

## MAP 2302: Elementary Differential Equations

Spring 2015

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Office hours: Mondays 3:00–3:50, Wednesdays 10:40–11:30 and 3:00–3:50,  
or by appointment.

Class meets MWF 4:05–4:55 in Little 127.

### Textbook

*Fundamentals of Differential Equations and Boundary Value Problems (6th Edition)*, by Nagle, Saff, and Snider.

### Syllabus

This is a first course in ordinary differential equations. Some of the topics we will cover are first order linear ODEs; first order non-linear ODEs, including the techniques of separation of variables, exactness, and integrating factors; and second order linear ODEs, including the techniques of finding fundamental solutions of homogeneous equations, the Wronskian, undetermined coefficients, variation of parameters, the Laplace transform, and power series solutions.

### Exams

Friday, January 30, in class.

Friday, February 27, in class.

Wednesday, April 1, in class.

Friday, May 1, 10:00–12:00 (final).

### Homework

I will assign homework problems each week to be collected and graded. Solutions to these problems will be distributed after the homework has been collected. Late homework will not be accepted. I will also assign some homework problems which will not be collected or graded. You should certainly do these problems as well, since exam questions may be based on them.

### Grading

Each in-class exam is worth 20% of your final grade, the final is worth 40%, and the homework assignments are worth a total of 20%. I will drop your lowest in-class exam score (or half of your final exam) to make the total add up to 100%. Your grade will be determined by the following scale:

$95 \leq x \leq 100$ : A	$90 \leq x < 95$ : A–	$85 \leq x < 90$ : B+
$80 \leq x < 85$ : B	$75 \leq x < 80$ : B–	$70 \leq x < 75$ : C+
$65 \leq x < 70$ : C	$60 \leq x < 65$ : C–	$55 \leq x < 60$ : D+
$50 \leq x < 55$ : D	$45 \leq x < 50$ : D–	$0 \leq x < 45$ : E