# MATH 3113: Introduction to Ordinary Differential Equations Course Syllabus <br> Fall 2015 

Sections 001 and 002
MWF 1:30 pm - 2:20 pm @ PHSC 122 (001),
MWF 11:30 pm - 12:20 am @ PHSC 323 (002)

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Textbook: C. H. Edwards, D. E. Penney, and D.T. Calvis. Differential Equations and Boundary Value Problems, $5^{\text {th }}$ Edition

Prerequisites: MATH 2423 or MATH 2924

Objective: We will learn how to solve first-order differential equations, how to solve linear differential equations of second and higher order, how to use Laplace transforms to solve differential equations, and how to solve systems of differential equations. We will also study a few selected examples showing how differential equations arise in scientific problems.

Withdrawal Dates: Through September $4^{\text {th }}$, you may drop the course and no grade will be recorded. Dropping the course from September $8^{\text {th }}$ to October $30^{\text {th }}$ will result in an automatic W grade. Dropping the course later than that requires a petition to the Dean, and will result in a grade of either W or F .

Academic Honesty: The University of Oklahoma takes great pride in academic honesty, thus cheating of any kind will not be tolerated.

Students with disabilities: The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. If you require special accommodation in this course you are requested to speak with the instructor as early in the semester as possible. Students with disabilities must be registered with the Office of

Disability Services prior to receiving accommodations in this course. For further information please see http://www.ou.edu/drc/.

Homework: Homework will be assigned and collected once a week. The week's assignment will be collected at the beginning of class on the subsequent Friday. You are encouraged to get any help you need to solve the homework problems. However, once you understand how to solve the problem, the write-up should be your own. No late homework will be accepted for any reason. However, your five lowest homework scores will be ignored when calculating your homework grade.

Videos: We will use lecture videos to supplement the course. The videos will be listed on the course website. Please make sure to watch and understand the videos before you attend the corresponding lecture. To compensate for the time you spend watching the videos, there will be less homework for this class than for a normal MATH 3113 lecture class.

Quizzes: There will usually be a one-question quiz every class day. These quizzes will be obvious to anyone who has watched the videos assigned for that day. If you cannot make it to class that day for a reason the instructor deems acceptable, you will get credit for that day's quiz.

Lectures: Lectures time will be used for working on math problems in teams of three or four. Please ask for help from me or from your team-mates if you don't understand a step from the problem. Please be prepared to help a teammate who understands less about the problem than you do.

Tests and Final exam: There will be three closed book, closed notes, and closed homework in-class tests on September 16, October 28, and December 4. Students will have the entire class time to take the tests. The final exam is a comprehensive exam and will be held on Friday, Dec 18 ${ }^{\text {th }}$ at 8:00-10:00 am for the 001 section, and Monday, Dec $14^{\text {th }}$ at $1: 30-3: 30 \mathrm{pm}$ for the 002 section. These dates cannot be modified.

Make-up Policy: Make-up tests will be given only for reasons deemed acceptable by the instructor, and only with written documentation. Make-up tests must be taken within one week of the original date. If you have three finals on the same day, OU policy says that you may only move the tests that come later in the day. If you are in my 002 section, please let me know by November $30^{\text {th }}$ if it is your third final on Monday and you want to move it.

Calculator Policy: This is a course of mathematical ideas and techniques, not a course of mechanical computation. You may use a calculator when working on the homework assignments. In class and when taking exams, a calculator will not be needed and will not be permitted.

## Grading Distribution:

Homework................. $15 \%$
Quizzes..................... $10 \%$
Tests......................... $55 \%$
Final Exam...............20\%

## Grading Scale:

A:....100\% - 90\%
B:...... $89 \%-80 \%$
C:...... $79 \%-70 \%$
D:......69\%-60\%
F:...... $59 \%$ and below

