

Download File PDF Numerical Methods For Engineering

#Jenny



Finally I get this ebook, thanks for all these I can get now!

#Rio



Cool! I'am really happy

#Markus Jensen



I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu



wtf this great ebook for free?!

#Che Salsa



My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler



so many fake sites. this is the first one which worked! Many thanks



THE CATHOLIC UNIVERSITY OF AMERICA

SCHOOL OF ENGINEERING
DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

CSC 380-01 Numerical Analysis and Optimization
Spring 2011

Credit Hours: 3
Classroom: Pughson 000
Days and hours of class meetings: Mon, Wed, Fri 10:10AM - 11:00AM
Instructor contact information:
Name: Prof. Eitan El-Azaby
Office Location: Pughson Hall, Room 314A
Phone: (202) 319-5299
E-mail: ee@wvcc.edu
Office Hours: Mon, Wed, Fri 3:00PM - 4:00PM

Course Description
Numerical Analysis and Optimization methods to solve practical problems in computer science, business, engineering and science. Practical problem solving based on analyzing empirical, experimental or measured data where the precise mathematical model is approximated or not necessarily known. Limitations, trade-offs and margins of error are evaluated for various practical examples such as network traffic, engineering, science and business applications. MATLAB and/or C++ are used for computational problem solving. Suitable for computer science, mathematics, engineering, and business majors.

Prerequisites
Math 122. Recommended: Background in computer programming such as Visual Basic, C++ and/or MATLAB.

Recommended Text
Title: Numerical Methods for Engineers, 6th Edition
Author: Steven C. Chapra, Raymond P. Canale
Publisher: McGraw-Hill, 6th Edition, 2010
ISBN-10: 007741864
ISBN-13: 978-007741865

Topics to be covered
1. Importance of computers and the role of approximations and errors in the implementation and development of numerical methods.
2. Roots of equations and their usage in a wide variety of engineering problems.
3. Linear algebraic equations and their application in many fields of engineering.
4. A wide variety of engineering problems dealing with optimization.
5. Curve-Fitting and regression analysis.
6. Numerical integration and differentiation and their application for engineering problem solving.
7. Ordinary differential equations and eigenvalue problems. (TRDP)
8. Partial differential equations. (TRDP)

[Download PDF version of :](#)
Numerical Methods For Engineering