

Math 517

Foundations of Computational Mathematics Spring 2003

Instructor: L. Faybusovich

Textbook: J. Ortega

Numerical Analysis: A second course

The aim of the course is to explain some of the main concepts of numerical mathematics: complexity and rate of convergence of algorithms, their numerical stability; ill-conditioning of numerical problems. These concepts will be illustrated by considering methods and algorithms of matrix analysis, methods of solving nonlinear equations and optimization methods.