

Math 2584C  
Section: 003  
POSC A211

**Differential Equations and Laplace Transforms**  
MWF 8:30 – 9:20

Spring 2013  
Prof. Matthew Clay

**Office:** SCEN 416

**Email:** mattclay@uark.edu

**Phone:** 575-5195

**Course Website:** <http://comp.uark.edu/~mattclay/Teaching>

**Office Hours:** Monday: 1:30 – 2:30 and Wednesday: 10:00 – 12:00

If you are unable to use any of the above times, please make an appointment to see me.

**Graduate Assistants/Drills:**

D005	TR 8:30 – 11:20	Wanqing Cheng	wcheng@uark.edu
D006	TR 4:30 – 5:20	Don Hixon	dphixon@uark.edu
D007	TR 11:30 – 12:20	Vinay Kalyankar	vkalyank@uark.edu
D008	TR 12:30 – 1:20	Don Hixon	dphixon@uark.edu

**Text:** *Differential Equations with Boundary Value Problems*, 7<sup>th</sup> edition, by Dennis G. Zill and Michael R. Cullen, Brooks/Cole Publishers. We will cover most of Chapters 1–5, 7, 8.

**Prerequisites:** Math 2554/2564. Knowledge of the mathematical concepts learned in Calculus I, II, especially differentiation and integration techniques as applied to polynomials, exponential, and trigonometric functions.

**Goals:** You will learn how to understand the language of differential equations, use them as models of physical processes in science and engineering, find and analyze their solutions, and employ the Laplace transform as an alternative means of finding solutions.

**Academic Honesty Policy:** As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail. Each University of Arkansas student is required to be familiar with and abide by the University’s “Academic Integrity Policy” which may be found at <http://honesty.uark.edu>. Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.

**Class Conduct:** Attendance (both physical and mental) in lectures and drill sections is *mandatory*. Using a mobile device or a laptop inappropriately counts as an absence and *you will be asked to leave the classroom*.

**Exams/Quizzes:** There will be three in class exams (Monday, February 11, Wednesday, March 13 and Friday, April 12) and a final exam on Monday, May 6 at 8:00 – 10:00 AM. There will be unannounced quizzes approximately every week, either in lecture or drill.

A make-up for an exam will not be given without a compelling reason and my *prior consent*. *You must inform me before the exam* if you are to miss it due to illness, University related activity or religious holiday. You must inform me either through a phone call or in person. A make-up for a quiz will allowed for justifiable and documented absences. *This is a very strict policy*.

**Homework:** Homework is assigned daily but will not be collected. It is expected that you have attempted each assigned problem. *Homework assignments are very important to the learning process. Math is not a spectator sport, the only way to get better is to practice.*

**Calculators:** Calculators are not permitted on any quiz or exam.

**Course Grade:**

- Quizzes (Weekly) - 10%
- Exam 1 (Monday, February 11) - 20%
- Exam 2 (Wednesday, March 13) - 20%
- Exam 3 (Friday, April 12) - 20%
- Final (Monday, May 6, 8:00 – 10:00 AM) - 30%

Letter grades will be assigned according to:

$A : 100 - 87; B : 86 - 75; C : 74 - 63; D : 62 - 50; F : 49 - 0$

**Important Dates**

Monday, January 14	Classes Start
Monday, January 28	Last day to drop without W
Monday, February 11	In class exam 1 (20% of grade)
Wednesday, March 13	In class exam 2 (20% of grade)
Monday, March 18 – Friday, March 22	Spring Break
Friday, April 12	In class exam 3 (20% of grade)
Friday, April 19	Last day to drop with W
Thursday, May 2	Last day of classes
Monday, May 6	Final Exam (8:00 – 10:00 AM) (30% of grade)

See <http://calendars.uark.edu> for the complete academic calendar and final exam schedule.

**Special Accommodation:** Students who are registered with the Center for Educational Access must notify the instructor in writing by the end of the first week of class, or within one week of registering with CEA.

**Inclement Weather Policy:** Class will be held if the University is officially open. Allowances will be made if you are unable to safely reach the campus, but, bravely, class will go on! Do not call the Math office for inclement weather information. Instead, you should call the following telephone number: 575-7000.

**Disclaimer:** Information on this syllabus is subject to change. Any change will be announced in lecture.