

MAP2302 Elementary Differential Equations

Spring 2020

Section: 3E09(15231) meets T3/4, R3 in LIT201

Instructor: Carol Demas, LIT323, email: demasc@ufl.edu

Office Hours: M 9:35-10:25. TR 8:30-9:25 AM in LIT323 or by appointment.

Text: Fundamentals of Differential Equations by R. Kent Nagle, Edward B. Saff and Arthur David Snider, ninth edition, ISBN-13: 978-0321977069, ISBN-10: 0321977068. You may use the eighth edition if you prefer.

Content: We will cover Chapters 1(Introduction), 2(First Order ODEs), 4(Second Order ODEs), 7(Laplace Transforms), and some of 8(Series Solutions).

Lecture Quizzes: Each lecture has a brief online quiz which you will complete in Canvas. Lecture quizzes are worth 6% of your grade. The lowest two scores are dropped. Late submissions will not be accepted.

Homework: Doing homework is essential to your success in this course and is one of the best ways to prepare for quizzes and tests. You will complete online homework in Canvas. Homework is worth 6% of your grade. The lowest two scores are dropped. Late submissions will not be accepted.

Activities: There will be in-class activities as time permits. The two lowest scores are dropped. Activities are worth 6% of your grade. If you miss an activity with valid documentation it will not count toward your grade. You must be present within the first ten minutes of class to be eligible for activity points.

Live Quizzes: There will be up to seven live in-class quizzes. The lowest score is dropped. Quizzes are worth 6% of your grade. If you miss a quiz with valid documentation it will not count toward your grade. You must be present within the first ten minutes of class to be eligible for the quiz on that day.

Practice Exams: Four online practice exams are due on the dates shown in the calendar. Practice exams are worth 6% of your grade. The lowest score is dropped.

Exams: Four exams will be given in class on the dates shown in the calendar. The fourth exam is comprehensive. Each is worth 18% of your grade. If you miss an exam with valid documentation, the comprehensive final exam will replace it without penalty. If you miss without valid documentation, there will be a 10% penalty for its replacement.

The letter grade will be awarded as follows:

A	90%-100%	C	70%-73%
A-	87%-89%	C-*	67%-69%
B+	84%-86%	D+	64%-66%
B	80%-83%	D	60%-63%
B-	77%-79%	D-	57%-59%
C+	74%-76%	E	0-56%

Accommodations for students with learning disabilities: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting disability.ufl.edu/students/get-started

Academic Honesty: The course will be conducted in accord with the University honor code and academic honesty policy which can be found at www.dso.ufl.edu/sccr/honorcodes/honorcode.php. The Mathematics Department expects you to follow the Student Honor Code. We are bound by university policy to report any instance of suspected cheating to the proper authorities.

In addition, we remind you that lectures and the lecture notes given in this class are the property of the University/faculty member and may not be taped/shared without prior permission from the lecturer and may not be used for any commercial purpose. Students found to be in violation may be subject to discipline under the Student Conduct Code.

Makeup Exams: If you miss an exam with valid documentation, the comprehensive final exam will replace it without penalty. If you miss without valid documentation, there will be a 10% penalty for its replacement.

Evaluations: Course evaluations are now at <https://gatorevals.ua.ufl.edu/>

Exam Coverage

Exam 1 covers 1.1-1.4, 2.2-2.6, and first-order applications

Exam 2 covers 4.2-4.7 and second-order applications

Exam 3 covers 7.2-7.6, 7.8-7.9 Laplace transforms

Exam 4 is comprehensive, 50% chapter 8 and 50% chapters 1-2, 4, and 7.

Grade:

Activities 6%

Online Lecture Quizzes 6%

Online Homework 6%

Live Quizzes 6%

Practice Exams 6%

4 Exams 18% each

Total: 102%

Final Exam: April 16

Tentative Schedule (subject to possible revision)

Sun	Mon	Tues	Wed	Thur	Fri	Sat
Jan5	Jan6	7	8	9	10	11
		intro/1.1/1.2/1.3		1.4		LQ1-3 due
12	13	14	15	16	17	18
HW1-3 due		quiz/2.2		2.3		LQ4-6 due
19	20	21	22	23	24	25
HW4-6 due	Holiday	2.4/2.5		2.6		LQ7-9 due
26	27	28	29	30	31	1
HW 7-9 due		quiz/first order apps		Review		LQ10 due
2	Feb3	4	5	6	7	8
HW 10 due	PE1 due	Exam 1		4.2		LQ11 due
9	10	11	12	13	14	15
HW 11 due		4.3/4.4		quiz/4.5		LQ12-14 due
16	17	18	19	20	21	22
HW 12-14 due		4.6/4.7		2nd order apps		LQ15-17 due
23	24	25	26	27	28	29
HW 15-17 due		quiz/Review	PE2 due	Exam 2		
Mar1	Mar2	3	4	5	6	7
	holiday	holiday	holiday	holiday	holiday	
8	9	10	11	12	13	14
		7.2/7.3		7.4/quiz		LQ18-20 due
15	16	17	18	19	20	21
HW 18-20 due		7.5/7.6		7.8/quiz		LQ 21-23 due
22	23	24	25	26	27	28
HW 21-23 due		7.9		Review		LQ24 due
29	30	31	Apr1	2	3	4
HW 24 due	PE3 due	Exam 3		8.1		LQ25 due
5	6	7	8	9	10	11
HW 25 due		8.2/8.3		quiz/8.4		LQ26-28 due
12	13	14	15	16	17	18
HW 26-28 due		Review	PE4 due	Exam 4		
19	20	21	22	23	24	
		3.6, 3.7, 5.4 bonus		Reading	Reading	

Tentative Book HW for extra practice (not collected for grade)

9th edition (mechanical clock)		8th edition (apple)	
section	problems	section	problems
1.1	1-11 odds		same
1.2	1-11 odds, 21-27 odds		same
1.3	1-7 odds, 11-17 odds		same
1.4	1,3,5, take two steps only		same
2.2	1-25 odds		same
2.3	1-21 odds		same
2.4	1-25 odds		same
2.5	1-11 odds		same
2.6	1-27 odds		same
1st order apps	2.4 33, 3.2 23-25 3.3 1-5 odds		same
4.2	1-19 odds, 27-31 odds		same
4.3	1-25 odds		1-17 odds, 21-25 odds
4.4	1-25 odds, 27-31 odds		same
4.5	9-35 odds	4.5	11-19 odds, 23-25 odds, 31-35 odds
4.6	1-9 odds, 11		same
4.7	9-13 odds, 19-20, 41-44	4.7	9-13 odds, 19-20, 37-39 odds, 45-47 odds
2nd order apps	4.1 3-6, 4.9 3 for $b=0, b=8$ only, 4.10 3, 4, 5c		same
7.2	1-19 odds		same
7.3	1-9 odds, 13-17 odds, 25		same
7.4	1-25 odds		same
7.5	1-7 odds, 12, 15-23 odds, 35		same
7.6	1-17 odds, 21-23 odds, no sketch	7.6	1-17 odds
7.8 (convolution)	1-21 odds, 23, 25	7.7 (convolution)	1-21 odds, 23, 25
7.9 (dirac delta)	1-17 odds, no sketch, 25, 27	7.8 (dirac delta)	1-17 odds, no sketch, 25, 27
8.1	1-5 odds, 9a		same
8.2	1-5, odds, 11-13 odds, 17-27 odds, 29, 33		same
8.3	1-27 odds		same
8.4	1-15 odds		same