THE UNIVERSITY OF TEXAS AT EL PASO

COLLEGE OF SCIENCE

Department Of Mathematical Sciences

Course #: MATH 4329 (CRN12931)

Course Title: Numerical Analysis

Credit Hrs: 3

Term: Fall 2011

Course Meetings & Location: MW 13:30 – 14:50, LART 102

Prerequisite Courses: MATH 3323 and working knowledge of a high level programming language

Course Fee (if applicable) None

Instructor: Dr. Son-Young Yi
Office Location: Bell Hall 218

Contact Info: E-mail syi@utep.edu

Phone (915) 747-6864

Office Hours: MW 15:00 – 16:00

Textbook(s), Materials: Elementary Numerical Analysis, Third Edition, by Atkinson and Han, John

Wiley & Sons, 2004.

Course Website: http://www.math.utep.edu/faculty/yi/math4329f11.html

Course Objectives In this course, we study approximate solutions to mathematical problems that

(Learning Outcomes): cannot be solved or are difficult to solve analytically. We will look at

algorithms for solving basic problems and analyze the errors that are introduced. We will also look at the structure of computers and the

implications of using them in numerical calculations.

There are three main objectives of this course for students as outlined in the

text.

1. Students should obtain an intuitive and working understanding of some

numerical methods for the basic problems of numerical analysis.

2. Students should gain some appreciation of the concept of error and of the

need to analyze and predict it.

3. Students should develop some experience in the implementation of

numerical methods by using a computer. This includes an appreciation of

computer arithmetic and its effects.

Course Activities/Assignments: Homework: Homework will be collected regularly. Assignment will be

posted on the course website and announced in class. No late homework will

be accepted. Computer programming must be done in MATLAB.

Course Schedule: Complete course schedule will be posted on the course website.

Assessment of Course Objectives: Grade will be based on homework, two midterm exams, and a final exam.

Grading Policy: Homework: 20%, Midterm exams: 25% each, Final exam: 30%

Make-up Policy: No make-up exams will be given.

Attendance Policy: It is student's responsibility to attend every class. Students are expected to

arrive for class on time and to remain for the class entire period.

Academic Integrity Policy: http://admin.utep.edu/Default.aspx?PageContentID=2083&tabid=30292

Civility Statement: Please do not use cell phones, pagers, IPods, MP3 players, blue tooth devices,

etc. during class. Cell phones and pagers should be set to silent or vibrate, and any calls should be taken outside of class. Please do not wear headsets or blue

tooth devices during class.

Disability Statement: If a student has or suspects she/he has a disability and needs an

accommodation, he/she should contact the Disabled Student Services Office (DSSO) at 747-5148 or at <dss@utep.edu> or go to Room 106 Union East Building. The student is responsible for presenting to the instructor any DSS

accommodation letters and instructions.

Military Statement: If you are a military student with the potential of being called to military

service and/or training during the semester, please contact me by the end of

the first week of class.