M2302: Elementary Differential Equations MTWRF Period 2 (9:30 AM - 10:45 AM) Room: LIT205

Instructor: Cheng Yu, Little Hall 306, chengyu@ufl.edu

Office Hours: MW 10:50am-11:40am.

Textbook: Fundamentals of Differential Equations, 9th Edition, by R. Kent Nagle, Edward B. Saff and Arthur David Snider.

Prerequisites: Grade C or better in MAC 2313, MAC 2512 or MAC 3473.

Description: This course is designed to serve students in engineering, physics, mathematics and related disciplines with the goal of understanding qualitatively, applying, and solving ordinary differential equations of the most usual types.

Course content: This course presents techniques for solving and approximating solutions to ordinary differential equations. We will cover the following topics: Introduction to Differential Equations (Ch 1), Methods for Solving First Order ODEs (Ch 2), Linear Second Order Equations (Ch 4), The Laplace Transform (Ch 7), and Series Solutions (Sections 8.1-8.4). Some applications will also be covered.

Homework assignments: There will be several homework assignments. The test questions will be similar but different to homework problems. Please do all homework problems independently.

Exams: There will be four exams as follows Exam 1: 5/18, Wendesday. Exam 2: 5/27, Friday. Exam 3: 6/7, Tuesday. Exam 4: 6/17, Friday.

Grade Policy: Each exam is 20 percent. Home works will be another 20 percent. The class participation will be considered in borderline grades. The grade scale is as follows:

 $\begin{array}{l} A: [90, 100].\\ B+: [85, 90).\\ B: [80, 85).\\ B-: [77, 80).\\ C+: [75, 77).\\ C: [70, 75).\\ C-: [68, 70).\\ D: [60, 68). \end{array}$

Extra Help: Please stop by my office during office hours or by appointment to discuss the homework problems or any aspect of the course.

Attendance Policy: Please come to class on time. Please attend all classes. Don't talk with any students in class. Do not use computers, cell phones and other electronic devices during the lectures.

Students with Disabilities: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.