

MAP4305/MAP5304: Dif Equa Eg and Phy Sci
MWF Period 7 (1:55 PM - 2:45PM)
Room: MW: Little 0113 and Online teaching, F:Zoom.

Instructor: Cheng Yu, chengyu@ufl.edu

Office Hours: Zoom, MW 12:30pm-1:30pm or by appointment.

Canvas Messages: Check your emails often so that you do not miss any important announcements.

Prerequisites: C or better of MAP 2302 is required. It is also strongly desirable to have a decent understanding of a Linear Algebra course. Please go through all review problems on the first week.

Textbooks: Fundamentals of Differential Equations and Boundary Value Problems, the 7th edition, Addison- Wesley/Pearson (Publisher), Nagle,Saff,Snider (required).

Please note that this course will be participating in the UF All Access program. Login at <https://www.bsd.ufl.edu/G1CO/IPay1f/start.aspx?TASK=INCLUDED> and Opt-In to gain access to your required course materials - UF All Access will provide you with your required materials digitally at a reduced price and the charges will post directly to your student account, allowing any available Financial Aid funds to cover the cost of your materials. This option will be available starting 1 week prior to the first day of classes and ending 3 weeks after the first day of class.

Description: This course is designed for any undergraduate students in engineering and physics. In this course, we will discuss much of Chapters 8, 9, 10 of the textbook. In particular, we will cover the following topics:

- a. Series solutions of differential equations,
- b. Matrix methods for linear systems,
- c. Introduction to partial differential equations.

Homework assignments: There will be several homework assignments. The test questions will be similar but different to homework problems. Please do all homework problems independently.

Exams: No use of calculators, or books will be allowed during any tests. No makeups WITHOUT medical documentation. It is the students' responsibility to have reliable internet connection, sufficient internet speed and cleared cache and cookies before each exam. Webcams are required for use of Honorlock. There will be three Mid-exams and one comprehensive final as follows

Midterm Exam 1: Feb. 15, Monday.

Midterm Exam 2: Mar. 22, Monday.

Midterm Exam 3: April 16, Friday.

Final Exam: Group B, 10:00 a.m - 12:00 p.m, April 29.

Grade Policy: Homework is 15 percent, each mid exam is 20 percent, and final is 25 percent. The class participation will be considered in borderline grades. The grade scale is as follows:

A : [90, 100].
B+:[85, 90).
B : [80, 85).
B-:[77, 80).
C+:[75, 77).
C : [70, 75).
C-:[68, 70).
D : [60, 68).
F : [0, 60).

Students with Disabilities: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Diversity and inclusion: I am committed to diversity and inclusion of all students in this course. I acknowledge, respect, and value the diverse nature, background and perspective of students and believe that it furthers academic achievements. It is my 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.