

## Differential Equations I, Math 3410, Spring 2011

### Lectures:

Section .001: TR 12:30-1:50, GAB 201.

Sections .003 and .500: TR 2:00-3:20, Chilton 245.

**Professor:** Dr. Conley, GAB 419, 565-3326, conley@unt.edu. Course material and announcements will be posted at [www.math.unt.edu/~conley](http://www.math.unt.edu/~conley).

**Office Hours:** W 11:30-1:30, TR 11:30-12:30, and by appointment.

**Text and Prerequisites:** The text is *Elementary Differential Equations and Boundary Value Problems*, ninth edition, by Boyce and DiPrima. The prerequisites are Calculus II (1720) and Linear Algebra (2700).

**Exams:** There will be two 100 point midterms, both on Tuesdays: Feb. 22 and Apr. 5. There will be a comprehensive 180 point final, Tuesday, May 10, 1:30-3:30 for Sections .003 and .500, and Thursday, May 12, 10:30-12:30 for Section .001. There will be no make-up exams.

**Homework:** There will be two 5 point problem sets and eleven 10 point problem sets, usually due Thursdays (see over).

**Notes:** You may work on the problem sets together with your friends, but the best way to prepare for the exams is to begin by trying them on your own, looking for help only after making a good effort. It is best to work first on scratch paper and then recopy your solutions.

The problem sets are due at the beginning of class. If you are late to class or your work is messy or unstapled you will lose 1 point. Problem sets will not be accepted after class.

You are welcome to contact me by email, but please do not send me overly informal emails.

**Calculators:** Calculators are not allowed during exams. They are allowed for homework but usually you will not need them. I suggest that you do not use them, because it is best to do the homework in the same way you will have to do the exams.

**Disabled Students:** Please let me know of your disability.

**Topics:** Tentatively, we will cover the following chapters and sections: Chapter 1: Sections 1-2. Chapter 2: Sections 1-3 and 6. Chapter 3: Sections 1-6. Chapter 4: omitted. Chapter 5: Sections 1-6. Chapter 6: Sections 1-3. Chapter 7: Sections 1-8. This list skips most sections not crucial to the flow of the material, allowing us to cover all the main topics in the book.

**Problem Set 1** (due Thursday, January 20, worth 5 points):

*Section 1.1:* 1, 6, 8, 15, 18, 20

*Section 1.2:* 9, 10

Math 3740 Sections 001 (12:30-1:50 GAB 201), 003 & 500 (2:00-3:20 Chilton 245), TR, Spring 2011, Conley

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1/17 Holiday	1/18 First class day	1/19	1/20 HW 1 (5 points)	1/21
1/24 Math Lab opens	1/25	1/26	1/27 HW 2	1/28
1/31	1/1	2/2	2/3 HW 3	2/4
2/7	2/8	2/9	2/10 HW 4	2/11
2/14	2/15	2/16	2/17 HW 5	2/18
2/21	2/22 Exam 1	2/23	2/24	2/25
2/28	3/1	3/2	3/3 HW 6	3/4
3/7	3/8	3/9	3/10 HW 7	3/11
3/14 Spring break week	3/15	3/16	3/17	3/18
3/2	3/22	3/23	3/24 HW 8	3/25
3/28	3/29	3/30	3/31 HW 9	4/1
4/4	4/5 Exam 2	4/6	4/7	4/8
4/11	4/12	4/13	4/14 HW 10	4/15
4/18	4/19	4/20	4/21 HW 11	4/22
4/25	4/26	4/27	4/28 HW 12	4/29
5/2	5/3 HW 13 (5 points)	5/4	5/5 Reading period: no class	5/6
5/9 Final exam week	5/10, 1:30 PM: Exam for Sections .003 and .500, the 2:00 class	5/11	5/12, 10:30 AM: Exam for Section .001, the 12:30 class.	5/13