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Slack, study groups, tips for group work,  
boring videos.

Contreras 1



Dear Future Dusty students,

Hello, I'm Ulysses Contreras and I'm majoring in Electrical Engineering at Highline College. I plan on transferring to UW Tacoma. I work as writing and math tutor at the Academic Success Center at Highline. I like to play video games, watch anime, and working out. In terms of mathematics, I've taken CAL 1-3 and differential equations at Highline. I'd say my math skills are very refined and I do enjoy the subject.

The first big one is to make sure you utilize all the platforms Dusty uses. It can definitely seem overwhelming with how everything is so spread out, but it's intuitive once you get used to it. Make sure you know what's on Canvas, Gradescope, Slack, and Pearson. If you're confused by it, make sure to ask Dusty or other classmates. Furthermore, Slack is the big one that you should make sure to utilize as much as you can. It provides easy access to messaging Dusty and other classmates. Any important announcements can be found there. Most of all, you can ask other classmates questions on things like homework which can be very helpful. I know it can be easy to ignore or forget to check it, but it's a good habit to check it at least a few times a week.

A big part of Dusty's class is there is a big emphasis on doing group work practice problems. Now, for those who go "AHHH GROUP WORK EWWW" don't fret my friend, you will learn to like it this quarter. My specific advice is to fully utilize this time and try to make sure everyone participates including yourself. This requires good team synergy and there's many things you can do to reach this synergy. For one, try taking turns being the "leader" of a problem and writing on the board. Like I did problem 1 then I could elect another group member to tackle the next problem by giving them the marker and nudging them into it. Another way would be to offer support and guidance for your groupmates. This can be done by asking guiding questions and stating what we know and what concepts are at play. It can also be done by talking through a step or 2 of the problem. Finally, if you fall in the boat of "I have no idea what's going on" make sure you ask your groupmates questions to clarify the concepts and process. This helps you understand it and helps them master the problem/concept by talking about it. Furthermore, if a groupmate is not following along, don't be afraid to try and explain it to them even if you're unconfident. You can always check with Dusty once he checks in with you guys later.

Continuing with the big group work theme, a bit less than halfway through the quarter, Dusty elected group leaders to have the option to create their own study groups. They could create an open weekly study group at a certain time and date. I ended up being a leader and went in thinking it wouldn't be that useful, but boy I was wrong. I choose a time before each quiz and being able to study with others helped quite a bit, especially with the later sections. It's great to ask each other questions, quiz each other, and just talk through concepts. Furthermore, with my group we often tried predicting what would be on the quiz as well as

what proofs we would need to know/memorize. It was also surprisingly a lot of fun as I got to know my classmates better. The extra credit for attending is a nice bonus too.

One last piece of advice of studying is to create a master notes document in word or any word processor. Basically, just take notes on the key points of each section. You should try to summarize things and concepts in your own words. This will end up being quite useful for assessments and the final exam. To add another side tip, use a planner/checklist to keep track of all your assignments. Also, these are effective for any STEM class.

Dusty's flipped class model has its benefits and flaws. Starting with the good, it allows for a very flexible class because you can watch the lecture videos any time and work at your own pace. It allows more time for practice problems during class. It was challenging in that the lecture videos were not of the greatest quality. They're old, outdated zoom lectures and I honestly would often get bored watching them. It often felt like things dragged on because it was the early zoom era where everyone was still figuring it out. They felt like they had a lot of filler that could've been cut out. They can be long especially when each section has 2-3 videos. Although watching them at 1.5-2x speed made it much more bearable. Furthermore, it has the disadvantage of not being able to ask questions when watching lectures compared to in-person lectures. Although this effect is mitigated because you have plenty of time to ask questions during groupwork and on slack.

Now with all this in mind, at the end of the day Dusty's linear algebra really isn't bad at all. It ended up being a very chill and low stress class for me and I bet it'd be the same for you as well. As long as you put in the effort your essentially guaranteed to be successful. Furthermore, make sure to cherish this time because Dusty is one the nicest and chilliest teachers, you'll ever get to have during your college career.

Sincerely,

Ulysses Contreras

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works a lot, life happens, communicate!

Dear Future Student of Dusty's,

My name is Jonavann Am. I took Dusty's linear algebra class for the Winter 2023 quarter. Here's a little information about me. I'm currently 22 years old and graduated high school in 2019. I didn't start college until 2021 so this is my second year at Highline. I am working towards becoming a civil engineer. I work as a restaurant server mainly on the weekends, mostly in the evening. I have 3 younger brothers (21, 15, and 4), a younger sister (18) and two older step-sisters. The younger siblings live with mom while the older siblings are out in the world doing their own stuff. I moved out of my mom's house last year and now live in a house I purchased with my dad.

This quarter I faced many challenges as a person and as a student. I struggled with getting assignments turned in because I had other things on my mind so I didn't start it or I left it to the last minute to work on it. I have a bad habit of doing that, but I still continue figuring out what works best for me. I found that work would interrupt my education because of the late hours I would work (sometimes I work graveyard shifts and the restaurant doesn't close until 2am on Fridays and Saturdays). This would affect the amount of sleep I got on the weekends. I would set aside some homework to do on the weekends but that doesn't end up happening because I need sleep to work properly. Besides work, life happens to everyone. By that I mean I had things come up in my life that left a pothole in my road to education. There were things I prioritized over homework that if left incomplete, I would keep thinking about it.

What I did to overcome some of these challenges was talking to my manager at work about having a consistent schedule that worked for me while being a full time student and still needing to pay bills so I don't lose my house. I also found that getting my thoughts on paper through journaling helped clear my mind so I could go forward about my day or not lay in bed thinking about whatever was on my mind (mortgage, bills, etc.). Everything else I overcame involved me in taking initiative and just doing whatever I needed to do to the best of my abilities.

An advice I have for taking Dusty's class is always come to his class with at least one question. Dusty is good at explaining his reasonings of why something in math works so if you are confused, he can most likely answer your question.

The flipped class model in my opinion is both good and bad. It is good for independent learning and rewatching video lectures if something didn't make sense that day. It is bad in a sense that you are responsible for yourself to set time aside to study outside of class. It can be really easy to fall behind, but it is not impossible to catch up. What the flipped class model made

challenging for me was setting time aside to watch the videos and do the workalong sheets that went with them. I do like how it is laid out though, I just found it difficult to have a set routine to really sit down and do it. I probably spent at least an hour per school day commuting back and forth between home and school. That meant I spent a bit more time in the library to do some homework before deciding to go home.

I'll end this letter with something encouraging. You can never predict what life throws at you, but you can prepare yourself to take whatever life throws at you head on. If you catch yourself overthinking, start journaling and see if that helps. Talk to your professors. They aren't mind readers so they don't know what you have going on in your life. They want to help you to the best of their abilities and they want to see you succeed in both school and life. Professors can't help you if you don't tell them what you need help with. Communication is critical. If you're a running start student, good on you. Keep on pursuing school because no one can't take away what you know. I know that many young students can't wait to move out from their parents house, but trust me. Stay with your parents as long as you can because living on your own will get expensive. Just know that everyone's personal and educational journey is different. It's not so cookie cutter simple that everyone can follow. Do what makes you comfortable, but don't be afraid to step out of your comfort zone. Being comfortable with the uncomfortable leads to growth.

"Begin doing what you want to do now... We only have this moment sparkling like a star in our hand melting like a snowflake." - Marie Beynon Ray

Best Wishes,  
Jonavann Am

③

## humor, proofs, tips for group work

Hello there future student! I'm Tan Nguyen, someone who's majoring in Electrical Engineering, and I'm a Vietnamese-American student. I've been at Highline for almost two years, and previously went to Bates Tech 2 years prior. I'm part of a few clubs like Book Club and Asian-American Pacific-Islander Club, or AAPI. I'm planning on going to UW Seattle or Tacoma, and if that doesn't happen, you might find me in a cardboard box in the street.

Linear Algebra was a rough course for me, especially since I haven't done anything with matrixes for several years. The most difficult challenge that I've been through during Linear Algebra is having to deal with proofs for a good portion of it. As someone who's never done proofs since I got to skip Geometry, proofs were pretty hard to do.

I never really got much better at doing proofs, but I did have some techniques on memorizing text. One proof I could recite almost word-for-word, having spent at least a few hours staring at it, and saying it out loud.

After having blundered in his class a lot, you'll want to ensure that you're absorbing what the notes say and what you do in class. If he continues the learning model he has right now, the stuff you do in class is generally going to end up on the assessments. Thankfully, those are usually in the homework as well.

In Linear Algebra, know your proofs. This is especially important for during the early middle to late middle part of the quarter. Chapters 2 to 4 have a lot of proofs saying the exact same thing, but in different words. Knowing how to show those proofs worked has been my bane of my assessment scores, but hopefully you learn from my mistakes!

The flipped class model was an interesting experiment, though it could have used some improvements. I've already voiced these to Dusty already, but it originally started with several groups working on a handful of problems and Dusty would come on over to talk to your group about it. In a 50-minute class, this can get time consuming and while you do get to know the information more intimately, it's less widespread throughout the class.

The model can work, but it needs to be refined. I don't imagine that this class will be the only time he tests it, but in the case that he does it again: do all the problems before he comes along. At the start, groups would usually do one problem, and wait for Dusty to confirm the answer. This wasn't great, as there's a chance that you wouldn't get an explanation for the rest of the questions.

If I'm being frank, my favorite part was just being able to work with others on problems.

Ending on a good note, just make sure you study and do your homework. I don't think that he makes assessments or the homework difficult, but the content gets rough. If you ever need to, get some help from your classmates. Study groups usually open up before or right at the midpoint of the quarter, so go there whenever you can. Dusty's also a valuable resource too, so make sure to ask him questions whenever you need to.

④ time management, study concepts, group work,  
change of mindset.

Gabriel Sison – Math 220 Linear Algebra  
Discussion Seminar 6 Letter to a future student  
2/16/22

Dear future student, hello, my name is Gabriel Sison, I am majoring in Computer Science (getting my Associates of Science in Computer Science by the end of the school year) and I am a current student in Mr. Wilson's linear algebra class. A few background information about me is math is my favorite subject because I love to see how different concepts would connect with each other.

A challenge I faced this quarter was time management. This quarter, I started a new role as a computer science AEW (basically a teaching assistant) for MESA. On top of that, I also work as a Calculus/ Differential Equations tutor at our school's Math Resource Center, our Computer Science Club's Web Content Manager where I manage a discord server I created that has 100+ people in it, and I was organizing our school's first ever in-person hackathon post-Covid (we had 25+ participants). I think I was able to make it through because I was actually passionate about the activities I was doing and had goals and benchmarks I set for myself I used as a reminder of why I'm doing the things I'm doing. Differential Equations was one of my favorite classes I've taken at Highline, so I didn't really view tutoring it as a job. I also really enjoy coding.

Advice I have for you to be successful in Dusty's linear algebra class is to focus studying the concepts and imagining how they connect. Honestly, when I first started his class, I didn't really study any of the concepts. This made me feel unconfident in myself and I wasn't sure I was going to do well in his class. However, as time progressed, I put more of an effort in myself to not only review the material we went over in class, but also explain to myself how this relates to other concepts we learned, to form a cohesive narrative of linear algebra. Linear algebra is definitely a unique math experience. The calculations we do are simple, yet once you start understanding what you're doing, you'll see the beauty of this new mathematical worldview you're learning.

At first, I did not like a flipped class model at all. I thought it was inefficient and even wrote Mr. Wilson a whole 5 paragraph slack message asking him to go back to a traditional lecture. However, as time progressed, the model and modifications made in class actually started to grow on me. When the quarter started, we'd just do group work, but the later changes he made was first we'd do 2 problems as a class together, then go into groups. Honestly, once he started doing that, I think everything in class started to make sense for me. I think this was a crucial change to make because before, it felt like a conceptual free-for-all where everyone was fighting for an explanation on a concept. But since we started with a problem together, he'd give us a baseline understanding of the concept so that everyone would be able to work on the problem once we were in groups.

Word of encouragement I have for you is that there is more to you than you think. I think most people tend to underestimate or doubt their abilities which limit the number of opportunities they set up for themselves. This was definitely the case for me because during high school, I actually didn't have any leadership positions because I would convince myself I wasn't qualified enough. However, once I started to understand that I had more potential within me than I thought, I started loading myself with responsibilities, and honestly, I've been handling them pretty fine. Despite the amount of activities I'm doing this quarter, I've managed to keep solid grades (3.99 GPA), and I feel like the activities I'm doing have really

helped me discover who I am as a person and what is important to me. So please, don't limit yourself, and don't think you're unworthy of things in life. The history of humanity consists of poverty, suffering, and deprivation. I feel like a big reason why our society has advanced so far is because individuals taken it upon themselves to become competent, hardworking, and contributing members to society that shine a light onto the world.

Sincerely,  
Gabriel Sison



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ESL, balance hard classes, videos, slack.

Dear Dusty's future students

Hello everyone my name is Rinkal Faldu. I am majoring in computer science. I want to computer science with minor data science. I am from India I came here in 2019. I started my journey as ESL student in Highline college, after that I started taking class for associate in computer science. This my final year in highline college and planning to transfer in university of Washington Seattle.

In this quarter I faced some challenges as a student and as individual. This quarter I am taking two class physics and math. When I was trying to focus on one class I lost in other class. I was not able to balance both of them at same time. starting of quarter, I was feeling that physics will be hard for me then in this quarter I focused on physics, by doing that I was not able to do good on math. In the middle of quarter, I change preference of this class and I started working on both classes equally, and I tried to balance score of both classes. So balancing work of these two classes it was really challenging for me in this quarter. Because of hard time in time allocation, As a student it is hard to manage time for study and for tutoring job. One of the difficult things is too hard to manage time for each and every task. I always struggle two to three weeks in starting of quarter for making schedule of time assignment and weekly assessment preparation, once I have fixed schedule for each task then it is not that much hard to do each task on time. This quarter I used to do most of assignment on weekend so in weekday I can do preparation for weekly assessment of both class so I can get good score in weekly assessment.

I have some advice for future student of Dusty. Please watch videos posted by Dusty in his you tube channel as you learn new section in class, this bast way to successful in weekly assessment. Dusty's class is really straight forward, it's like you have all material, and videos of this class, you just have to put little effort to do watch videos and complete notes of each section of this class. Whenever you have stuck anywhere, not able to do assignment just ask for help to Dusty or other classmates. Dusty creates platform to communicate with him or with other classmates in, so use that platform to get help from dust or from other classmates, and this the platform where you will get response really quick any time.

This quarter we used flipped class model for the study. Every coin has two side, same way this model also has two sides positive and negative. For me positive side of this flipped class model is as a student we can work as group and able to take advantage of each other's knowledge and share ideas with each other, and solve math problems by our self-first and if we struggle, we can get help from instructor, rather than just listening instructor and not trying any math problem by our self. Disadvantages of this flipped model is we were not able to cove more example in class, and some times I am not able to understand hard concept as group work.

Please present in class to take the advantages of face-to-face learning, and attendance plays important role in you grading. Finally, I would like to encourage to everyone for study. Whenever you feel demotivated or hopeless, please talk to someone you comfortable with and ask for help and get your motivation for study. Please communicate with other and talk about your problems. Give your best to each and every task to successful in every class.

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1st gen., vocab & proofs, YouTube, slack

Jonah Chegarnov  
Linear Algebra  
Discussion Seminar VII  
3/8/2023

Hello, my name is Jonah. I am currently majoring in Computer science. I chose this major because I want to get a job in computer programming. My reason for wanting a job in this field is because of my interest in coding and the possibilities it provides. And honorable mention would be the money you receive in this field. If coding wouldn't get you a lot of money, I would get a business degree and work a job in construction; or become an electrician. My parents immigrate to this country. So I am the first generation student in my family to go to college. I have a lot of expectations placed upon me.

There were a few challenges that I have faced this quarter, taking linear algebra. I would say that understanding all the terms is a bit challenging. Most of the terms that I learned this quarter were all new. And needing to learn all of them can be a bit annoying. However, once you read the terms enough times, you just start to understand the terms. Another challenge I have faced is the proofs. I think that learning the proof is unnecessary. Because you learn the theorem anyway, and the fact that you have to know all the minor details of how it works is a bit excessive.

Honestly, I think if you want to be successful in this classroom. I would say you need to complete the homework without any outside help. Like learn how to complete the problems without any calculator help. And then once you figure out the process, you can use a calculator to speed up the process for the homework. Before doing any quizzes, review from the book and try to understand the material. Watching his videos online may help some people. But if you search up the section and write "linear algebra" after it, usually shorter videos with explanations show up on YouTube that can be more helpful. I would say for the tests. Review any material you have. This includes homework and quizzes. If you show up to class then also you should ask as many questions as possible and do not be afraid to ask, even if you think your question is stupid. Because at the end of the day, it's your grade that matters.

One good part from a flipped classroom is you get to interact with your peers a lot more. However, depending on your personality, this might be a big negative for you as well. I prefer the lecture method of teaching. Because I like to see a lot of examples and have them help me understand the process of completing the problems. Also, the teacher explaining the Theorems helps a lot, since it isn't quite you're trying to understand it from your own interpretation.

Well, I am not a person who is amazing with words, but I would say that you should try your best in this class. Fix your time management. Try to complete all your work earlier in the day, and then later on in the evening come back to it and review your work. Before any test, finish the homework ahead of time. If there is an assignment due the day of the test, and that section is on the test, complete it beforehand a day in advance. Even if that means doing two homework assignments in a day. Because the day before the test when you are reviewing and studying, you will already be familiar with the material, and should already understand how to complete it. Instead, you can review and study any proof or theorems you have. Also, if you ever have any questions, just ask for help on slack. There is always someone who is willing to help.

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proofs, flash cards, adjustments

Dear Future Student,

My name is Gina Philipose and I am trying to major in computer engineering. I am a running start student in my Senior year of high school at Decatur High School.

Some challenges I faced this quarter were trying to memorize definitions and proofs, part of the time last minute, and figuring out how to use my time properly with my classes. I was able to start remembering the theorems and definitions better when I used flashcards and reviewed them from time to time earlier in the week before an assessment. I was able to use my time more efficiently when I created a schedule and set up a calendar with when all my assignments were due.

Some advice I have for being successful in a class taught by Dusty is don't leave the homework and quizzes off till the last couple of days. Try to at least look at it earlier, that way you can ask questions and know how to solve and understand those types of problems on the assessments.

Some good parts of the flipped class model for me was that I could work through problems with other students and hear explanations from them that sometimes helped further my own understanding.

I felt like I was falling behind in the beginning of this quarter and I wasn't sure how Linear Algebra was going to go for me but I got advice from others and implemented new habits and techniques that helped me better prepare for this class. You can do the same. If you feel like you're falling behind, remember that there is a way to get back on track but the motivation and effort to do so is needed. I would say to try to identify where the problem is, maybe talk to others about it and ask for help, and then try implementing new strategies and techniques until you find something that works for you. Overall, you can do it.

Sincerely,

Gina Philipose



Ask questions, flipped-class, Linear is different.

Discussion Seminar VII: Letter to a Future Student

Dear Linear Algebra student,

My name is Kari Lau and I am a civil engineering major. I am finishing my Associates in General Engineering. I attended Highline for Running start and chose to stay an additional year before transferring to a local university. Linear is my last math pre requisite and it's an overall odd math course. Some challenges had to do with the content of the course, while other struggles occurred from Dusty's teaching style. Where this was my one and only course taught by Dusty, a new professor always takes some time to adjust but this quarter seemed to be especially hectic in terms of inconsistent teaching methods. I'd advise to ask Dusty questions pertaining to assessments, and ask your peer's questions pertaining to homework/ small conceptual confusion. This order in particular because I found that peers creating study groups gave me the most straight forward solutions to understand topics. Personally, I'm an engineer and have no interest in linear algebra other than taking this lone course at Highline. This helped me as I attended class daily and had a strong connection with classmates within the course. Having a flipped class concept does wonders for a variety of students, allowing students to be accountable for their methods of learning. I think this method is more valuable during class rather than spending class time learning and after class struggling to solve example problems individually. This flipped class allows for student flexibility that leaves room for the students to decide if class attendance is necessary for their needs. Generally, for students having to take this class, they're STEM majors and flipped class is a typical learning style so it wasn't anything out of the blue.

Linear Algebra is unlike other math courses so don't overlook its contents too early. Dusty encourages for a class to be a community and that has truly helped me in my success. This course runs in waves, do your prep work, be consistent in your efforts and I wish you the best of luck!

-March, 2023

## ⑨ proofs, Dusty's handwriting, balance, videos, notes how to learn to program

Hello, my name is Hai and I am a computer science major. I wish I knew earlier in linear algebra how proofs on tests work. At first I thought you just use common sense or intuition as Dusty calls it to come up with your proof/argument. There wasn't any proof that seemed like Dusty just quoted the top 1% of people and it was impossible to understand. Because of this, I thought you could autopilot proofs and say whatever sounded convincing enough that you prove your claim. I got a bad grade, and I tried remembering the proofs that would occur in future tests. You might look at a proof and be horrified by how big it is. Don't worry, that's just Dusty's handwriting. What helped me the most was to write down the proof on notepad, and look for some kind of pattern. Do anything you can to minimize the load you have to remember and focus on the steps, not the math that's written.

To be successful in Dusty's class, it's not a matter of being smart or anything because if you step back from everything and just think about what you have to do then you will realize there isn't much happening. There is a doable workload. The biggest issue for me and probably a lot of other people is balancing the workload between three classes. To me, studying doesn't feel like I accomplish anything since it doesn't check boxes off of the canvas to-do list, but it is still very important for this class. Try to find your balance between procrastinating, homework, and studying. If you're still feeling productive after homework and it's not 3am yet, do what you can to maximize the time available for studying. Things like proofs take time to remember (I take at least a day to remember just one).

In our class around the beginning, there was a debate about whether the flipped class model was helpful for anyone. There seemed to be a lot of work because you have to watch over an hour of videos, and then when you come to class you do group work. I like the way Dusty does things. He gives you all the resources in the world, and to top it off, none of this is required. Attending classes is optional, and watching videos is optional. The class gives people the opportunity to teach themselves if they prefer and I think that's what a lot of people chose to do since on the first day classes were filled but eventually the attendance dropped by a lot. I will admit that after halfway through the quarter, I just stopped watching the videos and if I ever did watch them, it was for some kind of background noise while I do the notes because Dusty's voice is so relaxing (I hate the lo-fi in the background though). The most challenging part about the flipped class model was when I did not do the notes before coming to class. I would just end up autopiloting the day and it somewhat helps since you recall moments from your groupwork during tests.

My advice to anyone reading this is to accept that you won't just learn things if you don't have a passion for what is being taught. A lot of classes end up feeling like a test of how good your short-term memory or time management is, and the things you're taught are usually forgotten. I can't say much on how to learn every topic, but for anyone that wants to learn how to code, I would advise you to start with Python. Get your hands on either a YouTube tutorial, or a book (even by unethical means like I did) and read it when you have lots of time on your hands. Do not try to rush through the book. Whenever learn something new, try to stop reading and apply your new knowledge to make some cool program. At times you might feel stuck and not find any answer after googling but you can just take your time to justify to yourself why things are the way they are and move on. I'm not sure why the world of academia decided the ideal way to learn programming was to take classes that involve problem solving to improve your ability to solve problems in computer science. I disagree with it. I think people should just code more, so they get better at coding. You will still encounter challenging problems that require a lot of thought just by doing some passion project, and you will learn more about programming just by tackling those problems.



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attendance, proofs, videos, notes

Dear future student,

I am Yuree Garcia and I am a running start student from Thomas Jefferson high school and am currently getting a degree in computer science. I am currently planning on going to UW as a biology student, but UW hasn't sent the acceptance letter yet. I decided to change majors in the middle of applying to colleges, so I decided to try and finish my computer science degree. I decided to change majors since I got to help in an emergency.

One challenge I faced this quarter was that since graduation is so close by, I feel like I am lacking motivation in my schoolwork. To solve this, I have frontloaded most of my classes into my previous quarters, so these ending quarters have very few hard classes in them. One thing I do say to fellow students is to never take Aleya for physics. Even though Shawn has earlier classes, they are worthwhile to go to.

To be successful in Dusty's class is to try and communicate with him, and ask him a lot of questions. Even though you think you might not need to show up to classes, sometimes he goes over things that are in tests or even more importantly, what you need to memorize for tests, such as proofs. Me and my classmates have struggled with proofs, so I always make sure to spend my free time reciting the proofs.

One good thing about the flipped class model is that you have more free time, and we can spend class time going over problems. To be honest though, I don't really treat the class like a flipped class. We have notes that we need to take every few days on a section of the chapter that

is based off of notes in the videos he makes, but I don't watch them since his mic quality kinda sucks and they are really long. Instead, I just copy his completed notes that he posts online.

I think that if you try your best you can probably pass this class; probably.

Sincerely,

Yuree



(1)

Int'l. student, two math classes the same  
qtr, attendance

Tu Tran

3/9/2023

Math 220

Discussion Seminar VII: Letter to a Future Student

Hello prospective students. My name is Tu Tran. I am pursuing mechanical engineering at Highline College. I am an international student from Vietnam, and I have been in the US for five years. I got an AA from South Seattle College in Computer Science. Honestly, I went through a lot of emotions and feelings during my first year at Highline College. My SEVIS was completed when I transferred to Highline College, and I almost had to go and was forced to go home. Luckily, I just got my SEVIS back in early February after more than 5 months of waiting. This was probably my hardest quarter as I hadn't taken any math classes in over a year and decided to take 2 math classes (220 and 230). It was like a slap in the face to me as I often get stuck in completing homework and memorizing the knowledge of the two math classes. There were times when I wanted to give up and drop either. However, I thought I would take those classes sooner or later, so I tried my best to get them done. Dusty showed me the enthusiasm and dedication he brought to us throughout the class. Dusty always tries to listen and share his valuable experiences with students. If you've read this letter of mine, don't be afraid to give your opinion on something and ask Dusty for advice. He is an extremely knowledgeable person and will gladly give you useful advice. Also, I recommend that you try to go to class regularly because I didn't get the chance to go to class regularly and feel very regretful for it. I like the atmosphere Dusty brings to the classroom. He loves asking questions and wants to get to know each student better. For me, learning plays an important role in the formation and development of everyone. However, we need to get enough sleep and take care of ourselves and those around us. As a student, I think you've done a great job and it's normal to feel stressed before every midterm or final. We should have a to-do list so we can keep track of the things we need to do in a day and try our best to get them done. I think it's one of the simplest things we can do to be successful in college.

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## assessments, connections, proofs, videos, vocab

My name is Brinston, and I am majoring in Mechanical Engineering. I decided to come back to school in 2019 and have been doing classes part time since then. I work and live on my own with my wife, so it has been a long and slow process in getting to my associates of science. I didn't take high school seriously at all, so even though I took calc 1 my senior year, I forgot almost everything in the 5 years after I graduated before coming to highline.

Linear Algebra is the most different math class I have taken, and not just in class structure, but conceptually in how you are describing solutions to problems. On the weekly assessments, you will be tested on new vocabulary, usage of vocabulary, multiple ways of defining something, and being able to remember the proofs covered in the worksheets. This is very different from most math classes I've taken because usually you just need to remember the right formula, or how to do the correct algebra or calculus steps to solve a given problem or equation, given the right information.

I struggled with being able to describe what we are doing in multiple ways. A lot of the new ideas you are going to learn have a lot of overlap, so being able to describe how they connect in multiple ways will be one of your bigger obstacles this quarter.

It was hard to do the proofs without just straight up memorizing them. Proofs feel very unintuitive in how you are supposed to word and structure them (at least to me). If you have issues being able to lay them out yourself, you might be better off just memorizing the most critical one from each section. He usually will test you on the shorter ones, nothing like a page long.

It was really hard to convince myself to do the weekly slack and worksheet upload. Being worth 1 point on canvas makes it feel like it's not worth it, but the points for each type of credit are not weighted equally. It takes very little time to complete, and the points add up quickly.

Watch the videos linked on his website. If he keeps the class format the same, most of your class time will be spent with your peers trying to figure out problems on your own. While his videos are really slow paced and spend a lot of time on introductions and other unimportant things, getting examples and explanations of each chapter will be worth your time. If you are trying to be time efficient, skipping the intro and watching at 1.5x speed will help you out a lot. You can always slow it back down and rewatch important parts.

Spend time to write down the new vocabulary of each chapter. Being able to describe what the new words mean in a few different ways will help a lot in understanding what you are doing mathematically, and there will be questions on assessments that specifically ask for you to fill in the blanks or describe in words what a concept means.

The flipped class really forces you to put thought into why you are doing what you are doing, as opposed to memorizing the steps to solve a particular problem, which is more so how the homework functions. The True/False questions are the real test of this. Being able to have a full understanding of the vocabulary will help you see the small nuances in those questions and give

you a stronger mental model for what you are doing. If you are unsure of a problem in class, try to walk through your thought process out loud with your group.

The challenges of a flipped class are mainly that you see fewer examples and explanations from the teacher. This is why I suggest watching the videos, because sometimes you and your group might be lost or doing a problem the wrong way, and Dusty coming by giving a quick correction might not solve your deeper misunderstanding.

This class, while it is very unique, and challenging in a new way compared to most math classes, the math itself is very simple. You don't have to solve any integrals, or be super clever with a trig substitution, all of the math you will be doing is arithmetic. From a math perspective, you are overqualified for this class. If you can learn calculus, you can learn linear algebra.

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*Intl. student, extra credit, group work, proofs*

Adamou Amadou Tidjani

Discussion Seminar VI

Dear students,

My name is Adamou, but I go by Adam. I am majoring in computer science. I have taken the Calculus series up to Calc 3 plus Math 230 (differential equations) and Math 220 (Linear Algebra) with Dusty. I am also tutoring at these levels. I enjoy math, programming, and a little bit of gaming. I am an international student from Chad. I started Highline in the summer of 2021 and am graduating this winter, 2023.

The challenge I faced this quarter was using the flipped class model. I did not know what to expect. Two of my classes start early in the morning, and one starts late (e.g., I have lab classes at 7 am on Thursdays, and on Tuesday, I have a CS class from 4:30 to 6:50 pm). In Dusty's class, I always end up doing my discussion seminar notes the day before the assessment, which takes up the time I need to study.

To succeed in Dusty's class, you must keep up with the notes because you need to complete the notes and watch the video lectures to avoid feeling confused in class. Ask questions if you need clarification, and Dusty will try to the best of his ability to answer it. Pay attention when Dusty goes over a practice problem. If you catch his mistakes, he'll reward with sticky notes which are worth bonus points. Finally, attend and be engaged in study group sessions. Learning can be fun when we work with peers. You also get extra credit for leading or attending.

At first, the flipped class model was challenging and frustrating. Sometimes we ended up in a group where none of us knew what to do because we had not watched the lecture videos before coming to class. However, as we progressed through the quarter, things started making more sense, and I began to like it. Even if we struggle as a group, we learn together from one another, and it is more enjoyable.

The first two weeks will be challenging, depending on your experience with flipped classes, but you will get through it. If you're taking Linear Algebra, you must row-reduce by hand on the first assessment and then use your calculator for the rest of the quarter. Make sure you know how to do proofs; you will be asked to do them later. Write them out for practice; it can help you remember. I wish you the best of luck. Keep calm; you can do it!

works a lot, assessment, Dusty's personality  
procrastination.

### Letter to Future Dusty's Students

Hello, future linear algebra student! I am writing this letter while taking Linear Algebra in the Winter of 2023. I hope you're doing well! Just a little about me - I graduated from high school in a foreign country and continued my college journey at Highline College. I am currently a second-year student studying an Associate of Arts degree emphasis in Computer science at Highline college. Hopefully, I will graduate this spring and transfer to UW this fall.

The biggest challenge that I faced this quarter was balancing my academic and working time. I was working thirty-two hours per week on average and taking 15 credits this quarter. Especially the first two weeks were hard for me to stabilize my environment. However, I believe that all problems are not problems; it depends on the way how we see them and deal with them. For instance, this quarter was hard for me to stay ahead in my classes, but it also gave me an opportunity to improve my time management skills and experience to solve these kinds of problems.

My advice for the following Linear algebra students is "Avoid procrastination" and "Take the assessment seriously." In this class, it is easy to procrastinate because each week, there are seven activities on average, and you should watch lecture videos for each section. Additionally, there is an assessment each week that weighs 50 percent of the whole grade. Most students, including me, thought the assessments were like other activities but had an ultimate effect on the final grade. For example, some questions like proof weigh five points out of twenty points, so you probably get seventy-five percent if you lose this point. As an additional tip, Dusty is the most friendly and empathetic instructor I have ever seen. If you have any questions or want to talk to him about your social life, just feel free to reach out to him; he is always happy to help anyone.

The flipped class has pros and cons. Students who like traditional learning systems might not like this flipped class in the first session. I am one of those who like traditional learning systems. I'd choose to learn in class rather than learn from watching videos. However, this class

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faith, preparation, self-discipline

Dear future students,

As I sit down to write this letter, I am reminded of my own experiences as a student, and the challenges I faced throughout my academic journey. My name is Ayimen Hussien, and I am majoring in Computer Science. I come from Ethiopia and practice the Islamic faith. In writing this letter, I hope to offer some insights and advice that will help you navigate your own academic path.

This quarter, I faced a number of challenges both as a student and personally. Like many students, I struggled to balance coursework with other commitments, and at times felt overwhelmed by the workload. However, I found that by breaking tasks down into smaller, more manageable pieces, I was able to stay on top of my assignments and avoid feeling too stressed out. Additionally, I made a conscious effort to prioritize self-care and make time for activities that helped me relax and recharge.

If you are taking a class taught by Dusty, my advice would be to come to class prepared, and to take advantage of the resources available to you. This might mean doing the assigned notes ahead of time, watching the lectures, or talking to Dusty if you have questions after class. It is also important to stay organized, keep track of deadlines, and communicate with your classmates if you need help or support.

One of the things I appreciate about the flipped class model is the opportunity to engage more actively with course material. By completing readings or watching lectures before class, I felt more prepared to participate in discussions and ask questions during class time. Additionally, I appreciated the flexibility of being able to review material on my own time, which allowed me to work at my own pace.

However, I also found the flipped class model challenging at times. It requires a lot of self-discipline and self-motivation to stay on top of readings and assignments, and it can be easy to fall behind if you don't stay organized. Additionally, it can be challenging to maintain focus during class discussions, especially if you are easily distracted or have trouble staying engaged.

In closing, I want to encourage you to approach your academic journey with an open mind, and to be patient and compassionate with yourself as you navigate the ups and downs of the semester. Remember that success is not always measured by grades or test scores, but by your willingness to try new things, learn from your mistakes, and grow as a person.

Best of luck,

Ayimen Hussien