Math 307
Differential Equations

Instructor: Dr. Glenn Williams
Office: ECS 2111, Office Hours: 11:00-12:30, 1:30-2:30, Tue & Thur. Other times by appointment.
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Catalog Description: Topics include first order differential equations and systems, second and higher order linear equations, solution by series and Laplace Transform, and applications.

Prerequisites: MATH 212 (Calculus II)


Grading Policy:
- Quizzes 10%
- Class Tests (3) 60%
- Final Examination 30%
  (Thursday, May 4, 3:45-6:45 p.m., BAL 334)

Grading Scale:

Course Overview:
Math 307 is a three credit-hour course in the basics of solving ordinary differential equations. You will be required to quickly identify the type of ordinary differential equation, and then apply the appropriate solution technique. A solid knowledge of Calculus is required. If you did poorly in Calculus I & II, you need to immediately review differentiation (especially product and chain rules applied to exponentials and trigonometric functions) and integration techniques (especially integration by parts). A short review has been provided in the appendix. Also, the problem sets in the first few sections will help you practice this review material. You are encouraged to read and understand the text. There are many examples of physical problems that, due to time restrictions, will not be presented in class.

Last day to withdraw: Tuesday, March 14.

Disability Services Policy:
Reasonable accommodations will be made for students with disabilities provided those students have registered with the Office of Disability Services (683-4655).

Honor Code:
By enrolling in this course you agree to adhere to the honor code on all written work: "I pledge to support the Honor System of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism." I am aware that as a member of the academic community, it is my responsibility to turn in all suspected violators of the honor code.

During exams spread out as much as possible and try not to sit next to another student. The instructor reserves the right to relocate any student(s) to ensure the Honor Code is not compromised.

Writing Policy:
The exams will require that you respond in writing to present a solution, derivation or proof. All work, whether it uses standard or symbolic writing, must be presented in a clear and logical form, and be reasonably free of spelling, grammar and punctuation errors. To receive full credit on homework and exams, show all work in arriving at your answers.
Computing Policy:
The class tests and the final exam will be "closed book, no calculators, no computers."

Attendance Policy:
A student who must miss class is expected to get the notes from other students. Students are expected to be present for all quizzes, tests and exams. Although excessive absences can have a considerable negative effect on a student’s learning and performance, absences from class are not counted.

Make-Up Exam Policy:
There will be no make-up assignments or tests. Under exceptional circumstances, beyond the student’s control, the final exam grade may be recorded for ONE (and only ONE) missed test. The student must provide written documentation of the reason for missing the test, no later than one week after the test. If the instructor approves this explanation, the test grade will be adjusted accordingly. Otherwise, a score of zero will be entered for the missed test.

Homework and Quizzes:
At the end of each section is a short list of problems directly related to the material presented in the text. Unless otherwise specified by the instructor, you are required to be able to solve all of the problems. Detailed solutions are given for each problem. If you need to look at the solutions to obtain the correct answer, you should practice the problem until you can solve the problem by yourself. Homework problems will not be graded, but will be representative of those given on quizzes. Your performance in this course will generally reflect the skill attained at solving these problems.