

The Sheet That Should Be Handed Out The First Day Of Class

Applied Differential Equations ~ Fall 2012

General Stuff

The Course: Applied Differential Equations, MA 238 (section 01)

Prerequisite: MA 172 (Calculus B) **Pre/Co-requisite:** MA 201 (Calculus C)

Class Meets: Monday, Wednesday & Friday, 9:10 to 10:05, in Shelby Center 207

The Text: The 2012-2013 version of *Ordinary Differential Equations* by Howell. Available cheaply in the local textbook markets, or you can download chapters from it from the text's website, www.math.uah.edu/~howell/DEtext. (Don't try using any older versions — there are too many changes.)

Class Web Site: www.math.uah.edu/~howell/DE1

Your Instructor

Name: Prof. Ken Howell

Office: Shelby Center 201B

Office Hours: Monday 10:15 – 11:45 & 1:45 – 2:15
Wednesday 10:15 – 11:45 & 1:45 – 2:15
Friday 10:15 – 11:45 & 1:45 – 2:15
(*other hours by appointment*)

Email Address: howell@math.uah.edu

(Email is a good way to contact me. I check my email regularly everyday, even on the weekends, whether I'm on campus or not.)

Office Phone: 256-824-6410

Instructor's Home Phone (to be used only if you really, *really* have to): 256-880-7040
(But consider email, instead. You're much less likely to catch me at an embarrassing moment.)

Course Content

Goals and Objectives: This is an elementary introduction to the theory and techniques for dealing with the basic differential equations usually encountered by beginning science and engineering students. The primary goal is for you to gain the understanding and skill to set up and solve (or otherwise extract usable information from) the differential equations you are likely to encounter in applications arising in other courses and in work. As a bonus, because of the nature of the material, you will get to reinforce your knowledge and proficiency with many of the basic concepts and methods taught in the first two calculus courses.

What We Will Learn: Here is a thumbnail syllabus for the course:

- I. *Basic Introduction*
- II. *First Order Equations*
- III. *Higher Order Linear Equations*
- IV. *Laplace Transforms*

Additional topics may be covered if time permits.

Grading

Exams: There will be three tests (100 pts. each) and one final (200 pts.).

Quizzes: A bunch, of which I will only count your best seven. Those seven, together, will count as one test (100 pts.).

Tests and Quiz Schedule: On every Friday of class *after* August 24, we will have either a full test or a short quiz. We will not have tests or quizzes on any other days (except to make up a Friday missed due to bad weather or other calamity).

You may assume that each Friday's quiz will not require material from the immediately previous Wednesday's lecture or homework.

Makeups: There will be ***NO MAKEUPS for missed QUIZES!*** Not even if you want to take the quiz early or have a very good excuse and a signed note from someone who thinks they can authorize it! Really! So don't ask!

TESTS are a different matter. I usually give makeups for missed tests, though that may depend on your reason for missing the test, how long you wait to see me about missing the test, and whether I had a good breakfast that day.

Homework: Tons of homework will be given, but none will be graded. Failure to do the homework, however, will probably lead to failure on the quizzes and tests.

Computing Your Grade: Each test determines 1/6 of your grade, as does your best 7 quiz grades. The remaining 1/3 of your term grade comes from the final.

(By the way, I do assign +/- grades when, in my judgment, they are appropriate.)

The Final: 8:00 to 10:30, Friday, December 7, 2012

Stuff I Should Not Have To Tell You But This Is Not A Perfect World And Someone Will Probably Complain If The Following Is Not Included

Electronics in the Classroom: All cell phones, ipods, iphones, ipads, ipeeps, walky-talkies, blackberries and other electronic fruit, game machines, and all other gadgets of communication and/or entertainment that can be picked up and thrown against the wall are to be turned off during class. If you have a good reason to leave your phone on, ask permission of the instructor.

Academic Integrity: General guidelines concerning “academic integrity” can be found in the Code of Student Conduct chapter of the Student Handbook. Any work you hand in for a grade must be your own work!

Disabilities: This instructor and the University of Alabama in Huntsville will make reasonable accommodations for students with documented disabilities. If you need support or assistance because of a disability, you may be eligible for academic accommodations. Students should identify themselves to the Disability Support Office (256-824-6203, Madison Hall 136) and their instructor as soon as possible to coordinate accommodations.

Complaint Policies: If you have difficulties or complaints related to this course, your first action usually should be to discuss them with me (the instructor). If such a discussion would be uncomfortable for you or fails to resolve your difficulties, you should contact Professor Li, Chair of the Department of Mathematical Sciences. Professor Li’s office is SC 258-A. His telephone number is 256-824-6470. If you still are unsatisfied, you should discuss the matter with Dr. Daniel Rochowiak, Associate Dean of the College of Science. Dean Rochowiak’s office and telephone number are MSB C206 and 256-824-6844.

If you feel it necessary to go beyond the Associate Dean, then the chain of complaint would be the Dean, the Provost, the University President, the Governor of Alabama, the President of the United States of America, and, finally, God.

UAlert System: The University has the UAlert emergency notification system to warn you of imminent danger through emails, voice mail and text messages. Warnings are automatically sent to all campus email addresses. To also receive text and/or voice message alerts, you must enroll and provide the appropriate contact information (which is kept confidential). For more information and to enroll, visit the UAlert web site, <http://ualert.uah.edu>.