Numerical Computing
Math 4800, Spring 2016

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Learning Outcomes:

The numerical computing course provides an overview of some important computational algorithms that are used as fundamental building blocks to solve a wide class of important problems in many fields including engineering, physics, chemistry and biology as well as economics, computer graphics and computer games.

Successful completion of the course should enable you to

1. be familiar with some common and widely used numerical algorithms used in the solution of equations and the approximations of functions, derivatives, and integrals.

2. implement, in Matlab, basic numerical algorithms.

3. understand the strengths and weaknesses of different methods.

4. understand the notions of accuracy, conditioning and convergence.