

MAP 2302
SPRING 2014

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 Sakai at <https://lss.at.ufl.edu/> (under the **Course Materials**) or purchased at Target Copy: 1412 W University Ave, Gainesville, FL 32603

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

MAP 2302 7742 ELEM DIFF EQUATIONS MWF17 LIT 0109

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 (Sakai): <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 (Chapters 1-2)
<u>Unit II</u>	L8 – L14	Models and Linear Second Order Equations (Chapters 3-4)
<u>Unit III</u>	L15 – L21	Mechanical Vibrations & Laplace Transform (Chapters 4, 7)
<u>Unit IV</u>	L22 – L28	Series Solutions to Differential Equations (Chapters 7, 8)

FINAL EXAM: L1 – L28

Course Calendar

MAP 2302

Spring 2014	Monday	Tue	Wed	Thursday	Friday
JANUARY	6 L1 Classes begin	7	8 L2	9	10 L3
	13 Problem Session	14	15 L4	16	17 L5
	20 Martin Luther King	21	22 L6	23	24 L7
	27 Review	28	29 Exam1:L1-7	30	31 L8
FEBUARY	3 L9	4	5 L10	6	7 Problem Session
	10 L11	11	12 L12	13	14 L13
	17 L14	18	19 Review	20	21 Exam2:L8-14
	24 L15	25	26 L16	27	28 L17
MARCH	SPRING BREAK: 03/01 – 03/09				
	10 Problem Session	11	12 L18	13	14 L19
	17 L20	18	19 L21	20	21 Review
	24 Exam3:L15-21	25	26 L22	27	28 L23
APRIL	31 L24	1	2 L25	3	4 Problem Session
	7 L26	8	9 L27	10	11 L28
	14 Review	15	16 Exam4:L22-28	17	18 Review
	21 Review	22	23 Final Exam: L1-L28	24 No class	25 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.

PROBLEMS SESSION & REVIEW: On the dates indicated in the calendar as “Problem Session” or “Review”, the lecturer will complete an unfinished lecture and offer the students challenging problems from the homework and typical problems for the exam. 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 along with a reference to the lectures covered on each exam. Total of 4 unit exams will be given during the term. The unit exams are free-response and will be hand-graded on a scale from 0 to 60. 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 this reason, an OPTIONAL multiple-choice Final Exam will be given at the last day of classes. The best 4 of the 5 exam scores will count. **All Exams will be administered during the normal class time.**

NOTE: You must show all work on the unit exams to receive full 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 after the end of the term.

HOMEWORK: Textbook homework problems are assigned after each lecture. They will not be graded but the students must do the homework problems in order to be prepared for the exams.

To view Homework Assignments, go to

<http://people.clas.ufl.edu/lwill/courses/map-2302/homework/>

ONLINE HOMEWORK: On-line homework assignments will be offered in WeBWork. Further information will become available after the semester begins. The on-line homework will be graded and total of 80 points can be earned on these assignments.

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 after 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 one day if there is a grading error or any other problem.

LECTURE PARTICIPATION: Starting at **the end of the second week of the semester**, students are required to have their i>clickers in class in order to participate in the lectures. Students will be asked questions to test their understanding of class materials and their responses will be graded and recorded. The total of 66 points can be earned on the lecture participation. Eight extra points will be granted at the end of the term to compensate for occasional absences, device failures, etc.

i>clicker2 remote can be purchased at Campus Bookstore
ISBN: 9781429280471

GENERAL INSTRUCTIONS FOR CLICKERS:

In this course, you have the option of using i>clicker2 remote, or using i>clicker GO, which enables you to vote via a web-enabled device like a laptop or smart phone. PLEASE NOTE that i>clicker GO cannot be used in a course where your instructor has not enabled i>clicker GO. Check with your other instructors to ensure that i>clicker GO is permitted in each course you take—otherwise, you may want to consider purchasing a remote so that you can use it in all your courses. *Only purchase a i>clicker GO subscription if:*

1. You will not be using i>clicker in another course that does not allow i>clicker GO as an alternative to purchasing a remote.
2. You do not plan to sell back a remote to the bookstore.
3. You have access to a wireless device (i.e. a laptop, iPhone, iPod Touch, or Android) running a browser that supports AJAX, JavaScript, and HTTPS requests such as Internet Explorer, Firefox, Chrome or Safari.

Be sure to check with your other instructors if you have questions about the possibility of using i>clicker GO in your course(s).

INSTRUCTIONS FOR WEB REGISTRATION:

You are required to purchase an i>clicker 2 remote or i>clicker GO subscription for in-class participation. i>clicker is a response system that allows you to respond to questions I pose during class, and you will be graded on that feedback and/or your in-class participation (i>clicker GO works the same way). In order to receive this credit, you will need to register your i>clicker 2 remote or set up your i>clicker GO account by **the end of the second week of classes**. If you have decided to use i>clicker GO instead of a remote, please see below for registration instructions.

i>clicker 2 remote registration:

You must have come to class at least once and voted on at least one question in order to complete this registration properly. Once you have responded to a question with your i>clicker remote, go to <http://www.iclicker.com/registration>. Complete the fields with your first name, last name, student ID, and remote ID. Your student ID should be your **GATORLINK USERNAME**. The remote ID is the series of numbers and sometimes letters found on the bottom of the back of your i>clicker remote. i>clicker will be used every day in class, and you are responsible for bringing your remote daily.

i>clicker GO registration:

To create an i>clicker GO account, visit <https://iclickergo.com> (USA) or <https://iclickergo.ca> (Canada) or download the app for [iOS](#) or [Android](#). Creating an account automatically starts a free 14-day trial subscription. **Please use this trial period to make sure i>clicker GO will work for all of your i>clicker classes before purchasing a subscription as there are no refunds afterwards.**

Once you create your i>clicker GO account, you do not need to do anything else to register. Just be sure that your account has the following profile information:

Student ID: **GATORLINK USERNAME**
School ZIP/Postal Code: **32611**
School Name: **[school name student should select here]**

At the end of your trial, should you decide to purchase i>clicker GO, you can purchase access to i>clicker GO in a variety of subscription lengths using your credit card online or through in-app purchase with your smartphone; this subscription includes an unlimited number of courses.

If you have an activation code from purchasing an access card in the bookstore or from a package with a textbook, you will need to redeem the code from the i>clicker GO website. Once redeemed, the activation will take affect for iOS and Android apps. You cannot redeem access cards from within the iOS or Android apps. To redeem on the website, visit <https://iclickergo.com> (USA) or <https://iclickergo.ca> (Canada) and log into your account . Enter your code from your account profile page if you do not see an entry field upon logging into i>clicker GO.

If you have more questions on i>clicker registration, please visit <http://support.iclicker.com> for FAQs and other resources.

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 386 points accumulated as follows:

20	On-line homework	@	4 points	80	21 %
33	Lecture Participation	@	2 points	66	17 %
4	Exams	@	60 points	<u>240</u>	<u>62 %</u>
			Total:	386	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 higher.

GRADE POSTING: All grades will be posted in a timing manner on E-Learning (Sakai) 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