

George Mason University
Math 214 - 001
Elementary Differential Equations

Instructor: Trey Andreani
Email: fandrean@gmu.edu
Office: Exploratory Hall 4407

Lecture: Blackboard Videos
Office Hours: By appointment

Prerequisite: C or better in MATH 213 or MATH 215.

Description: We will cover first-order ODEs, higher-order ODEs, Laplace transforms, linear systems, nonlinear systems, numerical approximations, and modeling.

Text: Boyce and DiPrima, Elementary Differential Equations 11th Edition.

Lecture: Lectures will be prerecorded and posted to Blackboard under the tab, 'Lecture Videos'. You are required to watch each video and complete the corresponding homework before the end of the week.

Problem Solving Session: A problem solving session will take place in the online classroom. You will need to log into our Blackboard page, select the link 'Meeting Room' on the left, click on 'Course Room' in the page that opens, and finally click 'Join Course Room' in the frame on the right. Participation is optional, but strongly encouraged.

Technology: No calculators or computer programs will be allowed at any point in the course. A webcam is required to take exams. You may purchase one, or use your smartphone as a webcam when logging into Blackboard.

Homework: Homework will be assigned at the end of each class, and will be posted under the corresponding Blackboard link. Completing the homework assignment is the bare minimum of work you should be doing outside of class. Additional problems are available for those who would like extra practice. Homework will not be collected, but completing it is essential to passing the course.

Recitation: Recitation will take place in an online classroom. Details will be provided by you recitation instructor. Attendance and participation are mandatory.

Exams: There will be a midterm and final exam. You must be logged into the Blackboard online classroom (the same as for problem sessions) with your audio and camera enabled. This will allow me to observe everyone and ensure the integrity of the examination environment. Make-up exams will only be given for extreme circumstances, must be accompanied by official documentation, and I must be notified in advance.

Grading: Recitation - 20% Exams - 40% x2

Academic Integrity: Violations of the honor code will not be tolerated.

Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

Important Dates:

Classes Begin - August 24

Last Day to Drop (no tuition liability) - September 8

Last Day to Drop (with 50% tuition liability) - September 15

Selective Withdrawal Period - September 15 - September 28

Schedule: (Subject to Change)

| Week Beginning On | Sections Covered | Notes |
|-------------------|------------------|--|
| 8/24 | 1.1, 1.2, 1.3 | |
| 8/31 | 2.1, 2.2, 2.3 | |
| 9/7 | 2.4, 2.5 | |
| 9/14 | 2.6, 2.7, 2.8 | |
| 9/21 | 2.9, 3.1, 3.2 | |
| 9/28 | 3.3, 3.4, 3.5 | |
| 10/5 | 3.6, 4.1 | |
| 10/12 | 4.2, 4.3 | Saturday, October 17 Midterm Exam (Ch 1-3) 10:30am-12:20pm EDT |
| 10/19 | 4.4, 6.1 | |
| 10/26 | 6.2, 6.3 | |
| 11/2 | 6.4, 7.1 | |
| 11/9 | 7.2, 7.3 | |
| 11/16 | 7.4, 7.5 | |
| 11/23 | 7.6 | |
| 11/30 | 7.7, 7.8 | Saturday, December 12 Final Exam (Ch 4-7) 1:30-3:30pm EST |