

MAP 2302
SPRING 2015

SYLLABUS

COURSE TITLE: Elementary Differential Equations

COURSE CONTENT: MAP 2302 is designed to serve for the students in engineering, physics, and mathematics. The course gives the fundamental knowledge necessary for understanding and solving differential equations of the most basic types and applying this knowledge to real life phenomena.

PREREQUISITES: MAC 2312: Calculus 2

TEXTBOOK: Fundamentals of Differential Equations and Boundary Value Problems, R. Kent Nagle, Edward B. Saff, and Arthur D. Snider,
6th Edition
ISBN: 9780321747747

LECTURE NOTES: Lecture notes shell makes the note taking easier and is required in the course. Lectures can be printed from Canvas at <https://lss.at.ufl.edu/> (under the **Course Materials**) or purchased at Target Copy: 1412 W University Ave, Gainesville, FL 32603

In FALL 2014, you are assigned to the following course meeting time:

MAP 2302 7742 ELEM DIFF EQUATIONS MWF 7 LIT 109

INSTRUCTOR: **Doctor Larissa Williamson**
Office: Little 380, Tel. 352-294-2341
Office hours: M9, W8-9, F9 or upon appointment
E-mail: lwill@ufl.edu

E-learning (Canvas): <https://lss.at.ufl.edu/>

Course website: <http://people.clas.ufl.edu/lwill/>

The course is divided into four units:

<u>Unit I</u>	L1 – L7	Introduction and First Order Equations
<u>Unit II</u>	L8 – L14	Mathematical Modeling
<u>Unit III</u>	L15 – L21	Linear Equations
<u>Unit IV</u>	L22 – L28	Laplace Transforms

FINAL EXAM: L1 – L32

Course Calendar

MAP 2302

Spring 2015	Monday	Tue	Wednesday	Thurs day	Friday
JANUARY	5	6 Classes begin	7 L1	8	9 L2
	12 L3	13	14 L4	15	16 L5
	19 Martin Luther King	20	21 L6	22	23 L7
	26 Review	27	28 Exam1:L1-L7	29	30 L8
FEBUARY	2 L9	3	4 L10	5	6 L11
	9 L12	10	11 L13	12	13 L14
	16 Review	17	18 Exam2:L8-14	19	20 L15
	23 L16	24	25 L17	26	27 L18
MARCH	SPRING BREAK: March 1 – 8				
	9 L19	10	11 L20	12	13 L21
	16 Review	17	18 Exam3:L15-21	19	20 L22
	23 L23	24	25 L24	26	27 L25
APRIL	30 L26	31	1 L27	2	3 L28
	6 Review	7	8 Exam4:L22-28	9	10 Drop deadline L29
	13 L30	14	15 L31	16	17 L32
	20 HW:L31-L32 Review	21	22 Final Exam L1-L32	23 No class	24 No class

LECTURES: Lectures will be delivered on the dates marked with L in the Calendar. It is important that you should have a hard copy of the lecture notes in class in order to follow the lecture presentations and work out problems together with the lecturer during the presentations.

REVIEW: On the dates indicated in the calendar as “Review”, the lecturer discusses the material that will be covered on the upcoming exam. The students are supposed to print out and bring in class the review sheet. Exam Review sheets can be found under the Lecture Notes in Canvas. Participation in these sessions is very important and attendance will be taken.

UNIT EXAMS: Exams will be offered on the dates indicated in the Calendar. Total of 4 unit exams will be given during the term. The unit exams are a combination of multiple-choice and free-response questions. The multiple-choice part is out of 30 points. The free-response part will be hand-graded on a scale from 0 to 30. A total of 60 points can be earned on the exams. It may be necessary to miss an Exam during the term or you might not be satisfied with one of your grades earned on a Unit Exam. For these reasons, an OPTIONAL multiple-choice Final Exam will be given on the last day of classes. The best 4 of 5 exam scores will count. **All Exams will be administered during the normal class time.**

NOTE: You must show all work on the free-response part to receive full credit. The multiple-choice part will be graded without a partial credit.

MAKEUP POLICY ON EXAMS: If you are missing a Unit Exam due to legitimate documented circumstances, you have an option either to take the Final Exam as a MakeUp or, if you wish to make it up before the last day of classes and save the Final for another test, you can schedule a makeup earlier: please see Dr. Williamson in LIT 380 during her office hours at least a week prior to the test or immediately afterwards if you were sick. All make ups will be given only on legitimate documented reasons. Late documentation will not be accepted. No makeups will be given at the end of the term.

HOMEWORK: Textbook homework problems are assigned after each lecture. They will not be graded but the students are supposed to do the homework problems in order to be prepared for the exams. To view Homework Assignments, go to the Course Materials on Canvas.

ONLINE HOMEWORK: On-line homework assignments will be offered in WebWork. The information on registration will become available by the end of the first week of classes. Each homework assignment is out of 4 points and 30 assignments will count towards your grade. Thus, a maximum of 120 points can be earned on HW.

MAKEUP POLICY ON ON-LINE HOMEWORK: If you missed the due date on homework due to a legitimate and documented reason, you have to present a valid documentation to Dr. Williamson prior to the due date or right afterwards if you were sick. Late documentation will not be accepted. No extensions will be given after the due date without documentation.

FINAL EXAM: The Final Exam is OPTIONAL and will be given on the last day of classes **during the normal class time.** The final is accumulative all multiple-choice questions and worth 60 points. The best 4 out of total 5 term exam scores will count. If you are satisfied with your grades on the 4 Unit exams, you do not need to take the Final.

IMPORTANT NOTE: Exams will not be reviewed, offered, and/or accepted for grading at the end of the term. We will not accept any late excuse documentation. You have to present to your Instructor an appropriate documentation **before you miss the exam or right after you come back to school if you were sick** in order to be eligible for the makeup. You should discuss each unit exam within one week with your instructor and the Final – within two days if there is a grading error or any other problem.

LECTURE PARTICIPATION: Starting on Wednesday, January 14, lecture participation will be taken. The students are required to register with Pearson’s Learning Catalytics website <https://learningcatalytics.com/> in order to get points for participation. Please visit the **Canvas home page** for the **Registration Instructions**.

This system allows the Students to use their smartphone, tablet, or laptop to respond to questions in class and their responses will be graded and recorded in the gradebook. A total of 34 sessions will be graded. There will be 2 questions per session. Each question is worth 1 point and the grade will be assigned as 75% for participation and 25% for correctness. However, each session will count out of 1.75 points in Sakai gradebook. A student receives a full credit by answering both questions and one of them correctly. If a student answers both questions and both correctly, he/she receives 2 points for the session, which includes 0.25 bonus. The two lowest scores for the participation will be dropped at the end of the term to compensate for occasional absences, device failures, etc.

CALCULATOR POLICY: Graphing calculators of types TI-82-TI-89 are recommended but not required and not allowed on the exams. **Scientific calculators are required on the exams.**

COURSE GRADE: The course grade is based on 416 points accumulated as follows:

30	On-line homework	@	4 points	120	28.85 %
32	Lecture Participation	@	1.75 points	56	13.46 %
4	Exams	@	60 points	<u>240</u>	<u>57.69 %</u>
			Total:	416	100 %

The course grade is the grade satisfying the conditions below and **will be strictly adhered** to:

Passing Grades	Minimum %	Non-passing Grades	Minimum %
A	90 %	C-	62 %
A-	86 %	D+	58 %
B+	82 %	D	54 %
B	78 %	D-	50 %
B-	74 %	E	0 %
C+	70 %		
C	66 %		

NOTE: A passing grade in the course is a C or better.

GRADE POSTING: All grades will be posted in a timing manner on E-Learning (Canvas) at <http://lss.at.ufl.edu> . You can access your grades on E-Learning by logging in with you Gatorlink Username and Password and clicking on the MAP 2302 course.

SPECIAL ACCOMODATIONS: Students with learning disabilities requesting accommodations must first register with the Dean of Students Office. The Dean of Students Office will provide the student with documentation which must be turned in to the Instructor when requesting accommodations.

HELP: In addition to attending your class regularly and visiting your Instructor during her office hours, the following aids are available:

a) Broward Teaching Center: The OIR tutoring center located in SE Broward Hall is open during the day and in the evening. Further information and hours of operation are posted on-line at www.teachingcenter.ufl.edu

b) Private Tutors: If, after availing yourself of these aids, you feel you need more help, you may obtain from the Mathematics Department Office (358 Little) a list of qualified tutors for hire. This list is also posted on the department web page www.math.ufl.edu