

**Spring 2003**  
**CMPE 360 Numerical Methods**  
Can Özturan

**Course Hours and Location:** W Th Th 412, YD 116 , K.PARK 01,  
K.PARK 01

**Prerequisites:** MATH 252

**TA:** Ali Haydar Özer

**Course home page:** <http://www.cmpe.boun.edu.tr/courses/cmpe360>

**Course mailing list:**

- e-mail: [cmpe360@cmpe.boun.edu.tr](mailto:cmpe360@cmpe.boun.edu.tr)
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**Textbook:**

- R. L. Burden, J. D. Faires, Numerical Analysis, PWS-Kent Publishing Company.

**Topics:**

1. Floating Point Arithmetic
2. Solution of Nonlinear Equations in one variable
3. Direct and Iterative Methods for Solving Linear Systems
4. Eigenvalues and Eigenvectors, SVD
5. Interpolation and Polynomial Approximation, Curve Fitting
6. Numerical Differentiation and Integration
7. Solution of Ordinary Differential Equations (depending on time availability)

**Grading:**

Homeworks	20 %
Midterm 1	20 %
Midterm 2	20 %
Final	40 %