#### Hi Fluids students!

You should generally never need to visit the Brightspace site for this course. Instead, the course website is here: <a href="https://www.geneseo.edu/~pogo/Fluids/Fluids.htm">https://www.geneseo.edu/~pogo/Fluids/Fluids.htm</a>
Bookmark it in your browser right this second! You can get a pdf of the syllabus, etc. there.

## **Books**

Summary of my book policies: https://www.geneseo.edu/~pogo/pogobooks.html

Although you are required to buy a paper copy of the textbook, *you are permitted to use an older edition*. As you probably already know, electronic versions of books are useless because of how slow it is to use them and how much they clutter your usable screen space.

Amazon has the 8<sup>th</sup> edition in used/hardcover for \$45 (search for 0073398276) Amazon has the 7<sup>th</sup> edition in used/hardcover for \$11 (search for 0077422414) Plenty of other forms and options exist. You probably spend more on this on coffee *daily*.

### Exams

Exams are currently scheduled as 75 minutes "in-class", but as usual, I am willing to give you more time if that is what the class desires. To reschedule an exam, 100% of the class must agree on a different time and date than the one listed on the syllabus. 100% does not mean that one of you tells me "Oh, it's ok, we all talked and everybody agrees". Instead, it means that *every one of you talks to me* directly, with no exceptions. The new time and date must be between 0 and 7 days after the date scheduled on the syllabus. The new time may not exceed 2 hours. The final exam may not be rescheduled (it is Monday, May 12<sup>th</sup>, noon to 2:30 pm). Exams are written (not CAPA).

# A 5 minute assignment that is due right now as part of this email!

On the first day of class, we'll be trying to understand the basics of how fluids differ from non-fluids. So, I have a short activity I want you to complete. Start with this Word document: <a href="https://www.geneseo.edu/~pogo/Fluids/ContinuumDemo.doc">https://www.geneseo.edu/~pogo/Fluids/ContinuumDemo.doc</a>

# "Project"

This class has a "final project". Projects are typically completed by teams of 2 or 3 students, and allow students to choose an activity that gives them slightly more depth on a sub-topic of their own interest. Overall, the projects are equivalent to about 2 full homework assignments in terms of overall effort. As part of any accredited engineering program, such a project would have many criteria (e.g., it's possible to solve it in more than one way, it requires team work, it requires a written report, it requires presentation of data in well-conceived plots, etc.). Most students I have talked with are clueless about the word "team work". To students, "team work" means each team member has a focus area so that the other team members don't have to know what the others are doing. But in real team work, every team member knows everything about every area of the project. Teamwork is NEVER about division of labor, it's about collaboration to improve both understanding and quality.

Although projects are due at the end of the semester, I encourage you to choose a team and a project early, and to work on it in one or two hour chunks long before the deadline.

# Take A Survey Right Now!

This is about how you want to be updated about your grade: <a href="https://forms.gle/3KM9kX32MjmAqJen6">https://forms.gle/3KM9kX32MjmAqJen6</a>

#### **Office Hours**

Office hours times are listed at the tippy top of the syllabus. Here's a graphical summary: https://www.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": <a href="https://discord.gg/GjkWREU">https://discord.gg/GjkWREU</a>. 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: <a href="https://www.geneseo.edu/~pogo/Discord.pdf">https://www.geneseo.edu/~pogo/Discord.pdf</a>
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. As a result, Discord is also much more bandwidth-friendly than Zoom is.

#### Homework

There are ten assignments. All of them are on CAPA (<a href="http://capa.geneseo.edu/">http://capa.geneseo.edu/</a>). The first assignment is available now! To learn about using CAPA, maybe see this link: <a href="https://www.geneseo.edu/~pogo/MathMethods/CapaInfo.pdf">https://www.geneseo.edu/~pogo/MathMethods/CapaInfo.pdf</a>

Also, you will earn extra credit for doing your homework "early", as described here: <a href="https://www.geneseo.edu/~pogo/RewardSummary.pdf">https://www.geneseo.edu/~pogo/RewardSummary.pdf</a>

This 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, provided that you don't do too much work close to the assignment's deadline.

## **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? Read this: <a href="https://www.geneseo.edu/~pogo/Recommendations.pdf">https://www.geneseo.edu/~pogo/Recommendations.pdf</a>

## Forged in Fire

I started watching this reality show recently: <a href="https://www.history.com/shows/forged-in-fire">https://www.history.com/shows/forged-in-fire</a>
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. I never have. 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 fluids to help you not learn some fluids, you can watch some videos at Khan academy to help you not learn fluids, you can watch your friends do their homework, etc.

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

I'll see you in a couple days!

Pogo