

Calculus and Analytic Geometry III

MATH 2314

DEGREE PROGRAM COURSE DESCRIPTIONS

The student will compute partial derivatives, gradients, differentials, double and triple integrals in rectangular, cylindrical and spherical coordinate systems, curl and divergence of a vector field, and path and surface integrals of vector fields directly and by applying Green's Theorem, Stokes' Theorem and the Divergence Theorem; write parameterizations for lines, curves and surfaces; and solve application problems that include optimization, work and flows of vector fields.

PREREQUISITES?

MATH 2214 within the last year.

CREDIT HOURS

4