Math 353 - Section 04 - Elementary Differential Equations - Spring 2020
MWF: 12:00pm - 12:50pm, Hume 113

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Office Hours: MW 1:30-2:30   Email: scrober2@olemiss.edu

Course Information

1. Text: *A first course in Differential Equations* by Dennis G. Zill, the Classic Fifth Edition.
   (WARNING: this author has many books with similar titles!)

2. Corequisite: Math 263 (Calculus III).

Course Content and Goals

Differential equations are one of the key mathematical tools used in science and engineering. They arise in settings where the *rate of change* of a quantity is related to that quantity by some means. Examples are found in many areas of science, engineering and economics. For instance, Newton's laws of motion, vibrations of a material under stress and chemical reaction rates can all be modelled with differential equations.

Math 353 will focus on the identification of certain important classes of differential equations, and on how to solve them. We will cover Chapters 1, 2, 4, and 7 of the textbook, together with some applications from other chapters (parts of Chapters 3, 5, 6). The topics include first-order differential equations and their applications, linear differential equations of higher order, and the Laplace transform.

Homework, Quizzes, and Tests

1. Homework will be given from the textbook. These problems are intended for you to practice the course material and will not be collected.

2. Quizzes will be given regularly during classtime. The questions on the quizzes will be slight modifications of the homework problems. The quizzes will collectively be worth 100 points.

3. There will be three major tests. Each test will be worth 100 points. The test questions will be based on the lectures and homework problems. Your lowest test grade will be replaced by your final exam percentage, if it is higher.

4. The final examination is comprehensive and will be worth 200 points.

Very Important

1. If a test is missed for ANY reason, a grade of 0 will be given. There will be absolutely NO make up tests given for ANY reason.

2. The lowest of the three major test grades will be replaced by the exam percentage, if it is higher. Please note that the homework grade cannot be replaced.

3. Any student who misses one of the tests because of an official University function must reschedule and take this test at a time BEFORE the test is scheduled to be given. NO OTHER rescheduling will be allowed.

4. An "I" grade will not be given without the permission of the Department of Mathematics.

5. Students must show all work for each test question and arrive at a correct answer.

6. Every student must take the final exam at the time scheduled. The only exceptions are those students affected by # 3 above.

Final Grade

The cumulative total for the course is 600 points - tests: 300, quizzes: 100, final exam: 200.

Grade	Percentage Necessary
A	93%
A-	90%
B+	87%
B	83%
B-	80%
C+	77%
C	70%
C-	67%
D	60%
F	below 60%

Attendance Policy

1. Attendance is mandatory. Absences will negatively impact your grade.

2. Attendance fraud is a form of academic dishonesty. Students engaging in fraud will fail the class and be reported to the university for further disciplinary action. If a student must leave class after signing in, it is the responsibility of the student to communicate with the instructor before class begins.

3. Random attendance checks may be made in the form of a role call during lectures. If a student scanned into class using his or her student identification card but is not present for the role call, then that student will be found to have fraudulently attended class.

Calculators and Electronic Devices

Your brain is a sufficient calculator for Math 353. Electronic devices such as calculators and cellphones are prohibited on tests, quizzes, and the final exam. Use of such devices while taking a test, quiz, or final exam will be considered academic dishonesty and appropriate action will be taken.

Cheating

The following statement is the policy of the Department of Mathematics regarding cheating:

Offenses: Cheating on any assignment related to the class; theft or attempted theft of exam questions; use of prohibited technology; or possession of exam questions prior to the time for examination; shall all be offenses subject to appropriate penalties.

Penalties: The penalty for commission of any offense set out above is failure in the course and, subject to the approval of the Chancellor, dismissal or suspension from the university.

Withdrawal Deadline for the Fall 2020 Semester - Monday, March 2

After the course withdrawal deadline, a student may withdraw from a course only in cases of extreme and unavoidable emergencies as determined by the academic dean. Withdrawing from a course after the deadline will not be permitted because of dissatisfaction over an expected grade or because the student has changed his or her major. After the course withdrawal deadline, courses dropped will be recorded on University records and the W grade will be recorded if the student is not failing the course at the time of withdrawal; otherwise, the grade recorded will be F.

Disability Access and Inclusion

The University of Mississippi is committed to the creation of inclusive learning environments for all students. If there are aspects of the instruction or design of this course that result in barriers to your full inclusion and participation, or to accurate assessment of your achievement, please contact the course instructor as soon as possible. Barriers may include, but are not necessarily limited to, timed exams and in-class assignments, difficulty with the acquisition of lecture content, inaccessible web content, and the use of non-captioned or non-transcribed video and audio files. If you are approved through SDS, you must log in to your Rebel Access portal at https://sds.olemiss.edu to request approved accommodations. If you are NOT approved through SDS, you must contact Student Disability Services at 662-915-7128 so the office can: 1. determine your eligibility for accommodations, 2. disseminate to your instructors a Faculty Notification Letter, 3. facilitate the removal of barriers, and 4. ensure you have equal access to the same opportunities for success that are available to all students.

Test Dates

Test dates will be announced in class. The final exam will be on Friday, May 8, at noon.