

## MA 3605 - Fundamentals of Analysis I

Text: Elementary Analysis: The Theory of Calculus, by K. A. Ross.

**Course Objectives:** The objective of this course is to give the student a solid understanding of the basic concepts of analysis: convergence of sequences, continuity of functions, open and closed sets of Euclidean spaces. This is a mathematics course in the pure sense. Proofs will be emphasized, and the student will learn how to reproduce, understand, create and enjoy mathematical proofs.

Hours:	Sections	Topic
6-6	1-6	Numbers and Cardinality
9-15	7-12	Sequences, Limits, and Cauchy Sequences
5-20	14-16	lim sup, lim inf, and Series
5-25	17-20	Continuity
4-29	23-25	Uniform Convergence
4-33	Holidays, Exams, and Presentations	