

Math 4574: Vector/Complex Analysis
[MEETING DAYS] [MEETING TIMES]
Fall 2020 (CRN #####)

Instructors: Dr. Edgar Saenz Maldonado **Email:** easaenzm@vt.edu
Office: 420 McBryde Hall

Dr. Joseph Wells **Email:** Joseph.Wells@vt.edu
Office: 420 McBryde Hall

Phone: 540-231-6536

Office Hours: Mon 12:00pm - 1:00pm, Tue 12:30pm - 1:30pm
other times by appointment

Texts (Optional): *Calculus: Early Transcendentals*, by James Stewart, 8th ed.
All contents of Chapter 16 will be covered.
Advanced Engineering Mathematics, by Peter V. O'Neil, 8th ed.
All contents of Chapter 19 – 23 will be covered.

Canvas: <https://canvas.vt.edu/courses/117988>

Prerequisite:

A passing grade in MATH 2204

Course Content:

The course consists of two parts

- Part 1: Vector analysis – vector fields, divergence, curl, line integrals, Green's Theorem, areas of surfaces, surface integrals, divergence, Stoke's Theorem.
- Part 2: Complex analysis – complex numbers, complex functions, complex differentiation, complex integration, sequences, series, power series, singularities, Residue Theorems, applications in evaluation of real integrals, conformal mappings.

Per VT Math Department policy, the specifics of the course policies have been redacted from this public-facing document.