

Differential Equations with Applications
MATH 4512

Instructor: Bernardo Cockburn. Office: Vincent Hall 327

Fall 2017 schedule: MWF 10:10-11:00, Ford Hall B80

- **Objective:** In this course, we study several basic aspects of differential equations modeling phenomena of interest in physics and engineering.
- **Textbook:** *Differential Equations and their Applications*, by Martin Braun, Springer, 1993 (4th. edition). We will cover the first four chapters.
- **Grade:** 40% homeworks (four homeworks), 30% midterms (three midterms) and 30% final (on December 21, 8:00-10:00am).
- **Office hours:** By appointment **only**. To get one, just send me an e-mail to cockburn@math.umn.edu.

	classes			subsections		
Sept.	–	6	8	–	§1.2	§1.4
Chapter 1	11	13	15	§1.5	§1.8	§1.10
	18	20HW	22	§1.13	§1.13	§1.15
	25	27RV	29MT	§1.16		
Oct.	2	4	6	§2.1	§2.2	§2.3, 4
Chapter 2	9	11	13	§2.5	§2.6	§2.6
	16	18HW	20	§2.9, 10	§2.11	§2.12
	23	25RV	27MT	§2.13		
Nov.	30	1	3	§3.1, 2	§3.3, 4	§3.5, 6
Chapter 3	6	8	10	§3.7	§3.8	§3.9
	13	15	17HW	§3.10	§3.11	§3.12, 13
	20RV	22MT				
Dec.	27	29	1	§4.1	§4.2	§4.3
Chapter 4	4	6	8	§4.4	§4.5	§4.6, 7
	11HW	13RV	–	§4.8		

Homework = **HW**, Review= **RV**, Mid-Term=**MT**.