Instructor Dr. Gail Mackin

Office ST 320

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Office Hours Monday, Wednesday & Friday: 10:00-10:50am; Tuesday & Thursday: 11:00am-12:00pm; or by appointment.

Text Numerical Analysis 7rd ed. by Burden & Faires.

Technology Some programming will be required. I will support MATLAB and Mathematica, both available in the Advanced Computer Science Lab (ST 344) and General Computing Lab (ST 359). Students will be provided with accounts for both these labs. Although you may program in any language you are proficient in, I will provide examples and demonstrations in MATLAB.

Time and Place Class meets in ST 254 from 1:00-1:50pm, Monday, Wednesday & Friday.

Attendance Policy I expect students to attend all classes. Your grade is indirectly dependent upon your attendance. A number of missed classes will affect your comprehension of the material and, hence, may also affect your grades.

Course Prerequisites The student must be proficient in calculus, linear algebra and basic programming to succeed in this course. The prerequisites for MAT 360 are grades of C or higher in both MAT 225 and CSC 260.

Course Content The goal of this course is to familiarize students with various numerical methods for solving nonlinear equations, interpolation and approximation of polynomials, differentiation, integration and solving initial value problems, all in one dimension. We will also spend considerable time proving the accuracy and convergence of such methods. We will cover material from Chapters 1-4 and possibly Chapter 8.

Course Policy Your grade in this course will be determined by homework assignments, written project, a midterm and a final. Reading assignments and homework will be assigned for each chapter. Homework will be collected on average of every two weeks. I do not accept late assignments. The midterm and final may consist of an in-class and/or a take-home section. The final exam is scheduled for 1:00-3:00pm, Wednesday, December 17, 2003. Make-up exams will be offered
at my discretion, but only in the case of a documented illness, university function or family emergency. I expect the student to be responsible for informing me of any such situation at the earliest possible moment.

I hold students responsible for all announcements made in class. This includes schedules for exams, homework assignments and any other important announcements.

Your final grade will be determined as follows:

<table>
<thead>
<tr>
<th>Homework</th>
<th>35%</th>
<th>An average of 90% guarantees the final grade: A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>10%</td>
<td>An average of 80% guarantees the final grade: B</td>
</tr>
<tr>
<td>Midterm</td>
<td>25%</td>
<td>An average of 70% guarantees the final grade: C</td>
</tr>
<tr>
<td>Final</td>
<td>30%</td>
<td>An average of 60% guarantees the final grade: D</td>
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</tbody>
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NOTE: You must show all details on all graded work in order to receive any credit.

**Important Dates**
- August 29 – Last day to ADD/Drop (100% tuition).
- September 1 – No Classes.
- September 12 – Last day to drop without effecting transcript (50% tuition).
- October 20-21 – Fall Break: No classes.
- November 1 – Last day to withdraw without penalty (0% tuition).
- November 26-29 – Thanksgiving Holiday: No classes.
- December 13 – Last day of classes.
- December 15-20 – Finals.

**Honor Policy**
Honesty in your academic work will develop into professional integrity. I do not tolerate any form of academic dishonesty. The **minimum** penalty for cheating in any form will be a zero on the work in question and the offense will be reported to the proper authorities.

**Addendum**
Suitable changes may be made to this course contract during the course of the semester.