

MATH 2700 Differential Equations

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Course website: <http://www.math.uga.edu/~caner/08math2700>

Please visit this website frequently to read important announcements (updates on test times, class schedule, syllabus etc.) and to get the homework assignments and quiz solutions.

Office Hours: 1:45pm-2:30pm Tuesdays and Thursdays (Boyd), and anytime by appointment (Driftmier or Boyd).

Text: Elementary Differential Equations and Boundary Value Problems, by *William E. Boyce and Richard C. DiPrima*, Wiley.

Introduction: The laws of the universe are written in the language of mathematics. Algebra is sufficient to solve many static problems, but the most interesting natural phenomena involve change and are described only by equations that relate changing quantities. The study of differential equations has two principal goals; to discover the differential equation that describes a specified physical situation, and to find the appropriate solution of that equation. In our course; we will cover first and second order differential equations, Laplace transforms, systems of differential equations, Fourier series and partial differential equations.

Classes: You will find the way I cover the course material in class a lot more clear compared to the textbook. So I suggest that you try to learn in class while taking notes, rather than just taking notes and trying to learn the topic using your notes or the textbook. It is sometimes hard to understand everything perfectly in class, so I strongly encourage you to ask questions as I teach.

Help: You are always welcome to e-mail me to set up an appointment if you can't make it to the office hours. There will be additional help in the mathematics department where you can get free help from graduate students in a designated study room. The *Mathematics Study Hall* provides free math tutoring:

http://www.math.uga.edu/undergraduate/student_services.html

Evaluation: Almost all lectures will be based on the previous one, so I strongly recommend that you study daily on your own. To encourage this, there will be homework assignments and pop quizzes. Homeworks will not be graded, however, your quiz grades will count towards your final grade. Your lowest two quiz scores will be dropped. Homework assignments will be posted on the course website as they become available. It is your responsibility to check the website to get the HW assignments. The course grade will be based on quizzes (23%), a midterm exam (33%), and a final exam (44%). The use of calculators and computers are not permitted during the exams. All academic work must meet the standards contained in "A Culture of Honesty". Students are responsible for informing themselves about those standards before performing any academic work.

Attendance: Attendance is required. I reserve the right to withdraw you from the class if you miss too many classes. If you miss any classes, it is your responsibility to get notes from your classmates and make up for the class you missed.

Make-up exams: Make-ups for the exams will **only** be given for documented reasons of illness, family emergency, or participation in a university sponsored event. Make-up exams may be oral. Please try to arrange a make-up at the earliest possible time. There will be no make-ups for missed quizzes since your lowest three quiz scores will be dropped. I will make an exception **only** if you miss at least three quizzes and have documented reasons for not attending all of them.

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.