

**Tennessee Technological University
Mathematics Department**

MATH 3810: Complex Variables

I. COURSE DESCRIPTION FROM CATALOG:

Complex numbers, calculus of complex variables, analytic functions, Cauchy's Theorem, series, the Residue Theorem, and applications. Lec. 3. Cr. 3.

II. PREREQUISITE(S): C or better in MATH 2110.

III. COURSE OBJECTIVE(S): To enable the student to obtain an understanding of the basics of complex analysis and its applications.

IV. TOPICS TO BE COVERED: Complex numbers, complex functions, complex differentiation, analytic and harmonic functions, complex integration, and infinite series representations.

V. ADDITIONAL INFORMATION:

VI. POSSIBLE TEXTS AND REFERENCES:

Fundamentals of Complex Analysis, 3rd ed., by Saff & Snider
Complex Analysis, 4th ed., Matthews & Howell

VII. ANY TECHNOLOGY THAT MAY BE USED:

Students with a disability requiring accommodations should contact the Office of Disability Services (ODS). 1
An Accommodation Request (AR) should be completed as soon as possible, preferably by the end of the first week of the course. The ODS is located in the Roaden University Center, Room 112; phone 372-6119.