Department: Mathematics and Computer Sciences **Division:** Applied Mathematics **Level and Major:** Graduate

Course Title: Advanced Engineering Mathematics **Number of Credits:** 3 **Prerequisite: Lecturer:**

Course Description:

Course Goals and Objectives:

Course Topics:

- Introducing IVP and BVP
- Fourier transform
- Separation of variable method for analytical solution of PDEs
- Transformation methods for analytical solution of PDEs
- Complex Functions
- Numerical derivations
- Finite difference method

Reading Resources:

Evaluation: