Mw427K Summer 2012
Unique No. 92125

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Rules: Don't miss class. Don't be late. Don't buy plane tickets which conflict with exams. Don't pack up early. Staple homework. Don't be rude.

Text: (Required) *Elementary DEs and BVPs* 9th Ed., Boyce and DiPrima. I think you'll find the student solutions manual (and such things) to be a waste of money.

Students with disabilities: The University of Texas at Austin provides, upon request, appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY

Grading:

Homework:	10%	
8 Quizzes:	40%	
1 Midterm exam	20%	
Final Exam:	30%	
Total:	100%	

We will be using the +/- grading system: 90% is at least an A, 86.7% is at least an A-, 83.3% is at least a B+, 80% is at least a B, etc.

Exams and Quiz Dates: Nearly chiseled in stone, the date for the midterm exam is Monday July 16. Quizzes are every Thursday in the discussion session. There won't be a quiz on July 12th before the Midterm. *There are no make-up quizzes.* The Final will be scheduled by the Registrar probably on August 13 from 9 to 12 a.m. Exams will be closed-book, closed-notes, and no-calculator.

Homework Assignments on are on the next page and are subject to change. Due dates are announced in class and *no where else. Late home work will not be accepted,* and it hurts to ask. Homework is due at the *beginning* of the discussion session. Staple multiple pages and polish your work; we take points off for missing staples and sloppy or disorganized work.

Overview A differential equation is an equation relating the derivatives of an unknown function to each other. The goal of this course is to learn various techniques for finding such unknown functions and using these techniques to solve physical problems. After studying first and second-order equations, we look at the Laplace transform methods and then at partial differential equations.

Quantitative Reasoning This course carries the Quantitative Reasoning flag. Quantitative Reasoning courses are designed to equip you with skills that are necessary for understanding the types of quantitative arguments you will regularly encounter in your adult and professional life. You should therefore expect a substantial portion of your grade to come from your use of quantitative skills to analyze real-world problems.

Assignments:

Work the following problems at the appropriate time, as announced in class. Do not hand in the "Warm-up Exercises". Numbers in parens are 8th edition equivalents. (I think.)

IPA	Section	Warm-up Exercises	Hand-in Exercises
1	1.1	3, 4, 11, 23, 29	2, 14, 21, 33
2	1.2	1, 8, 14	2ac, 7, 9, 12, 16, 18
3	1.3	2, 4, 9, 17, 25	12, 14, 18, 20
4	2.1	2, 16, 18	14, 15, 19, 28
5	2.2	3, 8, 11, 15, 31ab	2, 6, 14, 20, 24, 36ab
6	2.3	1, 2 20, 23	3, 13, 16, 21, 22
7	2.4	1, 2, 8	3, 7, 14, 18, 25, 28
8	2.5	3, 9, 12	8, 10, 13
9	2.6	3, 6, 13, 25, 27	2, 4, 8, 12, 14, 19, 28
10	2.7		2, 11a, 12a
11	2.8	3	4, 7, 14
12	3.1	3, 5, 7, 10, 11	4, 6, 12, 16, 20
13	3.2	3, 7, 12, 42(29)	6, 11, 13, 22, 26(25), 43(30)
14	3.3(3.3/3.4)	2, 3, 9, 35(3.4.39)	5, 8, 12, 17, 20, 23, 36(3.4.40)
15	3.4(3.5)	5, 6, 14, 23, 24, 27	8, 12, 26, 28, 41
16	3.5(3.6)	1, 3, 8, 13, 18, 22a	4, 6, 14, 24a
17	3.6(3.7)	2, 7, 13, 15	5, 6, 10, 16, 17
18	3.7(3.8)	3, 4	5, 6, 11, 17
19	3.8(3.9)	2, 3	5, 7, 10
20	5.1	1, 5, 9, 14, 21, 22	7, 16, 24
21	5.2	1abd, 3abd, 11abd, 15	5abd, 6abd, 12abd, 18
22	5.3	1, 3, 6, 11	2, 7, 14
23	5.4(5.4/5.5)	2, 3, 6, 8(5.5.2, 3, 6, 8), 19(3), 21(5)	4, 5, 13, 16(5.5.4, 5, 13, 16), 22(6), 26(10), 30(14), 33(18)
24	5.5(5.6)	3, 6, 7	4, 8, 9
25	6.1	2, 4, 5, 15, 16, 26	6, 8, 9, 18, 19, 27
26	6.2	1, 3, 7, 11, 12, 29	4, 9, 16, 24, 30, 33
27	6.3	1, 2, 4, 11(X), 13(7), 15(9)	18(12), 20(14), 21(15), 24(18), 27(21), 33(27), 37(31)
28	6.4	1, 3	5, 7, 10
29	6.5	1, 2, 5	3, 7, 9
30	10.1	1, 2, 3, 14, 16	4, 7, 10, 12, 18, 19
31	10.2	4, 7, 9, 12	13, 14, 18, 20, 21
32	10.4	2, 3, 4, 7	5, 14, 15, 17, 18, 25
33	10.5	1, 2, 3, 5	7, 8, 10, 15, 18
34	10.7	1, 5	4, 8, 10
35	7.1	3, 5	4, 15, 23
36	7.2	2, 4	10, 22, 23
37	7.3	17(16), 19(18)	14(13), 16(15), 21(20)
38	7.4	6	5, 7
39	7.5	1, 2, 3	4, 8, 9, 15
40	7.6	1, 2, 9	6, 10, 12abc
41	7.8	1, 2, 7, 9	4, 8, 10