School Of Mathematical & Natural Sciences Course Syllabus
MATH 3533: Differential Equations, Spring, 2009

Instructor: Dr. H. Sayyar
Office: Science Center B-12
Phone: 460-1366
E-mail: sayyar@uamont.edu
Office Hours: MWF 9:00 AM - 10:00 AM & 2:00 PM - 3:00 PM, TTH 2:00 PM-3:00 PM. Also by appointment.


COURSE PREREQUISITES: A grade of C or better in Calculus II (Math 3495).

COURSE OBJECTIVES: In this course we learn modeling of physical phenomena by differential equations and methods of analyzing differential equations. We will learn different analytic techniques of finding the functions which solve differential equations, qualitative techniques of analyzing differential equations.

COURSE CONTENT & EXAMINATIONS: The dates will be given throughout the semester.

<table>
<thead>
<tr>
<th>Test</th>
<th>Topic</th>
<th>Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chapter 1: Introduction</td>
<td>1.1 - 1.3</td>
</tr>
<tr>
<td>2</td>
<td>Chapter 2: First Order Differential Equations</td>
<td>2.1 - 2.5</td>
</tr>
<tr>
<td>3</td>
<td>Chapter 2: First Order Differential Equations</td>
<td>2.5 - 2.9</td>
</tr>
<tr>
<td>4</td>
<td>Chapter 3: Second Order Linear Equations</td>
<td>3.1 - 3.4</td>
</tr>
<tr>
<td>5</td>
<td>Chapter 3: Second Order Linear Equations</td>
<td>3.5 - 3.8</td>
</tr>
<tr>
<td>6</td>
<td>Chapter 4: Higher Order Linear Equations</td>
<td>4.1 - 4.4</td>
</tr>
<tr>
<td>7</td>
<td>Chapter 5: Series Solutions of Second Order Linear Equations</td>
<td>5.2 - 5.6</td>
</tr>
<tr>
<td>8</td>
<td>Chapter 6: The Laplace Transform</td>
<td>6.1 - 6.4</td>
</tr>
<tr>
<td>Final</td>
<td>Comprehensive</td>
<td>May 7, 1:30 PM</td>
</tr>
</tbody>
</table>

HOMEWORK & QUIZZES: There will be homework throughout the semester. Each homework will consist of problems from the sections covered. Problems on each test will be similar to the problems assigned as homework. Therefore diligent completion of ALL assigned problems is essential to the successful completion of each test.

GRADING: GRADING: The final grade for the course will be averaged as following:

<table>
<thead>
<tr>
<th>Homework</th>
<th>Tests</th>
<th>Final Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>65%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Grades are assigned on the following basis:

A; 90 - 100%  B; 80 - 89%  C; 70 - 79%  D; 60 - 69%  F; 0 - 59%
SPECIAL POLICIES

1. If no tests are missed, your score on the final exam will replace your lowest test grade if the score on the final is higher. If one test is missed, then the grade on the final examination will be substituted for that test grade. Note that the total homework grade will not be substituted. There will be NO MAKEUP TESTS.

2. Cheating and plagiarisms are unacceptable activities and a grade of zero will be given for any case of verified cheating. All occurrences will be reported to the Vice Chancellor for Academic Affairs for possible other actions. Disorderly Conduct: Any behavior which disrupts the regular or normal functions of the University community, including behavior which breaches the peace or violates the rights of others is prohibited under the Student Conduct Code. In particular, all cell-phones must be off for the entirety of class period.

3. You are expected to attend all class meetings and make a serious effort to do the assigned work. The successful student will attend every scheduled class meeting. Irregular attendance is the greatest factor in unsuccessful performance in this course. You cannot possibly learn the material if you do not go to class. You should see your instructor when you need help. You should consider forming study groups with some of your classmates.

EXPECTATIONS OF THE STUDENT: While this course is not particularly difficult for those who make a commitment to working on the course it does require a commitment of time and energy. The pace of the course is fairly rapid and it is necessary for you to attend class and seriously attack the homework, review recent lectures, and preview material to be discussed at the next lecture. You should commit at least two hours of study time for each hour of lecture and you should focus on understanding the basic principles presented rather than simply mimicking procedures.

IMPORTANT DATES:
January 14: First day of classes.
January 14-21: Late registration. A $25 late registration fee will be assessed.
January 14-21: Students may make schedule changes.
January 19: Martin Luther King Holiday. Offices and classes closed.
January 21: Last day to register or add spring classes.
February 27: Deadline to apply for August and December graduation.
March 16-20: Spring break.
April 6: Preregistration for summer and fall begins.
April 8: Last day to drop with W.
April 17: Preregistration for summer and fall ends.
April 30: Last day to withdraw from class.
May 5: Last day of classes.
May 6-12: Final exams.
May 15: Commencement

STUDENTS WITH DISABILITIES:
It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926.
McGehee: Office of Special Student Services representative on campus; phone 870 222-5360; fax 870 222-1105.
Crossett: Office of Special Student Services representative on campus; phone 870 364-6414; fax 870 364-5707.
UAM will no longer mail grade reports to all students. You may access your grades through Campus Connect on the UAM homepage, http://www.uamont.edu/. To have your grades mailed to you, complete the grade request form available in the Registrar’s Office in Monticello or the Student Services offices in Crossett and McGehee.