

**Boston University,
College of Engineering
ENG ME 566:
Advanced Engineering Mathematics**

Location&TIME: EPC 208, M-W 4pm-6pm

Instructor: Professor Eytan Barouch

Office: 15 St. Mary room 142

Office hours: M-W 1pm-3:30PM (email for confirmation)

Email: eytan@bu.edu

**Grading: HW-20% class attendance&participation-20%,
test1-20%, October-13th (note: Monday schedule)
test2-20%, November 18th
take-home test 20% (due December 9th)**

Course Topics: Fall 2015

- **Introduction to Complex Analysis**
- **Review of Calculus Methods**
- **Transform Methods (Laplace, Fourier, z)**
- **Matrices and Linear Systems**
- **Vector Algebra and Calculus**
- **Difference and Differential Equations**
- **Numerical Analysis**
- **Mathematical Techniques in Optimization Theory**

NOTE: The purpose of this course is to prepare you passing the qualifying exam. Thus, you may request to discuss in class any topic you feel a need for and I will do my best to comply.