Introduction to the Course

Topic 1: Math 4610 Fundamentals of Numerical Analysis

This course presents fundamental content from numerical methods/analysis and introductory computational skills concepts. Numerical methods and some analysis of the numerical methods will be presented in the lectures. The content for each lecture will be presented from a list of topics that bounces around between advanced computational skills, numerical methods, and some mathematics to prove basic results. The topics will be covered in order as a continuous stream of material until the end of the semester. So, we may cover one or two topics during a single lecture or we may take multiple lectures to cover a single topic.

The course will not cover a long and thorough list of topics from computational mathematics. Instead of covering a long list of numerical methods, we will weave in computational skills like parallel programming, data visualization, and a few topics that are not ordinarily covered in a numerical analysis or numerical methods course.

The next step by going over a syllabus for the course.