

MATH 231 - Differential Equations I - Spring 2008

Professor: Tim Schulze, 317H Ayres Hall, 974-4162, schulze@math.utk.edu

Office Hours: Tu 2:30 – 3:30 or by appointment

Text: *Fundamentals of Differential Equations, sixth edition*, Nagle, Saff & Snider (NSS).

Course Prerequisites: Second semester calculus

Grading: Your grade will be determined by a weighted average of homework (15%), 3 midterm exams (20% each) and a comprehensive final exam (25%). Homework will be assigned on most days and collected on Mondays at the beginning of class. No late assignments, but the lowest score will be dropped. Similarly, the final will count 45% if you miss and/or do poorly on a midterm.

Course Description: This course is an introduction to differential equations. We will cover initial value problems, some simple applications, linear equations with constant coefficients, Laplace transforms and series solutions. This corresponds to chapters 1-4,7,8 in NSS. If time permits, we will also cover some of chapter 6.

1. The first midterm covers chapter 1, 2 & 3, emphasis on first-order equations (chapter 2).
2. The second midterm covers chapter 4 & (time permitting) some of chapter 6, emphasis on second-order, linear equations.
3. The third midterm covers chapter 7, emphasis on Laplace transforms.
4. The final is cumulative, but will have some emphasis on chapter 8—series solutions.

Here are some important dates:

- January 21st - MLK Holiday, no class
- March 14-20 - Spring break, no class
- March 21 - Spring recess, no class
- April 25, last day of class
- May 1st - FINAL: 5:00–7:00