

Course info

[3410 Intro video](https://youtu.be/4-dA4h62-IU) [_\(https://youtu.be/4-dA4h62-IU\)](https://youtu.be/4-dA4h62-IU)



[_\(https://youtu.be/4-dA4h62-IU\)](https://youtu.be/4-dA4h62-IU)

Please start watching the above and then watch this one **[Introduction-2021](https://youtu.be/x3eLdZhC3Tg)**
[_\(https://youtu.be/x3eLdZhC3Tg\)](https://youtu.be/x3eLdZhC3Tg)

Welcome to Differential Equations I class!

My name is **[Bünyamin Sari](http://www.math.unt.edu/~bunjamin/)**. [_\(http://www.math.unt.edu/~bunjamin/\)](http://www.math.unt.edu/~bunjamin/) I am a professor of mathematics, I will be your instructor for this course.

This is asynchronous course, meaning we won't have live lectures on zoom. But we will use zoom somewhat differently, explained below. The course material consist of a free online textbook, some supplementary videos, and some practice problems that I wrote.

This is a fully online course so we will extensively use tech. You are already familiar with Canvas and how to upload a file to Canvas but we will use some more. **You will need, at minimum, a computer or laptop with webcam and a smartphone with camera.** If you have an iPad or surface pro (or some other tablet with pen), that's great too but not required. For software we will use

- Canvas
- Microsoft Office lens or CamScanner or similar scanner apps.
- **[Zoom](https://zoom.us/)** [_\(https://zoom.us/\)](https://zoom.us/) (download it to all of your devices, and log in with unt id)

- **Discord** [_\(https://discord.com/\)_](https://discord.com/) it to all of your devices, and sign up with any user name, if you already use discord you can use that username if you wish.)
- Youtube (learn how to upload a video, you can use any account you wish)

Scanner app. You need a scanner app to take a picture of your handwritten work on paper that converts into pdf. Learn how to scan several pages into a single pdf, these apps do that with ease.

Screencast/video assignments via zoom (instead of midterm exams)

You probably watched lectures on zoom but we are going to use zoom in a different way! You will use zoom to create and record a screen cast with video of yourself talking about your solution of a given problem, and upload to Youtube. The videos will be short, under 8 minutes, and there will be approximately 4 of them in the semester. This will be the most important (50%) part of your grade. Please learn how to

- Start a meeting on zoom (click start meeting, you won't have to have anyone else on the meeting)
- Share screen(click share screen, pick the pdf file of your handwritten solution on your computer)
- Record meeting. See here for basic instructions

[Recording a Zoom Meeting](https://www.youtube.com/watch?v=IZHSAMd89JE) [_\(https://www.youtube.com/watch?v=IZHSAMd89JE\)](https://www.youtube.com/watch?v=IZHSAMd89JE)



[_\(https://www.youtube.com/watch?v=IZHSAMd89JE\)](https://www.youtube.com/watch?v=IZHSAMd89JE)

- When finished upload on youtube (you can upload as unlisted video if you don't want it to be public) and submit the link of the video on canvas by the due date.

This is much easier than it sounds, and you will have the whole week to do, and you will be prepared during the week leading up to the video.

Peer review of screencast/videos

You will be asked to peer review 3 videos of other students' submissions. The videos that you will review will be assigned randomly by Canvas. **You will have to complete the review by due date in order to get a grade for your own video.** Detailed instructions will be provided for each assignment. Your instructor will give the final grades to the reviewed video assignments.

Group homework

You are all randomly placed in groups of 4 students. All weekly homework assignments will be group assignments. That is, you will work together (will communicate with each other on discord-see below) and submit only one assignment per group. You can see your group on canvas. The weight of the group homework is 15%.

Weekly quizzes

We will have weekly quizzes on Thursdays based on posted material of the week (%15).

Discussions and participation

Discussions will be on Discord. Discord is a chat app mostly gamers use but it seems it will be very useful for our use. After you download and sign up, click on the invite

<https://discord.gg/vguKPcB6mJ>

to join our class server. Do this now so we can continue our conversation there. I am sure you have lots of questions at this point. When you join discord rename yourself with your full name so I will know who is who. Please do not use NSFW login names. It may seem a lot of tech but most tools are widely used and you should be familiar with them.

So summary of what you are expected to do in this course: work with your group and submit weekly homework (%15), weekly quizzes (%15), create 4 screen cast videos each 8 minutes (50%), and take the final exam (20%). No midterm exams!

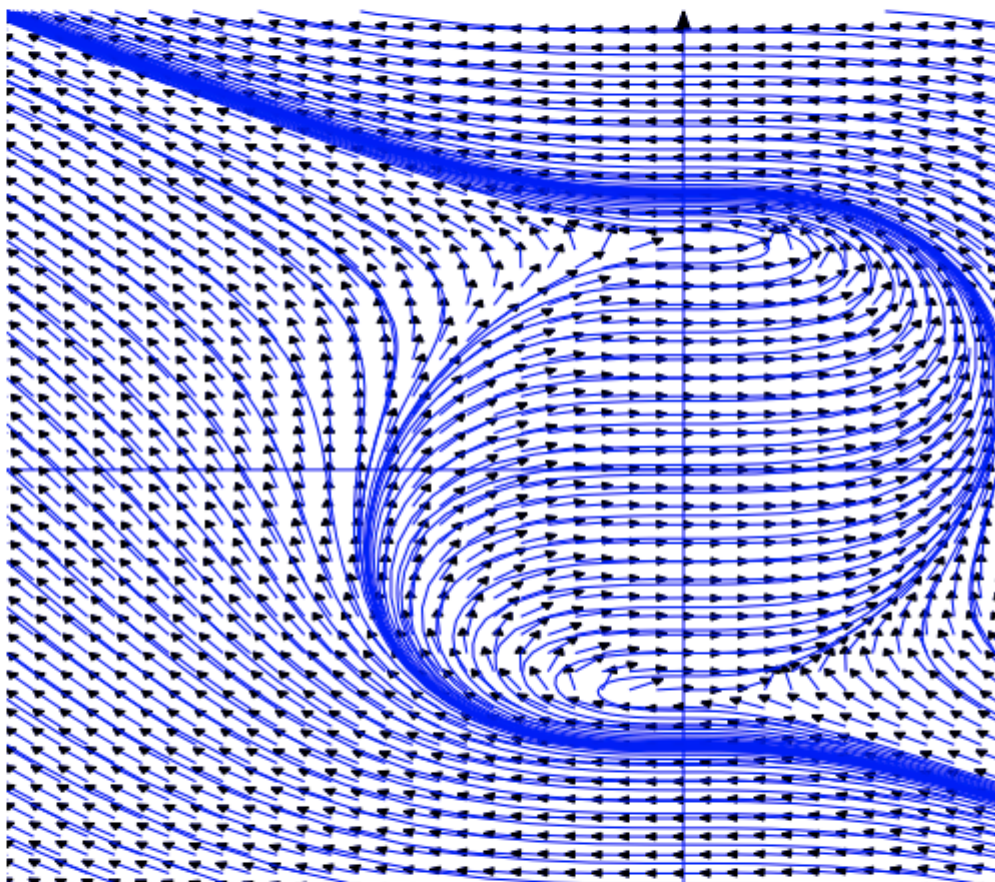
We have quite a bit of material to cover so please keep a consistent study pace. Don't delay the work till last minute. It is impossible to submit an acceptable work in last minute-you need to work throughout the week. The course is not self paced!

Course material

The course material is compiled from different sources; a free online textbook, a set of practice problems created by your instructor, and various YouTube videos to help you with the material.

- Download the [Practice problems](https://drive.google.com/file/d/0B70Q0VU9Pjwdc1VmQ3g1c2VHcW8/view?usp=sharing) (<https://drive.google.com/file/d/0B70Q0VU9Pjwdc1VmQ3g1c2VHcW8/view?usp=sharing>)
- Elementary Differential Equations by William Trench, open textbook, creative commons.

ELEMENTARY DIFFERENTIAL EQUATIONS





William F. Trench

Andrew G. Cowles Distinguished Professor
Department of Mathematics
Trinity University
San Antonio, Texas, USA
wtrench@trinity.edu

This book has been judged to meet the evaluation criteria of the Editorial Board of the American Institute of Mathematics with the Institute's [Open Textbook Initiative](#). It may be modified, redistributed, translated, transported, and built upon under a [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License](#).

[Attribution-NonCommercial-ShareAlike 3.0 Unported License](#)

[FREE DOWNLOAD: STUDENT SOLUTIONS](#)

http://ramanujan.math.trinity.edu/wtrench/texts/TRENCH_DIFF_EQNS_I.PDF

<https://digitalcommons.trinity.edu/cgi/viewcontent.cgi?article=1007&context=mono>) **To get started and navigation**

You will see the course navigation on the left. Explore the menu items to get familiar with the course site.

To get started with the course, click on Modules and start with the first module. Each module contains the weekly course content, daily homework assignments, and midterm exams. You can also access assignments from the navigation menu.

Daily schedule

The material is arranged to mimic a regular Tuesday-Thursday F2F class. See the syllabus for the list of topics and the Calendar for daily activities. See the page [how to submit work \(https://unt.instructure.com/courses/30674/pages/how-to-submit-work\)](https://unt.instructure.com/courses/30674/pages/how-to-submit-work) to submit assignments.

How to study

From the Modules you will find each weeks' instructions and topics covered. Typically, each day you study the assigned material for the day and do the posted practice problems, and if assigned, watch accompanying youtube videos or other material to better understand the topic. Then, work on homework problems with your group and start compiling solutions and write up before the weekend and submit your work on weekend on due date. Due date and time of each work is clearly indicated and late work cannot be accepted.

Getting feedback

Assignments will be graded by a TA, and together with your peer review I will be grading screencast/video assignments. We are aiming to get back to you all week's work before start of the following week. So you will be constantly getting feedback as how you do.