MATH 3113: Introduction to Ordinary Differential Equations
Course Syllabus
Summer 2015 Block D

Section 170
MTWThF 1:00 – 2:15 pm @ PHSC 224 (exams in PHSC 201) May 11- June 26

Instructor: Dr. Darren Ong
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Website: `www2.math.ou.edu/~darrenong/3113Summer15.htm`

Textbook: C. H. Edwards, D. E. Penney, and D.T. Calvis. *Differential Equations and Boundary Value Problems*, 5th 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 May 10th, you may drop the course and no grade will be recorded. Dropping the course from May 11th to May 27th 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 day. The day's assignment will be collected at the beginning of class on the next day. 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 eight 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 **May 19**, **June 4**, and **June 22**. Students will have the entire class time to take the tests. The final exam is a comprehensive exam and will be held on **Friday, June 26 $^{\text{th}}$**. All the tests and the final will take place in PHSC 201.

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.

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