MATH 2280-001

INTRODUCTION TO DIFFERENTIAL EQUATIONS

Instructor: Daniel Zavitz
Email: zavitz@math.utah.edu
Office: LCB 326
Lecture: M,W,F 8:05-9:25 AM (AEB 350)
Course website: Canvas course page in your CIS

Office hours: TBA
Midterm 1: October 7, in class
Midterm 2: November 17, in class
Final Exam: Friday, December 15, 8:00-10:00 AM (AEB 350)
Textbook: Differential Equations and Boundary Value Problems (Fifth Addition) by Edward, Penney and Calvis

1. The work

The work you will complete in Math 2280 comprises homework, two midterm exams, and a comprehensive final exam. Homework will be assigned each Monday and turned in in class the following Monday. Two of the lowest homework and quiz scores will be dropped. There will be no late work or test makeups accepted.

2. The grades

Letter grades are determined as follows: If \( X \) is your percentage total grade listed in Canvas, then

| \( X \geq 93\% \) | A | \( X \geq 90\% \) | A-
| \( X \geq 87\% \) | B+ | \( X \geq 83\% \) | B |
| \( X \geq 77\% \) | C+ | \( X \geq 73\% \) | C |
| \( X \geq 67\% \) | D+ | \( X \geq 63\% \) | D |
| \( X < 60 \) | E |

The grade weighting is 30% final exam, 20% midterm 1, 20% midterm 2, and 30% homework, but this could be altered at instructor’s discretion. Letter grade assignments can be changed at the discretion of the instructor.
3. Learning Objectives

3.1. Basic topics. This covers the standard material of a sophomore level course in differential equations: first order equations; existence and uniqueness, mathematical models and applications; linear n-th order ODEs; linear systems of ODEs; qualitative behavior of non-linear systems and equilibrium points; Fourier series and PDEs

3.2. Problem solving fluency. In addition to topical content, students will also gain experience and further mastery of complete problem solving fluency. Students will be able to read and interpret problem objectives, be able to select and execute appropriate methods to achieve objectives, and finally, be able to interpret and communicate results.

4. Students with disabilities

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020. CDS will work with you and us to make arrangements for accommodations.

5. Honor code

You are expected to abide by the University of Utah Honor Code and to avoid any instances of academic misconduct, including but not limited to: (1) possessing, using, or exchanging improperly acquired written or oral information during an exam, (2) substitution of material that is wholly or substantially identical to that created or published by an other individual(s), and (3) false claims of performance or work.