

**MATH 3113: Introduction to Ordinary Differential Equations**  
**Course Syllabus**  
**Fall 2014**

**Section 005**  
**TR: 9:00 – 10:15 am**  
**PHSC 0114**

**Instructor:** Dr. Darren Ong  
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**Office Hours:** 3:30-4:30pm Fridays, 2:30-3:30pm Mondays  
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**Textbook:** C. H. Edwards and D. E. Penney, *Differential Equations and Boundary Value Problems*, 4<sup>th</sup> 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.

**Method:** 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, we will do part of the homework in class, so you have less homework to do at home.

**Withdrawal Date:** Through October 24<sup>th</sup>, you may drop the course and receive a W grade. Dropping the course on October 27<sup>th</sup> or later 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 daily and it will be collected once a week. The week's assignment will be collected on the subsequent Tuesday. 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 three lowest homework scores will be ignored when calculating your grade.

**Tests and Final exam:** There will be three closed book, closed notes, and closed homework in-class tests on **September 9, October 16, and November 25**. Students will have the entire class time to take the tests. The final exam is a comprehensive exam and will be held on **Thursday, December 11<sup>th</sup>** at 8:00 - 10:00 am. This date **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, and no make-ups may be taken after the final exam. There will be **no** make-up exam for the final exam. Make-up tests are never easier than the original.

**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%
Tests.....	60%
Final Exam.....	25%

#### **Grading Scale:**

<b>A:</b> .....	100% - 90%
<b>B:</b> .....	89% - 80%
<b>C:</b> .....	79% - 70%
<b>D:</b> .....	69% - 60%
<b>F:</b> .....	59% and below