green's Theorem; Applications to problems in science and engineering.

TEXTBOOK

 $Calculus: Early \ Transcendental \ Functions, \ 4_{th} \ Edition, \ Larson/Hostetler/Edwards, \ Houghton-Mifflin, \ 2007$

UNITS OF INSTRUCTION

12.1 - 12.5, 13.1 - 13.10, 14.1 - 14.8, 15.1 - 15.5