

# MAP2302 Elementary Differential Equations

Fall 2020

**Section:** 6554(16346)

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

**Lecture:** MWF 4:05-4:55 PM through Zoom Conferences start Monday August 31.

**Online office hours.** MAP2302-only online office hours are Tuesday, Thursday 4-5PM through Zoom Conferences in Canvas except for exam days. These will be recorded. Global office hours are Monday, Friday 12:50-1:40 PM as well as Wednesday 11:45-12:35 PM but these are shared with other courses and not recorded. I am also available by private appointment.

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

**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.

**Requirements:** A hardwired connection (not wireless) is strongly recommended when working on quizzes, exams and /or submitting assignments. It is the student's responsibility to have a reliable internet connection, adequate internet speed (check with Honorlock and do a system check prior to the exam) and cleared cache and cookies before each exam. Webcams are required for online exams.

**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 three 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 quizzes covering 2-4 lectures with one attempt each. The lowest two scores are dropped. Quizzes are worth 8% of the course grade. Quizzes are 30-minutes long and are given through Honorlock.

**Discussion board:** There is one discussion board for each exam period. Students must ask (1 pt) and answer (1 pt) questions on the board to receive full credit. 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. It is not possible to make a late submission. Discussion board participation is worth 3% of your grade. The lowest score is dropped.

**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 are reviewed the day after the due date.

**Exams:** Four exams will be given through Honorlock on the dates shown in the calendar. The fourth exam is comprehensive. Each is worth 17.5% of your grade. A hardwired connection (not wireless) is strongly recommended when working on quizzes, exams and /or submitting assignments. It is the student's responsibility to have reliable internet connection, sufficient internet speed and cleared cache and cookies before each exam. Webcams are required for use of Honorlock.

**Grades:** The letter grade will be awarded 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 8% (drop two lowest scores)  
Discussion board participation 3% (drop lowest score)  
Lecture Quizzes 8% (drop lowest two scores)  
Homework 8% (drop lowest two scores)  
Practice Exams 5% (drop lowest score)

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Total: 102% (there are two extra credit points 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](http://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](http://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 Tuesday November 24. If you miss without valid documentation, there will be a 10% penalty for its replacement. Valid documentation includes documented illness, court-ordered or military appointments, and religious holidays. 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 10% penalty for each day beyond the due date.

**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)

Exam 2 covers 4.2-4.7 (L11-L17)

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

Exam 4 is comprehensive, approximately 33% chapter 8 (L25-L28) and 67% chapters 1-2, 4, and 7. (L1-9, 11-17, 18-24)

**Final Exam (Exam 4): December 4**

**Tentative due dates** (subject to possible revision)

Sun	Mon	Tues	Wed	Thur	Fri	Sat
	Aug 31	Sept 1	2	3	4	5
			LQ1/HW1 Syllabus Quiz		LQ2/HW2	
6	7	8	9	10	11	12
	holiday		LQ3/HW3	Quiz1(L1-3)	LQ4/HW4	
13	14	15	16	17	18	19
	LQ5/HW5		LQ6/HW6	Quiz2(L4-6)	LQ7/HW7	
20	21	22	23	24	25	26
	LQ8/HW8		LQ9/HW9	Quiz3(L7-9)	PE1	
27	28	29	30	Oct 1	2	3
	Review	DB1	Exam1 (L1-9)			
4	5	6	7	8	9	10
	LQ10/HW10		LQ11/HW11		LQ12/HW12	
11	12	13	14	15	16	17
	LQ13/HW13	Quiz4(L11-13)	LQ14/HW14		LQ15/HW15	Quiz5(L14-15)
18	19	20	21	22	23	24
	LQ16/HW16		LQ17/HW17	Quiz6(L16-17)	PE2, Review	
25	26	27	28	29	30	31
DB2	Exam 2 (L11-17)		LQ18/HW18		LQ19/HW19	
Nov1	Nov2	3	4	5	6	7
	LQ20/HW20		LQ21/HW21	Quiz7(L18-21)	LQ22/HW22	
8	9	10	11	12	13	14
	LQ23/HW23		holiday		LQ24/HW24	Quiz8(L22-24)
15	16	17	18	19	20	21
PE3	DB3	Exam 3 (L18-24)	LQ25/HW25		LQ26/HW26	Quiz9(L25-26)
	Review					
22	23	24	25	26	27	28
	LQ27/HW27	Exam1-3 makeup	holiday	holiday	holiday	
29	30	Dec1	2	3	4	5
	LQ28/HW28	Quiz10(L27-28)	PE4, Review	DB4, Review	Exam 4	

**HW:** 28 homework (3 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

**DB:** 4 discussion boards (ask and answer questions) due 10 PM

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

## 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	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