### Elementary Differential Equations MAP 2302 Section 4D15 SUMMER B 2017

Classroom: LIT 205Meeting Times: MTWRF 2 (9:30–10:45)Instructor: Dr. Konstantina ChristododoulopoulouOffice Phone: (352) 294- 2315Office Location: 370 LITEmail: kchristod@ufl.eduOffice Hours: M 11am- 12:30pm, W: noon- 1pm , R: 11am-12:30pm, and by appointment.Open Door Policy: You are welcome to drop by to discuss any aspect of the course, anytime.All course materials will be posted in e-Learning CANVAS https://lss.at.ufl.edu

**Text:** Fundamentals of Differential Equations by R. Kent Nagle, Edward B. Saff and Arthur David Snider, eighth edition, ISBN-13: 978-0321747730, ISBN-10: 0321747739.

**Course content and objectives:** This course presents techniques for solving and approximating solutions to ordinary differential equations. It is primarily for students in disciplines which emphasize methods. We will cover some material from Chapters 1(Introduction), 2(First Order ODE), 4(Second Order ODE), 7(Laplace Transform), and 8(Series Solutions).

**Reading:** It is essential that you work on the material outside the classroom. Carefully read the textbook before coming to class and use pencil and paper to work through the material. A course calendar (subject to revision during the term) is available at the end of the syllabus and also in the course homepage in CANVAS. There you can find which sections will be covered during each lecture. *It is expected that you have read the relevant textbook sections before each lecture, so that you will be able to better grasp the material presented.* 

**Office Hours:** I encourage you to take advantage of my office hours and my **open door** policy. You are welcome to drop by my office to talk about the course anytime I am in my office and my door is open. In addition, I will hold regular office hours for your convenience. If you cannot make my posted hours I will also be happy to set a meeting time that is convenient for both of us.

**Course Web Page:** I will update CANVAS regularly with class announcements, homework assignments, and additional materials. All grades are posted in the Canvas gradebook. You are responsible for verifying that those grades are accurate. You have one week after a score has been posted to contact me to resolve any grade concerns. We will not consider any grading disputes nor make any grade adjustments at the end of the term. Be sure to save all original documents in case of grading questions.

#### Grading:

Your course grade will be calculated as follows:

Homework, best 4 out of 6	10%
Quizzes, best 4 out of 6	10%
Attendance and Participation	5%
Three Exams	75% (25% each)

The following grading scale applies.

A	$\geq 90\%$	С	$\geq 70\%$
A-	$\geq 87\%$	C-	$\geq 67\%$
B+	$\geq 84\%$	D+	$\geq 64\%$
В	$\geq 80\%$	D	$\geq 60\%$
B-	$\geq 77\%$	D-	$\geq 56\%$
C+	$\geq 74\%$	E	< 56%

**Homework:** Homework will be assigned at the end of each section covered in class and collected on each Friday. Doing homework is essential to your success in this course and is one of the best ways to prepare for quizzes and tests, and it is worth 10% of your grade. You may work on homework problems in groups, but all submitted papers should be the work of the corresponding student alone, according to the UF honor code (see below). The two lowest homework scores will be dropped; therefore, no late homework will be accepted.

Attendance and Participation: You are expected to participate in class discussions and activities. Therefore, *it is absolutely essential that you attend class*. Excused absences are consistent with university policies in the undergraduate catalog https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx and require appropriate documentation.

**Quizzes:** There will be six quizzes on the dates listed in the calendar and the two lowest scores will be dropped. Quizzes are worth 10% of your grade. You must work individually on the quizzes, and no calculators are permitted.

**Submitted work expectations:** Submitted homework assignments and in-class activities should be neat, organized, and clearly presented. Homework must be on letter-size paper only and papers with multiple pages should be stapled. Papers not meeting these standards may have the scores reduced or may be returned ungraded.

**Exams:** We will have three exams which will be administered during the normal class time in our regular classroom. The specific sections covered by each exam are given on the tentative course calendar and will also be announced in class and on CANVAS. No calculators are permitted on exams. You will be asked to place personal belongings including (turned-off!) cell phones, backpacks, textbooks, notes, computers, etc. at the front of the classroom. It is recommended that you arrive to class a few minutes early on exam days in order to use all of the allotted time.

**Make-up policy**: You may arrange to make-up a missed quiz or exam for excused absences. Acceptable absences include but are not limited to the following: you are participating in a UF-sponsored event and provide me with documentation at least two days (for a quiz) or a week (for an exam) in advance; you were verifiably ill during the quiz/exam and notified me within 24 hours of its conclusion; you are observing a religious holiday and have notified me of this during the first week of class; you have a court-ordered obligation and have provided me documentation two days/a week in advance. Please note that "I just didn't feel well" without documentation and travel plans are NOT excused.

Class guidelines: It is expected that everyone in our class will act in a respectful manner:

• Please be respectful of your classmates and me while in class or office hours.

- I expect that you are committed to learning and will not miss class. Arriving late (after we have started class) or leaving early is disruptive and disrespectful. If however, you cannot avoid it, please arrange it in advance with me.
- Turn off all cell phones before the start of class.
- Laptops are not to be used in class (Facebook can wait!)

**Students with learning disabilities:** Students requesting class and exam accommodations must first register with the Dean of Students Office Disability Resource Center(DRC), www.dso.ufl.edu/drc/. That office will provide a documentation letter to the student to present to the instructor in Little 370. This must be done as early as possible in the semester, at least 7 business days before the first exam, so there is adequate time to make proper accommodations.

Academic honesty:Remember that you committed yourself to academic honesty when you registered at the University of Florida. All students are bound to

#### The Honor Pledge

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Academic Honesty Guidelines: "All students are required to abide by the Academic Honesty Guidelines which have been accepted by the University. The academic community of students and faculty at the University of Florida strives to develop, sustain and protect an environment of honesty, trust, and respect. Students are expected to pursue knowledge with integrity. Exhibiting honesty in academic pursuits and reporting violations of the Academic Honesty Guidelines will encourage others to act with integrity. Violations of the Academic Honesty Guidelines shall result in judicial action and a student being subject to the sanctions in paragraph XIV of the Student Code of Conduct."

In addition, we remind you that *lectures and the course materials 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.* 

#### 6. ONLINE COURSE EVALUATION

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are available from July 29 – August 4.

Tips for the Course:

- *Mathematics is not a spectator sport*. Your participation and engagement with the material is essential.
- Discuss the topics with your classmates.
- Take advantage of my office hours. This time is set aside for us to help you.
- Don't hesitate to ask questions in class.
- Be reminded that 2 student hours devoted to assignments and preparation for every hour of classroom time is a reasonable expectation for an average student.
- Barring unforeseen medical or other serious conditions, I expect you to be in class on time every day. If you must miss a class, please let me know as soon as possible and be sure to contact a classmate to find out what you missed.
- If you are in trouble see me immediately. If you think you are in danger of failing (or of getting a grade that you do not want) you should see me immediately. I will not give you an extra credit assignment or an incomplete to help you avoid failing, but I can make recommendations regarding drops, study habits, test taking skills, future courses, etc.

Counseling and Wellness Center Contact information for the Counseling and Wellness Center:

http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

This syllabus is subject to change. You will be notified if any changes are made.

Updated 6/23/2017

# SUMMER 2017 – MAP 2302 Calendar

Exam 1 (Chapters 1-2) – Friday, July 7 Exam 2 (Chapters 4, 7.2, 7.3) – Friday, July 21 Final Exam (7.4-7.7, Chapter 8) – Friday, August 4

Monday	Tuesday	Wednesday	Thursday	Friday
June 26	27	28	29	30
Sections 1.1, 1.2	Section 2.2	Section 2.3	Section 2.4	Section 2.5
				Quiz 1 (1.1, 1.2,
				2.2, 2.3)
				HW 1 due
3	4	5	6	7
Section 2.6	NO CLASS –	Section 4.1	Section 4.2 &	Exam 1
	Independence	Quiz 2 (2.3-2.5)	Review	(Chapters 1-2)
	Day			HW2 Due
10	11	12	13	14
Section 4.3	Section 4.4	Section 4.5	Sections 4.6, 4.7	Section 4.7
				Quiz 3 (4.1-4.4)
				HW3 due
17	18	19	20	21
Section 7.2	Section 7.3	Section 7.4	Review	Exam 2 (Chapter
		Quiz 4 (4.5-4.7)		4, 7.2,7.3)
				HW4 due
24	25	26	27	28
Sections 7.5	Section 7.6	Section 7.7	Section 8.1, 8.2	Section 8.2, 8.3
				Quiz 5 (7.5-7.7)
				HW5 due
31	Aug 1	2	3	4
Sections 8.3	Section 8.4	Catch-up/Review	Review	Final Exam (7.4-
		Quiz 6 (8.1-8.3)		7.7, Chapter 8)
				HW6 due

The schedule is subject to change at the instructor's discretion.

Withdrawal deadline (W assigned): Friday, July 28

## Tentative Book HW:

section	problems
1.1	7, 9, 13, 14
1.2	1-11 odd, 16, 17, 22
2.2	1-25 odd, 33, 34, 35
2.3	1-21 odd
2.4	1-25 odd
2.5	1-13 odd
2.6	1-27 odd
4.2	1-19 odd, 27-31 odd
4.3	1-17 odd, 21-25 odd, 32a, 33a
4.4	1-31 odd
4.5	1-19 odd, 23-31 odd, 35, 43
4.6	1-17 odd
4.7	9-19 odd, 37-39 odd, 45-47 odd
7.2	1-19 odd
7.3	1-9 odd, 12, 13-21 odd
7.4	1-29 odd
7.5	1-7 odd, 12, 15-23 odd, 35
7.6	1-17 odds, 29-32, do not sketch
7.7	1-19 odds, 23-27 odds
8.1	1-7 odds, 9a
8.2	1-5, odds, 11-13 odds,17-27 odds
8.3	1-27 odds
8.4	1-15 odds