

MATH 3410 Section 003 - Differential Equations I (Fall 2023 1)

Math 3410.003 Differential Equations I

MWF 11-11:50am, WH 317

Instructor. Bunyamin Sari, GAB 414, bunyamin.sari@unt.edu
(<mailto:bunyamin.sari@unt.edu>)

Office hours. MWF 12:30-2pm (or by appointment)

Textbook. Elementary Differential Equations, William Trench, free digital commons textbook. [↗ \(https://digitalcommons.trinity.edu/cgi/viewcontent.cgi?article=1007&context=mono\)](https://digitalcommons.trinity.edu/cgi/viewcontent.cgi?article=1007&context=mono) (click to download)

Additional problem sets with solutions. [↗ \(https://drive.google.com/file/d/0B70Q0VU9Pjwdc1VmQ3g1c2VHcW8/view?resourcekey=0-up5sjHGOp7NQA1sxA_kA\)](https://drive.google.com/file/d/0B70Q0VU9Pjwdc1VmQ3g1c2VHcW8/view?resourcekey=0-up5sjHGOp7NQA1sxA_kA)

Prerequisites. Calculus II (1720) with a grade of C or higher is required. Linear Algebra (2700) is recommended, but may be taken concurrently

Exams with grade weights and tentative dates

20% Exam 1, Monday Sep 18

20% Exam 2, Wednesday Oct 18

20% Exam 3, Monday Nov 13

30% Cumulative final exam, Monday, December 11 at 10:30am-12:30pm

10% Homework. The weekly homework will be posted and submitted on Canvas. Homework are due Thursdays. All homework must be handwritten on paper and then scanned using an app and submitted on Canvas as a SINGLE pdf file. Most phones or tablets have the scan app built into it, and there are also many free apps. Please use a scan rather than a plain picture. The scans get rid of white spaces and make it legible. If the file is not legible the grader may deduct partial or all points.







Please make effort on your own to solve problems before seeking help elsewhere. This will help you retain the material and be more successful in exams.


Calculators. Calculators are not allowed during exams.

Disability. Please seek accommodation via ODA and also let me know.

Topics. Tentatively, we aim to cover the following sections of the book. Sections 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.5, 2.6, 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 7.1, 7.2, 7.3, 7.4, 8.1, 8.2, 8.3, 8.4, 10.1, 10.4, 10.5, 10.6

Course Summary:

| Date | Details | Due |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Wed Aug 23, 2023 |  Lecture 2 (https://unt.instructure.com/calendar?event_id=720299&include_contexts=course_92665) | 12am |
| Fri Aug 25, 2023 |  Lecture 3 (https://unt.instructure.com/calendar?event_id=720425&include_contexts=course_92665) | 12am |
| Thu Aug 31, 2023 |  HW1- Basic concepts, integrating factor, separable equations (https://unt.instructure.com/courses/92665/assignments/1925586) | due by 11:59pm |
| Mon Sep 18, 2023 |  Exam 1 on September 18 (https://unt.instructure.com/courses/92665/assignments/1926443) | due by 11:50am |
| Wed Oct 18, 2023 |  Exam 2 on October 18 (https://unt.instructure.com/courses/92665/assignments/1926441) | due by 11:50am |
| Mon Nov 13, 2023 |  Exam 3 on November 13 (https://unt.instructure.com/courses/92665/assignments/1926442) | due by 11:50am |

| Date | Details | Due |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Mon Dec 11, 2023 |  <u>Final exam in on December 11 at 10:30am- 12:30pm</u> <u>(https://unt.instructure.com/courses/92665/assignments/1926449)</u> | due by 12:30pm |