MAP 2302 (Fall 2015)

Time and Location
MWF Period 3 in Little Hall Room 207
Office Hours: TBD in Little Hall Room 439 (or by appointment)

Textbook
This textbook is available directly from Cengage at http://www.cengagebrain.com/course/site.html?id=1-108815. They claim that this is a discount over the typical retail price, but please do your own research before taking their or my word for it. An access code for Webassign (included with a new copy of the textbook) is required for the online homework, but the homework is not mandatory. See the grading section for further details. Alternates Textbook: Fundamentals of Differential Equations and Boundary Problems, Sixth Ed. by R. Kent Nagle, Edward B. Saff, and Arthur David Snider.

This book will not help you get access to the online homework, but it contains all of the relevant material and a wealth of practice problems. This was the required text for this class in semesters past. You might be able to find a cheap used copy since it is being phased out.

Description and Goals
Many problems, particularly those arising in science and engineering, are naturally stated in the language of differential equations. In this course, students will study solution techniques for ordinary differential equations (ODEs) and apply them to problems from the sciences. Broadly speaking, we will deal with first order ODEs and general solution techniques for higher order linear ODEs including the method of Laplace Transforms and power series methods. This roughly corresponds to chapters 1.3, 4.5, and 7 from the textbook with some omissions.

Homework
New homework exercises will be posted on Webassign. Instructions to enroll will be posted on the e-learning site. The system is free to use for a few weeks, but after this period you will be required to purchase an access code. There is no other way to access online homework but the homework is not mandatory. See the grading section for more details.

Quizzes
Homework will typically be due every week before Monday’s class. You should expect to be given a short quiz consisting of one or two problems which are similar to homework problems at the beginning of Monday’s class (be on time).

Exams
We will have four in-class exams corresponding roughly to the material in chapter 2, 4, 6, and 7 respectively. There will also be a comprehensive final exam whose score can replace the lowest in-class exam score.

Grading
Each in-class exam contributes 18% of the course grade for a total of 72%. As previously mentioned, the final exam may replace one exam score. Homework and quizzes each contribute 14% to the course grade. Each week’s homework score may be replaced by the week’s quiz score. So while doing homework is not required, choosing not to do it will make quizzes count for a significantly higher proportion of the final grade. The lowest two or three homework and quiz grades will be dropped.

Final grades are assigned on a ten point scaled (100-90 for A, 89-80 for B, etc.) with the top and bottom two points reserved for plus and minus grades.

Tentative Weekly Schedule

Week 1: Sections 1.1-1.3
Week 2: Sections 2.1-2.3
Week 3: Sections 2.4-2.5 (Labor Day)
Week 4: Exam 1 (On Ch 1, 2), Section 5.1
Week 5: Sections 4.2-4.3
Week 6: Sections 4.4-4.5
Week 7: Sections 4.6-4.7
Week 8: Sections 4.8, 4.10
Week 9: Exam 2 (On Ch 4), Section 7.1
Week 10: Section 7.2-7.3
Week 11: Section 7.4 (Homecoming)
Week 12: Section 7.5 (Veteran’s Day)
Week 13: Exam 3 (On Ch 7), Section 6.1
Week 14: Section 6.2 (Thanksgiving)
Week 15: Section 6.3-6.4
Week 16: Exam 4
Thurs. December 14, 12:30-2:30: Final Exam

Other Information
- This course will enforce the academic honesty policy which can be viewed at the following link: https://catalog.ufl.edu/ugrad/current/classes/eng/info/student-honor-code.aspx.
- Students seeking disability must first register with DSO (https://www.dso.ufl.edu/). They will then be provided with an accommodation letter which should in turn be provided to the instructor. Accommodations cannot be provided until the instructor has received this letter.
- Various important dates such as the drop date can be found at https://catalog.ufl.edu/ugrad/current/Pages/adfall1516.aspx.