CS/Math 340 Numerical Analysis I

Spring 2005 (3 credit hours)

Instructor:  Name: Dr. Eric Jiang
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Office Hours: Monday 1-3 PM, Tuesday 2-3:30 PM, Thursday 1-2:30 PM
and by appointment

Required Textbook:


Course Description:

This course offers an introduction to modern approximation techniques. It focuses on numerical solutions of equations and systems of equations, round-off error analysis, matrix algebra, interpolation, numerical differentiation and integration, numerical solution of differential equations and problem solving with MATLAB. The course provides a foundation for further study of numerical analysis and scientific computing.

Academic Integrity:

As stated in the University Bulletin, the University of San Diego is predicated on the principles of scholastic honesty. Academic dishonesty in any form is taken very seriously. Cheating on any exam or assignment in this class will result in a grade of “F” for the course. Your work in this course must be your own. Complete details regarding USD policy on academic integrity are available in the University Bulletin.

Course Requirements:

Attendance and Participation
You are expected to attend each class session. You will be responsible for all material covered during any absence. Your active participation in class discussions will definitely enhance the learning process.

Written Homework and Programming Projects
You are expected to read the topics before the class meeting in which they will be discussed. Several written assignments and programming projects will be assigned during the semester in order to facilitate your understanding of the material, and will be due on a designated date and time. They will be collected and graded. Projects will be graded based on
their correctness and completeness, the efficiency and presentation. In general late projects will not be accepted for credit.

**Quizzes**
A number of quizzes will be given throughout the semester. There will be NO makeup quizzes.

**Exams**
There will be two (2) midterm tests and a final exam. Exams will be comprised of questions and problems based upon textbook, topics covered in the class. In general, NO makeup exams will be given.

**Grading:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Written &amp; Programming assignments</td>
<td>30%</td>
</tr>
<tr>
<td>Two Tests</td>
<td>35%</td>
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<tr>
<td>Final exam</td>
<td>25%</td>
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**Grading Scale:**

- 97% - 100%: A+
- 93% - 96%: A
- 90% - 92%: A-
- 87% - 89%: B+
- 83% - 86%: B
- 80% - 82%: B-
- 77% - 79%: C+
- 73% - 76%: C
- 70% - 72%: C-
- 60% - 69%: D
- below 60%: F

**Notes:**

Any announcements/messages after class will be sent to your USD email account which should be checked periodically.

I reserve the right to raise the grades of those students who show exceptional improvement over the course of the semester, participate fully and actively in class, and keep up in the assignments. I also reserve the right to change the number of exams if necessary.

The grade of Incomplete is reserved for special cases only (where there is an acceptable reason that prevents you from completing the work of the course) and will be decided on individual basis.

**Have A Wonderful Semester!**