

# MATH 5338

## NUMERICAL ANALYSIS (I)

### 1. COURSE PREREQUISITES:

Knowledge of calculus, linear algebra, and programming or consent of the instructor.

### 2. COURSE CONTENTS:

- Solution of one variable equations
- Interpolation and polynomial approximation
- Numerical differentiation and integration
- Direct methods for solving linear systems
- Iterative techniques in matrix algebra

### 3. TEXTBOOK:

Numerical Analysis by R.L.Burden and J.D.Faires (8th Edition)