MAT 2140 - Calculus III (4)

Introduction to vectors, dot product, cross product, equations of lines and planes, calculus of vector valued functions, introduction to multivariable functions, differential calculus of multivariable functions, the chain rule, applications including extreme problems and Lagrange multipliers, integral calculus of multivariable functions, double and triple integrals, applications of double and triple integrals, line and surface integrals of vector fields, Green's Theorem, the Divergence Theorem, Stokes' Theorem.

Prerequisite(s): MAT 116, MAT 214, MAT 1150, or MAT 1150C.
Component(s): Lecture
Grading Basis: Graded Only
Repeat for Credit: May be taken only once
Course Category: Major Course, Service Course