FLORIDA STATE UNIVERSITY MAP 2302

Summer Semester Ordinary Differential Equations 2019

Syllabus

Instructor Dr. Sanghyun Lee

Lectures Mon, Tue, Wed, Thu, & Fri (everyday): 2:00 – 3:20 pm, LOV 101

Email lee@math.fsu.edu.

Office Hours Mon/Wed: 3:30 – 4:30, LOV 002-D (or with appointments by email.)

Aims & Scope: Differential equations are the theoretical framework in which phenomena that change in time (or space) are studied. In this course, we will develop a toolbox of methods to study solutions of differential equations. Throughout the course, we will illustrate the utility of these methods in various disciplines, such as biology, chemistry, engineering, and physics.

Learning Objectives: At the completion of this course, you are expected to be able to

- Find and interpret solutions to first- and second-order ODEs
- Identify and classify various types of ODEs, and then apply appropriate methods to solve them
- Apply Laplace transform methods to solve forcing and impulse problems
- Construct approximate solutions to initial value problems

Eligibility: You must have the course prerequisites listed below, and must never have completed with a grade of C- or better a course for which MAP 2302 is a (stated or implied) prerequisite (including but not limited to MAP 3305). It is your responsibility to check and prove your eligibility for this course.

Prerequisites: You **must** have passed MAC 2312 (Calculus II) with at least a B- **or** passed MAC 2313 (Calculus III) with at least a C-.

Webpage: Course announcements, resources, and homework will be posted at

http://www.math.fsu.edu/~lee/teaching/ode_sum19.html

In addition, announcements and grades will be posted on Canvas. It is your responsibility to check the course webpage regularly and to read the announcements carefully.

Textbook: Reading and homework will be taken from

W. E. Boyce, R. C. DiPrima, and D. B. Meade *Elementary Differential Equations* 11th Edition, Wiley, 2017.

Lectures: You are expected to attend and participate in lectures. Lecture notes will not be posted online, nor will they be photocopied for you. If you miss a class for any reason, it is your responsibility to catch up on the work that you missed.

Assessments: Your final grade for the course will be determined by

Assessment	Date	Weight
Quizzes	Pop-up	25%
Midterm 1	Week 06 (Feb 14)	25%
Midterm 2	Week 12 (Mar 28)	25%
Final Exam	April 30, 10am–12pm	25%

The use of calculators, phones, computers and any other electronic devices in assessments is strictly prohibited. You must bring your FSU ID card to all assessments. Makeup exams will not be given for any reason. Check the dates of assessments before you schedule any travel or other plans. If a test absence is excused by FSU policy, then the final exam score may, at the instructor's discretion, be substituted for the missing test grade.

Homework: will be assigned, but will not be collected or graded. Problems and reading will be posted on the course webpage after each lecture. You are expected to read the relevant section of the textbook, and make as complete an attempt at the homework as possible.

(*Pop-up*) *Quizzes:* will be held in lectures. Quiz questions will be taken from lecture and homework material from the previous week. Your one lowest quiz grades will be dropped at the end of the semester. Makeup quizzes will not be given for any reason. If a quiz absence is excused, then the next unit test grade will be used for the missing grade. An unexcused absence from a unit test will be penalized. An unexcused absence from a quiz will result in a grade of zero.

Midterms: will be held in the Friday lectures of Weeks 2 (May 24th) and 4 (June 7th). Each midterm scores will count for 25% of your final grade. Midterms will be based on lecture and homework material. The Midterms will not be rescheduled for any reason.

Final Exam: will be held on June 21st. The final exam will be cumulative and will be based on all lecture and homework material covered in the course.

Grading Policy: It is your responsibility to make sure your work has been returned to you and the grade properly recorded in Canvas. *You have one week from the moment your work is returned to you to alert your instructor of a grading error or of missing work.* Grades can only be changed if you bring the original work on which the grade was listed.

Grading Scheme: Your final letter grade will be determined from your final numerical grade according to

Grade	Score
A- to A	90 – 100
B- to B+	80 – 89
C- to C+	70 – 79
D- to D+	60 – 69
F	0 – 59

Civility Policy: Lectures are devoted time for learning. Activities that interfere with this process will not be tolerated. Failure to comply will result in you being asked to leave, and will impact your final grade.

University Attendance Policy: Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who

have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy: The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy.)

Americans with Disabilities Act: Students with disabilities needing academic accommodation should

- (1) register with and provide documentation to the Student Disability Resource Center; and
- (2) bring a letter to the instructor indicating the need for accommodation and what type.

Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from the Student Disability Resource Center has been provided. This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the:

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Student Disability Resource Center 874 Traditions Way 108 Student Services Building Florida State University Tallahassee, FL 32306-4167 (850) 644-9566 (voice) (850) 644-8504 (TDD) Email: sdrc@admin.fsu.edu http://www.disabilitycenter.fsu.edu/
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Free Tutoring From FSU: On-campus tutoring and writing assistance is available for many courses at Florida State University. For more information, visit the Academic Center for Excellence (ACE) Tutoring Services' comprehensive list of on-campus tutoring options - email: tutor@fsu.edu. High-quality tutoring is available by appointment and on a walk-in basis. These services are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity.

Student Responsibilities: You are expected to keep up with the class and engage with the course material. Quizzes, midterms, and exams are expected to be products of individual students as per the FSU Academic Honor Policy. You are welcome to collaborate with your peers on homework problems.

Syllabus Change Policy: Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.