

MAP2302 Elementary Differential Equations

Spring 2022

Section Information

Section	meets	MWF	room	instructor	email	office	office hours	
	period	time					Zoom	Live
3141	4	10:40-11:30 AM	LIT109	Demas	demasc@ufl.edu	LIT 323	M5,6	F5
3142	5	11:45-12:35 PM	LIT109	Manly	imanly@ufl.edu	LIT 371		
3146	6	12:50-1:40 PM	LIT109	Rudyak	rudyak@ufl.edu	LIT406		
3148	7	1:55-2:45 PM	LIT109	Demas	demasc@ufl.edu	LIT 323	M5,6	F5

Course Coordinator: Carol Demas

Canvas Messages: Check your messages **daily** so that you do not miss any important announcements.

Text: **Fundamentals of Differential Equations and Boundary Value Problems** by R. Kent Nagle, Edward B. Saff and Arthur David Snider, ISBN-13: 978-0321977106, ISBN-10: 9780321977106. You may use the previous edition and/or the version without boundary value problems if you prefer.

Requirements: A hardwired connection (not wireless) is strongly recommended when working and submitting assignments. It is the student's responsibility to have a reliable internet connection, adequate internet speed and cleared cache and cookies before starting each assignment .

Time commitment: University students are expected to spend at least 3 hours for each hour watching lecture videos in order to keep up with the course material.

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 in Canvas. Lecture quizzes are worth 8% of the grade. The lowest two scores are dropped. Each lecture quiz has **two attempts**.

Homework: Doing homework is essential to success in this course and is one of the best ways to prepare for quizzes and tests. Online homework is completed in Canvas. Homework is worth 8% of the grade. The lowest two scores are dropped. Each homework has **unlimited attempts**. Students who miss parts of a multiple-part question should feel free to ask about which parts were missed.

Quizzes: There will be ten online quizzes covering 2-4 lectures with **one attempt** each. The lowest two scores are dropped. Quizzes are worth 10% of the course grade. Quizzes are 30-50 minutes long.

Discussion board: There is one discussion board for each exam period. If you have a question, please show your work and state the assignment from which the problem comes. The question must not have already been asked so read the boards daily. If you ask a question that has been answered in an online conference, you will be directed to watch the video of that conference unless you require specific clarification. Discussion boards are locked at 10 PM the night before each exam.

Practice Exams: Four online practice exams are due on the dates shown in the calendar. Practice exams are worth 5% of your grade. The lowest score is dropped. Each practice exam has one attempt. **Late submissions are not possible** as practice exams may be reviewed shortly after the due date.

Exams: Four live evening assembly exams will be given on the dates shown in the calendar. The fourth exam is comprehensive. Each is worth 17.5% of your grade.

Grades: The letter grade will be awarded with Canvas rounding up the display grade (i.e. 89.5 counts as A) as follows:

A	90%-100%	C	70%-74%
A-	87%-89%	C-*	67%-69%
B+	85%-86%	D+	64%-66%
B	80%-84%	D	60%-63%
B-	77%-79%	D-	57%-59%
C+	75%-76%	E	0-56%

If you have a grade dispute, please resolve it with your instructor **within a week** of the assignment deadline. Your grade is comprised of the following:

4 Exams 17.5% each
Quizzes 10% (drop two lowest scores)
Lecture Quizzes 8% (drop lowest two scores)
Homework 8% (drop lowest two scores)
Practice Exams 5% (drop lowest score)

Total: 101% (there is one extra credit point built in to the course).

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, you may take a makeup on Nov. 30. If you miss without valid documentation, there will be a 10% penalty for its replacement. Valid documentation includes documented illness, school-sponsored activity, death in the immediate family, court-ordered or military appointments, and religious holidays. Scheduled flights do not count as valid documentation so do not make plans for a flight which conflicts with exam dates and times. If you miss a second exam, the comprehensive fourth exam will replace it.

Late submissions: Homework, lecture quizzes, and quizzes can be submitted late with a 20% penalty for each day beyond the due date. If documented illness or other extenuating circumstances cause you to miss a deadline for an assignment, the first two missed assignments will count as your drops while you will be granted extensions for the remainder. You must contact the course coordinator for details.

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

Privacy: Our class sessions, including office hours, may be audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate verbally are agreeing to have their voices recorded.

If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared.

As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Diversity: The Mathematics Department is committed to diversity and inclusion of all students. We acknowledge, respect, and value the diverse nature, background and perspective of students and believe that it furthers academic achievements. It is our intent to present materials and activities that are respectful of diversity: race, color, creed, gender, gender identity, sexual orientation, age, religious status, national origin, ethnicity, disability, socioeconomic status, and any other distinguishing qualities.

Exam Coverage

Exam 1 covers 1.1-1.4, 2.2-2.6 (L1-L9) and applications (L10)

Exam 2 covers 4.1-4.7 (L11-L17)

Exam 3 covers 7.2-7.6, 7.8-7.9 (L18-L24)

Exam 4 is comprehensive, approximately 50% chapter 8 (L25-L28) with the remainder from chapters 1-2, 4, and 7 (L1-24).

Final Exam (Exam 4): date pending

Tentative due dates (subject to possible revision)

Sun	Mon	Tues	Wed	Thur	Fri	Sat
	Jan3	4	5	6	7	8
					LQ1/HW1 Syllabus Quiz	
9	10	11	12	13	14	15
	LQ2/HW2		LQ3/HW3/	Q1(L1-3)	LQ4/HW4	
16	17	18	19	20	21	22
	holiday		LQ5/HW5/	Q2(L4-5)	LQ6/HW6	
23	24	25	26	27	28	29
	LQ7/HW7		LQ8/HW8/	Q3(L6-8)	LQ9/HW9	
30	31	Feb 1	2	3	4	5
	LQ10/HW10			Q4(L9-10)/PE1	Exam1 (L1-10)	
6	7	8	9	10	11	12
13	14	15	16	17	18	19
	LQ11/HW11		LQ12/HW12		LQ13/HW13	
20	21	22	23	24	25	26
	LQ14/HW14/	Q5(L11-13)	LQ15/HW15		LQ16/HW16	
27	28	Mar 1	2	3	4	5
	LQ17/HW17/	Q6(L14-17)		PE2	Exam 2 (L11-17)	
6	7	8	9	10	11	12
	break		break		break	
13	14	15	16	17	18	19
	LQ18/HW18		LQ19/HW19		LQ20/HW20	
20	21	22	23	24	25	26
	LQ21/HW21/	Q7(L18-21)	LQ22/HW22		LQ23/HW23	
27	28	29	30	31	Apr1	2
	LQ24/HW24/	Q8(L22-24)/PE3	Exam 3 (L18-24)			
3	4	5	6	7	8	9
					LQ25/HW25	
10	11	12	13	14	15	16
	LQ26/HW26	Q9(L25-26) Exam1-3 makeup	LQ27/HW27		LQ28/HW28	
17	18	19	20	21	22	23
	Q10(L27-28)/PE4			reading	reading	

HW: 28 homework (unlimited attempts, drop 2 lowest) due 11:59 PM

LQ: 28 lecture quizzes (2 attempts, drop 2 lowest) due 11:59 PM

Q: 10 quizzes (1 attempt, drop 2 lowest) due 11:59 PM

PE: 4 practice exams (1 attempt, drop 1 lowest) due 11:59 PM

Final Exam date: **TBD.**

Tentative Lecture Schedule (subject to possible revision)

Sun	Mon	Tues	Wed	Thur	Fri	Sat
	Jan3	4	5	6	7	8
			Intro/L1		L2	
9	10	11	12	13	14	15
	L3		L4		L5	
16	17	18	19	20	21	22
	holiday		L6		L7	
23	24	25	26	27	28	29
	L8		L9		L10	
30	31	Feb 1	2	3	4	5
	L11		Review		Exam1	
6	7	8	9	10	11	12
	L12		L13		L14	
13	14	15	16	17	18	19
	L14		L15		L15/L16	
20	21	22	23	24	25	26
	L16/L17		L17		L18	
27	28	Mar 1	2	3	4	5
	L18/L19		Review		Exam2	
6	7	8	9	10	11	12
	break		break		break	
13	14	15	16	17	18	19
	L19/L20		L20/L21		L21L22	
20	21	22	23	24	25	26
	L22/L23		L23/L24		L24	
27	28	29	30	31	Apr1	2
	catch up/Review		Exam 3 (L18-24)		L25	
3	4	5	6	7	8	9
	L25/L26		L26/L27		L27/L28	
10	11	12	13	14	15	16
	L28	Exam1-3 makeup	Review		Review	
17	18	19	20	21	22	23
	Review		Review	reading	reading	

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

7th edition (mechanical clock)		6th 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	1-13 odds,19-20,41-44	4.7	1-13 odds,19-20,37-39 odds, 45-47 odds
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		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