

Math 242 - Elementary Differential Equations
Spring 2008 Course Information
University of South Carolina

Instructor: Matthew R. Gamel
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Course Description: This is a basic techniques oriented course in ordinary differential equations. I plan to cover solution techniques for first order equations, certain types of higher order equations, linear equations, applications, integral transform methods, and basic numerical techniques if time permits.

Prerequisites: Placement in this course is determined by the mathematics placement exam or a minimum grade of C in Math 142 (Calculus II). These are the minimum requirements one needs to enroll in this course. However, by this time, you should have a cursory and elementary understanding of topics from Calculus I and Calculus II including but not limited to the following topics: limits, derivatives, integration, and improper integrals. If you are uncomfortable with these topics, you may either want to review this material or drop the course. *We will not have adequate time to review these topics and I will expect you to know and be comfortable with these things.*

Meeting Time and Place: We will meet on Tuesdays and Thursdays from 4:40PM to 5:55PM in LeConte 310.

Textbook: The official textbook for this course is Edwards and Penney's *Differential Equations: Computing & Modeling*. We will be using the 4th edition. I will primarily use the text to assign specific problems but will not follow it exactly.

Calculator Policy: No calculators of any kind will be allowed unless otherwise specified.

Attendance: Attendance is expected but not required. You will, however, be responsible for material missed in class. It is in your best interest to make every attempt to attend the lecture as many of my lectures will not follow the text precisely.

Student Conduct: I sincerely hope that I have no need to say anything about this. Problems with boorish and uncivilized conduct shall be dealt with swiftly and harshly and may adversely effect your grade.

Course Website: I am not using Blackboard so please check the website for this course frequently for announcements, solutions to homeworks, homework problems, and so forth. It is important for you to do this regularly.

Course Evaluation: You will be evaluated on the basis of a weekly homework assignment, two examinations, one comprehensive final, and possibly several in class quizzes.

Homework will be assigned throughout the week and will be due every Thursday. I will typically post homework assignments on the course website if I do not explicitly mention them in class. It is extremely important for you to keep up with the homework assignments as it will be difficult for you to catch up if you fall behind in the work. More importantly, homework will help you to better understand the material covered in class. Insofar as grading is concerned, I will typically select several problems at random to grade. *Late homework assignments will not be accepted.*

Exams cannot be made up except in very extenuating circumstances. If you are unable to attend an exam, you must have a legitimate excuse and any necessary documentation. By legitimate excuse, I am referring to a medical or family emergency over which you have no control or a legitimate circumstance about which you have discussed with me at least one week in advance.

Course Breakdown: Here is an itemized breakdown of homework and exams:

Homework	40 %
Midterm	25 %
Final Exam	35 %

Your guaranteed letter grade will then be based on your combined, weighted percentage of points earned for the course: 100%-90% = A, 89%-85% = B+, 84%-80% = B, 79%-75% = C+, 74%-70% = C, 69%-65% = D+, 64%-60% = D, 59% and below = F.

Cheating: Cheating or any kind of academic dishonesty of any form will not be tolerated. If I catch you cheating, you will receive an automatic F for the course.

Extra Help: If you need extra assistance, please feel free to drop by my office. However, I am fairly busy so if you need me to devote my undivided attention to you, please try to come during my office hours. I will do all that I can to help you succeed in this course. If my office hours conflict with your schedule, please make an appointment to see me in my office. Also, there will be free tutoring provided to you in the Math Lab in LeConte 105. I will provide more information on this during class.

Fine Print: I reserve the right to make changes to this syllabus and to course procedure. I will inform you in class when and if these changes are made.