

Hi Math Methods Students, and welcome to Math Methods!

## Course Homepage

You should generally never need to visit the BrightSpace site for this course. Instead, the course website is here: <https://tildesites.geneseo.edu/~pogo/MathMethods/MathMethods.htm>

**Bookmark it in your browser!** You can get a pdf of the syllabus, etc. there.

## Books

Get a paper textbook. Especially with online homework, online textbooks are a waste of time. You need to be able to fully see both the book and your onscreen work side-by-side. On Amazon today, I found a dozen of copies of the hardcover *second* edition for around \$30. If you want the (newest) *third* edition (ISBN 0-471-19826-9), that's going to cost more like \$83 (used). I think it might be worth it because the third edition has many of your homework problems in it, including solutions.

## Surveys

Please examine these today:

Personal info Survey: <https://forms.gle/VH635i6iJ3qk89xA9>

Grade Request form: <https://forms.gle/FfNU6ZfVWS19yxEN8>

## Assignments

There are fourteen assignments. All of them are on CAPA (<http://capa.geneseo.edu/>). The first assignment is available now!

**(Warning: the first assignment is the hardest assignment for the whole semester... so it *will* get easier in two weeks...)**

To learn about using CAPA, see:

<https://tildesites.geneseo.edu/~pogo/MathMethods/CapaInfo.pdf>

Also, you will earn extra credit for doing your homework “early”, as described here:

<https://tildesites.geneseo.edu/~pogo/RewardSummary.pdf>

This extra credit is just a simple trick on my part to change you from having an immature attitude of procrastination that worked for you in high school, into a more mature student who is capable of college level work. **For exactly zero extra minutes of work**, you’ll get a higher grade, for merely not procrastinating on your homework.

## Office Hours

Office hours times are listed at the tippy top of the syllabus. Here’s a graphical summary:

<https://tildesites.geneseo.edu/~pogo/Schedule/Schedule.htm>

Office hours will use Discord, and my office hours time will be shared across all my classes using this “server”: <https://discord.gg/GjkWREU>. Office hours are primarily audio, and operate on a “first-come, first served” basis. However, each student may only ask one question in turns whenever other students are waiting patiently.

Here are some instructions to set up Discord to work properly for you during office hours:

<https://tildesites.geneseo.edu/~pogo/Discord.pdf>

You should practice using Discord *before the semester begins*, especially the audio capabilities.

Also, practice with making reasonable screen snips (i.e., not grabbing your entire screen), and with quickly imaging your own paper/handwritten work.

Discord will allow you to speak, listen, post screen captures or other electronic images, post text, and share your screen “live”. Whereas with Zoom, the main concept is seeing everyone’s faces, the main focus of Discord is seeing actual content. I’ll hear you, but not see you.

### **Office Hours Grade!**

A small part of your grade (5%) is based on using office hours via Discord. Basically, you have to be part of some (relevant) conversation during office hours at least once in at least two separate calendar months.

### **Letters of Recommendation**

Unless you plan on being abducted by aliens before you graduate, you’ll need a plan for your future. Most such plans require that other people vouch for you, and are willing to say that you’re worth taking a risk on. However, most students don’t understand that grades have nothing to do with that process. Do you want to see what you need to do *now* to get ready for that? Then read this:

<https://tildesites.geneseo.edu/~pogo/Recommendations.pdf>

### **Education**

Many students in this class think it’s pretty hard, and I agree that it’s harder than what you’ve been asked to do in the past. But, that’s more an indictment of how little you’ve been asked to do in the past, and not a true statement about how hard this class is. Did you know that New York actually has laws that specify how hard a college class has to be before it is allowed to be counted as a “college class”? This law even applies to private colleges! If a class is too easy, it’s not allowed to count! Here’s a short article summarizing the actual law and various college policies about your workload: <https://tildesites.geneseo.edu/~pogo/Education.pdf>

### **Mathematica**

Mathematica is a program that the college has already paid for you to use. It’s a versatile math assistant that you will be required to use later this semester. You should visit the CIT help page and install it on your computer *today*!

<https://geneseo.atlassian.net/wiki/spaces/HELP/pages/76780100/Mathematica+Installation+and+Licensing+Instructions>

Also, please note that updating Mathematica from a prior edition can be fairly buggy. See this document for some suggestions if you’re having trouble updating:

<https://tildesites.geneseo.edu/~pogo/MathMethods/ReInstallMathematica.pdf>

### **Forged in Fire**

I started watching this reality show recently: <https://www.history.com/shows/forged-in-fire>

It’s a show about blacksmithing. I’ve seen over 50 episodes, so by now, you’d think I must be an expert blacksmith, right? Wrong! Even though there’s some weird sense in which I’ve “learned” *something* by watching this show, in every relevant sense, I’ve learned *nothing*. I still can’t make anything in a forge. If you think that *you* are capable of learning something by merely attending class, or even worse, by watching some internet videos on that topic, you’re fooling yourself.

Nobody anywhere has actually ever learned to do anything by *watching*. You learn by *doing*. The process of learning by doing is emotionally painful, because your first (ten or so) tries are *always failures*. But hopefully, by your eleventh try, you’re finally doing something worth doing. **If you want to fail at life**, physics, or college, a good way to make that happen is to *watch* more and *do* less. If you hate the idea of success, then you have a lot of options for things to watch to make sure you don’t learn anything: you can watch YouTube videos about math to help you not learn some

math, you can watch some videos at Khan academy to help you not learn physics, you can watch your friends do their homework, etc. to ensure that you fail your exams.

Your homework exists **only** for you to have a chance to at least get up to your fifth try at something. Don't squander them!

I'll see you in a couple days!

Pogo