

George Mason University
Summer 2022
Math 214 - B01
Elementary Differential Equations

Instructor: Iffat Sarfraz
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Office: Exploratory Hall 4311
Office Hours: WF 3:00-4:30

Lecture Time: TR 4:30-7:10 PM
Recitation Time: TR 7:20-8:10 PM
Room: Horizon Hall 1008

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. (ISBN: 9781119169741)

Homework: Homework will be assigned weekly, and it will be graded based on completion. Homework *must* be turned in on time via Blackboard. Please submit a single PDF. Also, make sure the submissions are clear and the problems are numbered in order. There won't be any homework drops.

Worksheets: There will be worksheets each recitation unless there is an exam. The worksheets will be graded for correctness. I will drop your two lowest worksheet scores at the end of the semester. There won't be any make-up worksheets.

Exams: There will be three exams during the course, which will be given during recitation. Make-up exams will only be given for extreme circumstances. I must be notified in advance.

Final Exam: The final exam will be cumulative. The date and time are set by the university and are non-negotiable (July 28 from 4:30 - 7:15 PM).

Grading:

Homework - 20% Worksheets - 20% Exams - 10% x3 Final Exam - 30%

Equivalence between scores and letters, recommended by GMU, is given by

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>97	>93	>90	>87	>83	>80	>77	>73	>70	>60	60-0

GMU Policies: The University Catalog, <http://catalog.gmu.edu>, is the central resource for university policies in university academic affairs. Further policies are available at <http://universitypolicy.gmu.edu/>. All members of the university community are responsible for knowing and following established policies.

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

Tutoring Center: The Mathematics Tutoring Center is in the Johnson Center room 344. Please see the website for hours of operation. <http://math.gmu.edu/tutor-center.php>

Other Useful Resources:

<https://homepages.bluffton.edu/~nesterd/apps/slopefields.html>

<https://www.symbolab.com/>

<https://www.desmos.com/calculator>

<https://www.wolframcloud.com/> (Free Mathematica Online via GMU login)

Important Dates (Session B: 8 Week):

Classes Begin – June 7

Last Day to Drop with no Tuition Penalty – June 9

Last Day to Drop 50% Liability – June 15

Final Exam - July 28 from 4:30 - 7:15 PM

Schedule: (Subject to Change)

Week Beginning On	Tuesday	Thursday
6/7	1.1, 1.2, 1.3, WS 1	2.1, 2.2, 2.3, WS 2
6/14	2.4, 2.5, WS 3, HW 1 Due	2.6, 2.7, 2.8, WS 4
6/21	2.8, 2.9, 3.1, Exam 1	3.2, 3.3, WS 5, HW 2 Due
6/28	3.4, 3.5, 3.6, WS 6	3.6, 3.7, 4.1, WS 7, HW 3 Due
7/5	4.2, 4.3, Exam 2	4.4, 6.1, 6.2, WS 8, HW 4 Due
7/12	6.2, 6.3, 6.4, WS 9	7.1, 7.2, WS 10, HW 5 Due
7/19	7.3, 7.4, 7.5, Exam 3	7.5, 7.6, 7.7, WS 11, HW 6 Due
7/26	7.8, 7.9, WS 12	Final Exam