

Dear Future Students,

Hello, my name is Aliyah Acosta, and I am about to finish Dusty's Linear Algebra course. I am currently majoring in mathematics here at Highline and this quarter I will be completing my Associates in Arts here at Highline. I hope to transfer to the University of Washington Seattle or Tacoma campus next fall to continue studying math. I hope to one day become a high school or college math teacher which is why I decided to study mathematics. Before settling on a math degree I tried studying engineering and computer science. Although they are great degrees and fields to go into, I felt like neither of them were my calling. Math on the other hand I always enjoyed, so that is how I ended up taking Dusty's Linear Algebra course.

This quarter, balancing my school work and my job was challenging for me. During this quarter I worked a part time job on top of my classes which was a bit difficult at times. I often left homework assignments until the last minute which made my life unnecessarily stressful. One thing that helped me was living by my planner. If you are in a similar situation where you have other outside responsibilities besides your courses at Highline, I would advise you to not procrastinate and make a plan of action to help you get through your work whether that is by using a planner, google calendar, or anything else that helps you keep track of your to-do's.

Overall, my advice to be successful in this course is to collaborate with your classmates. Your classmates are probably struggling along with you and working together on the tough material covered in class not only helps you talk through these new and challenging ideas, it also makes the class a lot more fun. I would suggest getting to know people by going to study groups and during class group work time.

One challenge I faced while getting used to the flipped class model was my organization. This flipped course model means that instead of going to class for lecture and doing practice work at home on your own time, you are expected to watch lectures at home and come to class ready to do some practice work with your peers. I found myself falling behind on the lecture videos a lot which made it hard to participate in class group work. If you feel like you don't have enough time to watch the videos, something that helped me was playing the videos at double speed and simultaneously filling out the note packets Dusty gives you. These videos give you the preparation needed to do good in class and to be ready to collaborate with your classmates. It also gives you the opportunity to prepare any questions you may have on the content of the chapter for class. All in all, my advice is to watch the lectures before class to take full advantage of the flipped class model.

This course might seem intimidating at first, but don't be nervous! Your ability to master the material is up to you and I know you are all capable of doing amazing in this course! By setting aside time to study, watching the lectures, and working through the homework, you will be setting yourself up for success in this course. Don't be afraid to ask questions, and take advantage of Dusty's office hours and class study groups to get some extra help. Best of luck! You got this!

Sincerely, Aliyah Acosta

Hello future student. My name is Anthony You and I am a running start student majoring in computer engineering. Before I entered this class I only got up to Calculus 2. So if you feel like the only one who went this route, you aren't alone my friend. I have stacked Physics 201 with this class so if you are on the engineering route like me you would probably go through some stress, and that's okay. The first step to dealing with stress is to acknowledge it.

I'm going to go straight to the challenges. I don't want to come off as pretentious but I was a student used to a high grade. But when I came to this class I was literally failing at one point. When it comes to calculus you just do a simple formula like chain rule or U substitution. In this class, you are going to be asking WHY. Which is what killed me. But what made it better was asking Dusty for help, going to study groups, and asking people who had experiences in this class beforehand. If I did not go to study groups or office hours my grade would be a 40% as of writing this.

One advice I'm going to say is, do not compare yourself with other students. It may look like some students breeze through the class but those same students have taken Differential Equations, Calculus 3, Calculus 4, etc. So comparison will do nothing for you. If you find yourself failing the class. Acknowledge that you are struggling and ask for help. Dusty loves helping students and people in study groups also love helping. (they won't bite!). I have seen so many geniuses fail because they refuse to ask for help. So please, if you are struggling be apparent and don't try and act tough. Plus, take every extra credit opportunity you can!

Despite the advice I have given you, there are some good and bad things about this class. When it comes to the flipped class model it allows us as students to come in prepared and ready to talk without going into a lecture and knowing nothing. Not only that during class time I became way more social because it felt like I was being surrounded by so many amazing smart

people who have the same interests as me. I really felt like I connected with people more than I ever had while being at Highline. But as you may know, Dusty has a flipped class model. What made it hard for me to learn was the fact that I could not keep focus if my life depended on it. In other classes like Calc 1, I would just sit there listening to my professor and ask questions during lectures. Since I was in a building with no distractions, I was pretty much forced to pay attention.

Well, that's all for me so far. But I want to tell you some things that might help. You need to strive for improvement rather than perfection. Dusty knows how happy I was when I got an 83 after constant 50's and 60's. I know it's not a 100, but the improvement I made just showed my studying techniques worked. However, I did fall down a little bit and did get a couple of bad grades. I still looked ahead because I wanted improvement. You also need to realize that if you fail, that is in the past. You can't keep looking back or else you will be blind to the door that is ahead of you. That's the same with comparison. You can't just compare yourself with students because that will make you demotivated and depressed (just like how I was). You need to focus on yourself. And finally, take things slow.

Dear Future Student,

My name is Rose Hewitt. I've been flip flopping between pursuing a computer science or a math degree. Right now I've settled on a math degree. I was really excited going into Linear Algebra because of how important it is to computer graphics (like rendering video games and stuff). That excitement helped me go in with a little bit of prior knowledge which helped me.

This math class is very different from ones you may have taken in the past. It involves lots of theory and proofs. Prior experience with vectors with help greatly. I definitely recommend watching the 3 Blue 1 Brown youtube series on linear algebra. It has incredibly helpful visuals that help you get a strong geometric understanding of what's going on. Though even that might come short with how abstract the course gets.

Your teacher is Dusty, I'm sure you've met him by now. He's very nice and a little crazy about godzilla minus one. He's very supportive if you let him know something is wrong. One time I ran into him later in the day on a rough day and he invited me to go get some coffee, we had a great conversation.

I really enjoy the flipped class model. It helps me interact with other students more and see other ways of approaching problems. What can be hard about it though is that it's up to you to stay up to date on the course material. It's very important to keep track of upcoming sections and at the very least skim the notes before, but I recommend watching the videos too.

This class was very fun, from interacting with my fellow mathematicians with the flipped model, and also seeing what math classes will look like down the road with proofs and more theory. This is your first step into the weirder more abstract side of math and I hope you enjoy it!

LETTER TO A FUTURE STUDENT

Dear Student,

My name is Faith Ngigi. I am majoring in mechanical engineering. I am a Kenyan-American student who has had a passion for math for as long as I can remember.

As a student, some of the challenges I've faced this quarter are time management and motivation. To be honest, linear algebra has been quite a challenge for me. I wanted to pass the class with flying colors but after doing proofs, my goal dropped from a 4.0 to 3.5. But don't let this deter you because at the end of it all, I regained my confidence.

The advice that I have for you is if you want to pass Dusty's class is to watch his videos a week ahead of time and go over your notes before class. That's not what I did hence the reason why I was in the trenches. My hope is that those first few days of class when the quarter starts where it's just relaxing in class getting to know each other, you used that time to get a headstart and not fall behind and/or get overwhelmed. Also if you watch his videos and they don't click for you as they should, try to find other videos online that explain the concept in a different way. Another suggestion that I have is going to him during office hours and get answers. Also to pass the assessments, focus on the group work practice problems.

Okay let's talk about the flipped classroom model. For me, it's a love-hate relationship. I usually function better when I watch the videos before class and write down notes. And in class, I come with questions that I might have or we can just go through examples that solidify my understanding. But sometimes in linear, I either didn't get time to watch the video before class so I'm literally confused in class, or my group is going too fast in class so I can't keep up. One thing I'll say is that if you feel like one of your group members is going too fast, don't be afraid to tell them to slow down. It might be terrifying and you might feel like it makes you look dumb, but it will be worthwhile. I mean would you want to look smart in class and look dumb on the assessment or vice-versa? Choose wisely.

Let me leave you with a word of encouragement. Don't give up even when times get tough and grades don't define you. The higher you go in STEM classes, the tougher it gets, so be proud of yourself for making it this far. And if you have a lot of classes that are stressing you out, or even if you only have one class, I would suggest you create a schedule and stick to it, otherwise it will be very hard to get stuff done.

All in all, you got this! I have faith in you just like I had faith in myself! All the best!
Also, Jesus loves you! :)

Dear Future Student,

My name is Daniel Trofimchik, and I am taking Linear Algebra in my second year as a running start student. I am planning to major in electrical engineering, and am hopefully transferring for Autumn 2024. I am writing this letter to you at 1 a.m. in the morning, while not having studied for tomorrow's (technically today's I guess) Linear Algebra assessment yet (assessments are pretty much Dusty's version of quizzes). If this is your first time taking a class with Dusty, then be prepared to switch your learning mindset a little bit (more later).

I am now answering the second prompt in Dusty's instructions for this assignment, which asks for any challenges I faced and how I overcame them. Honestly, this quarter has been pretty chill for me, and I haven't been hitting any walls at Highline. On the other hand, I've been having some issues with applying for University because of the Running Start path I am choosing to take. I chose to ditch my high school credit, and am just straightaway pursuing an AS at Highline while getting my high school diploma from Highline. This has created some weird pictures on my transcript, and I was rejected from my preferred choices because I didn't have required high school credit. By some miracle, I appealed to my first choice, and it was actually accepted on the terms that I take English 235 for the summer. This little dilemma helped me see the importance of perseverance, and showed me that sometimes you gotta "annoy" people to get through to where you want to be. It took a lot of emails and multiple zoom meetings, but I finally got pushed through. Sadly, that was only the first step, which was just being accepted into the school. Now, I need to make it through to be accepted into the program.

Next, the instructions ask me to talk about advice for being successful in Dusty's class. This is my second time taking a class with Dusty, so I got a hold of the ropes a little. The first thing you need to know is that Dusty does not lecture. All the learning in the class is basically done on your own, and the only purpose for coming to class is for quizzes and more practice problems. You get put in groups though, so class honestly becomes almost like a hang out place where instead of doing something normal, you hang out and do math. Another thing you should know is that Dusty is super nice, and if you are ever struggling with any concept or deadlines, talk to him. A few times this quarter, he just gave us free extensions on assignments and even would throw material out of quizzes if enough people plead their case.

I know I made it sound like the class structure kind of sucks, but if you want to be optimistic, it does teach you some important skills as you go through the quarter. First of all, you get some vital wake up calls on procrastination and responsibility. You will start falling behind really fast if you're not learning the material, and class will be a complete waste of time. Another thing is you really get to exercise your teamwork skill and how to cooperate in groups. In the real life work force, everything is about teamwork, so this is something important to get practice on. It's small groups, like 3-4, sometimes 2, and you can learn a lot yourself by attempting to teach your group members or working together to solve some of the harder problems. Take advantage of the class time. The thing that makes the class feel so challenging is that, first of all, Linear Algebra is usually the first proof-based math class you take, so the content feels different. Second, this will probably be your first time in this type of class environment. It'll rub off on you quickly, though.

Dusty asked to end the letter with some encouragement, so let's see what I can come up with. I think the best encouragement I can give is that class with Dusty will probably be one of the funnest classes you take. Sometimes, it doesn't even feel like school anymore. With the nature of the class and Dusty's personality, you can really feel expressive and open to other

people around you. I was originally going to write like 4 sentences for this letter, and started with triple line spacing. As I began to write, I dropped the spacing down to double, 1.5, then single. I really want to fit it on a single page, but I won't decrease the spacing less than 1 to save your eyes. So I guess that means it will just have to be slightly over a page long. This ended up being way longer than it should've been. Anyways, I hope Dusty doesn't give me a lower grade because I know this "letter" felt kind of chaotic and random, more like a one-sided conversation than a letter. But, I really want to keep procrastinating studying for the assessment, so I just kept writing more and more. I feel like I'm about to pass out from exhaustion, but I kind of can't go to sleep without studying, so I will finally end the letter now.

If this is your first exposure to proofs, don't be afraid of the material. The math you do in this class doesn't get more complicated than multiplying, dividing, subtracting, and adding numbers. It is just much more conceptual. Use the available resources you have plenty, like Dusty or the internet, and never leave an answer blank on the assessment. Most importantly, try to have fun, it'll save you a lot of stress.

Best Regards,
Daniel

Dear Future Student,

Hello there! My name is Hannah Lee. I am a Running Start student from Thomas Jefferson High School, majoring in Computer Science. Before this class, I had only taken up to Calc 2. So, stepping into this course, I was a bit nervous, especially seeing that many of my classmates had already taken Calc 3 or higher.

One of the first things I realized was that feeling behind was more of a motivation than a setback. It pushed me to work harder and reminded me that there was a reason I was here. I belonged in this class just as much as anyone else and I could make it through with effort and determination.

Here's some advice for succeeding in this class, especially with Dusty teaching. First, always do the notes and videos before class. I liked doing them on the morning of the class because it meant everything was fresh in my mind. This really helped me contribute more during group work. For assessments, don't cram; instead, review a section each day leading up to the test. Also, this class is big on connecting concepts, so looking ahead a section or two can really help you understand what you're currently learning.

The flipped class model has its ups and downs. The best part is being able to learn at your own pace since the videos are always available for you to watch or review. Group work is great too, but only if you're really there to learn and work with others. The tough part for me was really getting the material to stick. Just watching videos and taking notes wasn't enough. What made

the difference was going through group work, redoing homework problems on my own, and asking for help when I needed it.

Finally, I want to leave you with a bit of encouragement. No matter what your math background is, you can succeed in this class with hard work. The structure and content might be different from any math class you've taken before, but you'll get the hang of it. Don't get discouraged; there are plenty of people ready to support you, like study groups. Also, don't overlook those small extra credit opportunities—they really add up. You've got this!

Best of luck,

Hannah Lee

Hi, whoever is reading this. My name is Yuna Takele. I am pursuing computer science here at Highline. But I am thinking of switching to mechanical engineering once I transfer. A bit about my background...I am an international student from Ethiopia, and I LOVE coffee. I also like playing soccer. Besides those, I spend most of my time studying and working on my college applications. I don't know where I will be transferring yet, but I really hope I get into my dream college.

I struggled a lot with this class in the first few weeks. Thus far, all the classes I had taken were lecture-style, and adjusting to Dusty's flipped style was a huge struggle. I didn't like watching videos beforehand because I usually wouldn't understand the content just from watching the videos for an hour. This was very intimidating because I felt very lost when doing the group work with students. I also didn't like working with students because I do better when I think and solve problems alone. In general, I was wasting a lot of time trying to understand the videos, and then trying to cram as much information as possible from the group work before class just so that I don't feel lost in class, but it was not efficient and caused a lot of stress. I am not lying when I say this, this class has made me cry multiple times (but don't worry, this class is not that bad, it is just that I am a perfectionist and I get overwhelmed easily). Here is my advice for you: watch the videos at 2x speed, then do the handouts by yourself afterward (that way, you are evaluating your understanding and not just passively copying from the videos). This helped me a lot because I was able to see the general picture and not get lost in the details. You will get to understand why you are doing what you are doing, and not just mindlessly memorize.

And if you don't have time to watch the lectures beforehand, just go through the completed work before class.

There are a lot of assignments in this class. I personally struggled a lot managing my time between this class, physics 202, and an elective class, while also working on campus for 19 hours, while also being in the college application season. It is very challenging. But try to prioritize what matters the most. I had to prioritize my college applications at times, but I also had to compensate for my classes by staying up late and pulling all-nighters at times. Just have a plan and make sure you never forget to do your homework because missing a question on an assessment might not be prevented, but losing points for not doing homework can always be prevented.

Regarding the assessments, **PRIORITIZE THE GROUP WORKS**. Forget the textbook. But make sure you redo all the group work, revise your handouts, and write out the proofs multiple times before the assessments. Make sure you understand the concepts and proofs. Don't try to memorize the proofs because there is a chance that you might forget them while on the exam. So make sure you understand all the steps. Don't overthink the questions, they are usually like group work.

Here is one more piece of advice for you, some students or your friends who have taken the class might tell you the class is hard, and it is very hard to get a 4.0, but don't let that stress you

too much. It is true; it is challenging and very different from the calculus series but have fun with it. Challenges are overwhelming and stressful, but they are also a learning experience.

If you are taking this class, you are most likely finishing up your courses at Highline. Good job for making it so far. Take time to be proud of yourself. You got this, and good luck :)

Best,

Yuna Takele

Discussion Seminar VII: Letter to a Future Student

Dear Future Student,

Hello, My name is Jun Han, and I come from South Korea. Currently, I am pursuing a major in aerospace engineering, driven by the aspiration to become an aerospace engineering investigator. While there have been many ups and downs during my time in college, I believe every obstacle has only strengthened and resilient me. I love math so I took all the math I could such as differential equations and calculus 1 to calculus 4. Also I work as a math tutor in the math Resource center. To be honest, I haven't had much difficulty taking math classes so far and I haven't invested a lot of time studying. But I was not used to Linear Algebra class because everything was a challenge for me such as class style and proving questions and assessments.

Especially when I met a problem that I had to prove, I felt like a student who knew nothing about math. To overcome this, I tried to use my class time as much as possible. I always tried to organize my notes and take all the lectures before class. When I was familiarizing myself with the concepts before class and exploring the problems with the group in class, I was able to clarify the concepts through solving the problems and solve them by asking questions that I didn't know. I think that my method can be applied to everyone, and I think that this is a good way. And I recommend that you do your homework right after class if you have time.

So Speaking of Dusty's class, my advice for success would be to actively participate and engage with the material. Utilize class time efficiently by preparing beforehand and taking advantage of group discussions and activities. Don't hesitate to ask questions or seek help when needed. Dusty is there to guide and support you through your academic journey, so make the most of the resources available to you.

Discussion Seminar 7 - Letter to a Future Student

Dear Future Student,

My name is Elizabeth, and I am a senior in high school as well as a Running Start student. I probably won't graduate with a degree from Highline, and I am unsure what I want to do for a career, but I am in the process of figuring it out. I plan on transferring to a University in the Fall after I graduate. I have one younger brother, and I swim every day for two and a half hours. This schedule is not too difficult to manage, but I still have to choose between getting 7-8 hours of sleep or completing my homework.

Linear Algebra is a different type of math class; the calculations aren't too crunchy, but at times it feels as if it's a mixture of English and math because of all the proofs. I found it challenging to study for writing proofs because it appeared to be all memorization-based. I realized I needed to put more time into learning the concepts conceptually to derive the proofs myself. If you ever have any questions, always ask on Slack or Dusty. There are many difficult topics and questions on the homework, and others are probably struggling with the same thing, so it's good to ask for help, which is the key to being successful in any class. I recommend either leading a study group or attending one each week because you can not only gain extra credit, but you also have time dedicated to the class to keep you accountable and can work with your peers to make friends. Doing this helped me not only learn the material better but also feel more comfortable in class and generally have fun during Linear Algebra.

If, for any reason, you have to miss an assessment, Dusty is very understanding and will be more than willing to talk with you to find something that works. Assessments every week help keep you on track, but they are different from most other classes you've taken. Look through the lecture notes, past assessments, and the easier-mid-level HW problems to study for these assessments, as the questions will be quite similar. Don't procrastinate on the HW because even though you could wait until the last day to complete it during the first few weeks, it will create bad habits for when the HW's get harder and you won't be able to finish it all in one day by yourself.

This class-flipped model might be weird at first to get used to, but it's actually very helpful to work through problems with peers and teach each other. Also, it's important to put aside enough time to watch the lecture and take notes; that way, you're prepared for the problems of group work in class and don't get even more behind. I recommend doing it as early as possible the day before class so you can focus on other work later and not accidentally forget. The advice I have for you is that even though it can be tough to watch the hour-long lectures, take notes, do the work for other classes, and manage responsibilities, it's worth it to get a better understanding of the material.

Overall, Dusty is a great instructor who will make you feel welcomed and create a fun math community. Definitely participate in study groups and don't procrastinate. The time and dedication needed to be put into this class is worth it, and there are many extra credit opportunities (I recommend taking advantage of this). I believe in you; you can do this!

Best of Luck,
Elizabeth

Dear Future Student,

My name is Merra Migora, and I'm currently majoring in Computer Science. A little bit about me, I am an international student and I plan to transfer in the fall quarter. I haven't decided where yet. I love adventures. I am always ready to try new things. Besides school, I like to spend my time reading the bible, listening to music, and taking long walks.

This quarter, I had some big challenges. Switching from a math style focused on calculations, like calculus, to one that's more about theory was a real change for me. Understanding Linear Algebra required me to really get the concepts, not just plug numbers into formulas. Plus, since I hadn't taken Calculus 3, I had to work even harder to catch up and fill in the gaps in what I knew.

Juggling this class with my job, other courses, and personal stuff was really hard. It took up a lot of my time and energy, and it was both challenging and stressful. But I kept at it, worked hard, and eventually, I got through it. Dusty was also very helpful throughout the course.

My advice to be successful in this class is, firstly, to be sure to watch the videos before class. It'll help you understand the material better during lectures and discussions. Also, joining study groups can really help. it's a double win, you'll learn from your classmates, and get extra credit for it too. Managing your time well is crucial—make sure to prioritize tasks and give each one enough time. And don't forget, if you're ever unsure about something, don't hesitate to ask Dusty. There's no such thing as a silly question.

One great thing about the flipped class model is that it can get students more involved. When you have access to materials before class, you can come ready to dive deeper into the topics during discussions and activities. But let's be real—there were challenges too. Sometimes, mustering the energy to watch the whole video before class was tough. This sometimes made me feel less engaged during the session. Being consistent with pre-class prep is crucial to overcoming this hurdle.

To wrap things up, I want to offer some encouragement to you, dear reader. Yes, the class may be challenging, but trust me, you've got this. Embrace the journey, have fun while learning, and remember that each obstacle you overcome is a step closer to your goals. Good luck!

Best,

Merra Migora

My name is Khoa Le, my major is Computer Science and I am from Vietnam. I lived in Vietnam for a long time until I went to America to study and this is my 2nd year at Highline College.

In Linear Algebra, I struggled to catch up with the videos and as a result, I have fallen a bit behind before but I have learned to have the videos run quicker by doubling the speed as the videos have subtitles and notes written down so I won't miss a lot of details that way which has helped me catch up with the rest of the class.

One advice I have for Dusty's class is to take notes and watch the videos, the class structure Dusty have is to actually do the work instead of just listening to lectures which worked out well for me as it helped me understand the work more than just listening but it could be difficult for some people so they could watch the videos and lectures before class to avoid being confused in class. Another advice I have is to access the website to look up at the notes before class along with the videos. The videos could be long but as the videos also explain what the notes do, you can look at the notes at least if you do not have time due to having too many classes and do try to look at the notes at least. Another advice is to study for assessment at least 3-4 days before the assessments because assessments are worth a high percentage of your grade, it is best to not study for the assessment right the day before.

The flipped class structure is great as it gives you experience to apply what you learn and you can watch the videos at home at your own space instead of having to learn it early in the morning in class so it's more convenient and the examples done in class can be a good way of applying what you learned and it is not that challenging for me as although sometimes I couldn't watch the video, I could still look at the notes and the notes can help decrease the time you need to study to understand the work.

In the end, linear algebra can be simple or hard depending on the person studying and your attitude towards studying so if you try your hardest and just study to the best of your ability, you can succeed in the class

and also in your future career. If you have any troubles, you can just ask as many questions as you want as we are here to learn so it's ok to make mistakes.

Dear Future Students,

My name is Emma, and I took Linear Algebra with Dusty during the 2024 winter quarter. I am majoring in electrical engineering, and at the time of writing this is my second year at Highline. I plan on transferring to UW Seattle and obtaining my bachelor's degree there.

In my opinion, this has been a very challenging class. It is very conceptual, and unlike any other math class I have taken so far. Many of the study strategies I have implemented previously have not worked for Linear Algebra. For example, there aren't very many formulas to apply or plug values into. You must understand the concept to solve a problem. To help with this, I tried writing out each step of problem solving and taking notes on why we do it.

If I could offer some advice, it would be to network and build relationships with your classmates! Your peers can be some of your best teachers. In my experience, most people are eager to help. Attending study group sessions and having discussions in class were fundamental to my understanding. It is important to remember that you are not the only one learning the material, speaking to a classmate could give you insight.

About the flipped class model, I struggled with watching the videos on time. You definitely need to set aside a chunk in your schedule, as the videos can be over an hour long. Something I enjoyed about the flipped classroom was the time we could spend practicing. As you do problems in class, Dusty can point out exactly what misconceptions you are struggling with.

Overall, I do not think you should be too scared. It may be overwhelming at first, but as you learn, things will start to fall into place. Most importantly, you made it into Linear Algebra!

You have proven that you have the skills to complete this class, so have faith. Best of luck to you from a former student. :)

Dear Future Students

I'm Elham Abdo, and I came from Ethiopia. Right now, I am writing this on my last second quarter in Highline College where I've been working towards getting my Associate degree in computer science. I'm really excited about moving forward and getting my bachelor's degree. My journey in this field has been a mix of working hard in my studies and staying committed to my goals.

This quarter, I faced some challenges, as a student. One tough thing was trying to understand Linear Algebra. There was so much to learn, with lots of assignments, notes, discussions, and tests every week. At first, it was overwhelming. But I came up with a plan to improve. I started organizing my time better and doing things early, like doing discussions on the weekends instead of waiting until the last minute. This helped me take control of my schoolwork. Another struggle was managing my time, especially during tests. But I kept practicing and working hard, and little by little, I started to do better.

One big moment in my academic journey occurred when I shifted my approach to studying. Initially, I relied on memorizing the concept but upon advice from Dusty, our professor, I changed my studying to understanding the concept. This shift not only enhanced my comprehension but also showed me how cool Linear Algebra is.

If you're starting a class with Dusty, here's some advice I've learned from my own experience. Make sure you're on top of things by watching the lecture videos, taking good notes, and practicing regularly. Also, don't forget about the power of studying with friends. Group study sessions can be a lot of fun and really helpful for understanding the material better. So, don't be afraid to team up with your classmates and learn together. It can make a big difference! Most importantly don't stress too much about proofs in linear algebra. It might seem intimidating at first, but once you start to grasp the concepts behind them, working with proofs can actually be quite enjoyable. So, embrace the challenge and have fun with it!

Looking back on the flipped class model, I initially found it difficult to work through problems with classmates who were strangers. But as time passed, I realized how valuable it truly was. Being able to practice and solve problems together in a supportive environment helped me learn in a way that traditional lectures couldn't match. When I say "traditional," I mean just sitting in class, listening to lectures, and then practicing on your own at home. But in our class, it's different. We practice together in class with our friends, which is much better. For example, even if you didn't study much for a test, you still know how to do it because you practiced better in class. What I mean is, in traditional classes, there might be things on the exam that surprise you, but in our linear algebra class, since we practiced most of the material together, nothing felt entirely new during the exam. This approach made a big difference in how well I understood the material.

I encourage you to embrace the journey ahead with excitement and strength. Linear algebra might seem scary, but it can be really rewarding once you understand its basic ideas. And let me tell you about Dusty – he's not just a teacher, but someone who's easy to talk to, funny, and really cares about helping you succeed. You're lucky to have him as your teacher. As you start this academic journey, remember to stay involved, focus on understanding rather than just memorizing. Wishing you the best of luck!!!

Best Regards

Elham Abdo

Nathan Nguyen

03/13/2024

Math 220

Letter for Future Students

My name is Nathan, and my major is Engineering. I'm taking linear algebra class in Winter 2024. Greetings from the mathematical world! I want to offer some tips and guidance to assist you succeed in your math classes as you start your adventure of taking linear algebra. There's more to succeeding in math studies than just showing up to class and finishing your homework. To become proficient in mathematics, you should form good study habits, ask for assistance when necessary, and practice frequently. Although many students have math anxiety, you shouldn't let it stop you from achieving your objectives. Dividing issues into manageable chunks makes things easier, and keep in mind that it's acceptable to seek assistance. You can always ask for help from your tutors, instructors, or peers or come office hour. Work together, organize study groups, and build a network of people who will support you as you overcome the difficulties of math classes. Establish attainable objectives for yourself, such as learning a particular subject or raising your cumulative score is highly recommended. It's critical to recognize your efforts and rejoice in your accomplishments, no matter how modest they may appear. Acknowledge the work you've put into your education and make use of every accomplishment as a spur to keep going. Dusty's linear algebra class does the flipped class model. You should come to class with an open mind, a positive outlook, and a willingness to learn to your math sessions. You are allowed to be creative. For me, I prefer the traditional class more. Also, I have taken many Math classes before including 4 Calculus classes and Differential Equations. This is the one that I struggle with the most, so remember that you are not alone. Finally, keep in mind that math is more than simply a topic; it's a path of exploration, problem-solving, and personal development. You will achieve in ways you never would have imagined if you have faith in yourself and persevere. Believing in yourself will get you the outcome that you want.

Letter to Future Students

Hello. My name is Mihretu Gebre. I am Ethiopian and moved to the United States on a family visa in 2021. I am majoring in computer science. This is the seventh quarter at Highline College. I will transfer to the University of Washington in the fall of 2024.

I faced a challenge: simultaneously adapting to working and learning. Therefore, I decided to work only part-time and focus on school. Even though it is challenging, balancing school and work has helped me hone my time management skills. However, I learned that this requires practice because sometimes I still miss work to prepare for an exam.

My advice for success in this class is to learn and understand the concepts; you must know the main idea behind each unit. The solution to your success in this class is your ability to use and apply critical thinking techniques. Don't be afraid to raise your hand in class, go to office hours if you have questions for Dusty, or join a study group if you need help. Try your best to watch the lecture video before attending class. When studying for an exam, I would recommend practicing the questions worked on during class.

The good part of the flipped class model this quarter is that it gave us an opportunity to practice questions in small groups. I like the combination of practice and taking notes to really understand a subject. I found proofs challenging to understand in this class because they require more time and effort to understand fully. I enjoyed coming to class and collaborating with students on problems. You will succeed in this class if you stay on task with the material and homework. Dusty's classroom environment is very encouraging, so don't hesitate to reach out for help when you need it.

Dear Future Students,

Hello, my name is Jennifer Nguyen. I plan to major in computer science or anything in the tech field. I am part of the Running Start program and I am in my second year. I am currently a senior in high school and I will be graduating soon which is crazy. I love to play video games and watch movies with my sister, and from that I am amazed at how games and animations are created!

The challenge that I faced this quarter was realizing that my study habits weren't as good and consistent at the beginning of the quarter. It was my first time taking Dusty's class so I had no idea what the class expectations were like. It took some time getting used to the class requirements which didn't take long but it felt different. Exams are worth the whole part of your grade so I had to change my study habits to make the most of my grade in the class.

The pieces of advice I would give to be successful in this course is to stay on track and not get behind. I say it is easy to get behind because the class moves forward to a different section each day. Watch lecture videos daily especially before class since there is group work based on the section in the video. It is important to maintain and prioritize the resources posted on Dusty's website. Watch the videos and take the given notes to look back on, they are also helpful for group work during class time, and review for weekly tests. Before tests, I would usually look at old assessments from past quarters that are posted on Dusty's website to prepare and study for so it wouldn't be a surprise during the test.

The flipped class model comes in handy and plays a good part because watching the lecture video before class time helps with preparation and understanding the concepts. You get to practice and learn how to solve problems after watching the video. You then apply your understanding by doing the homework as well. At first, I thought it was strange to not have in-person lectures and only have group work during class time the whole course. That was the

challenging part because I was not used to the change but I turned out to like it. I became more social and got to work with new people and interact with them.

I also recommend going to study groups, you get extra credit which is always a bonus to the grade and you also get to meet new people and make friends. This is where you get the help you need since you might know something that someone doesn't know and that goes the same way to them. This is one of the math classes that I enjoy taking, it isn't hard or difficult, it is just tricky so use any resources that are available to you! This class obtains a friendly environment so don't forget to have fun :)

Signing off,

Jennifer Nguyen

- 1.) Introduce yourself, what you are majoring in, and a bit about your background.
 - a. I am Noah Lian. I majored in Electrical Engineering. A bit of my background is that it's in the back and ground color.

- 2.) What were some of the challenges you faced this quarter (personally or as a student) and how did you make it through?
 - a. I had a hard time warping my head around the wording or phrasing of the question especially when it comes to true or false questions.
 - b. I had a hard time understanding the theorems and there's a lot of them.
 - c. I made it through this far because of luck and memorizing stuffs.

- 3.) What advice do you have for being successful in a class taught by Dusty?
 - a. You might want to pin his calendar on your wall or take a pic of it, because that will have everything you need to know when it comes to what to submit or what is going to be covered on the assessments.
 - b. Remember the dot product formula. This will be covered pretty early into the course. You'll see it again and again when proving a proof or finding something that has no numerical value.
 - c. Write vocabularies for each chapter in a separate note or something because you'll see lot of new terms each chapter otherwise you can get lost.
 - d. Read the questions carefully and slowly in the assessments.
 - e. Details and details and details and memorize and memorize to understand the concepts.
 - f. You might want to understand what it is that you are not clear on before asking him during the group works, and always ask him for clarification or confirmation if unsure.

- 4.) What are the good parts of the flipped class model? What made it challenging for you?
 - a. The good part is that if you miss a class, there's videos you can go back and watch. The bad part is that videos are long because you can't really cut it up into pieces like Terry's videos.
 - b. The challenging part for me is the long videos. Thankfully, he also has notes that you can look at or download on his website.

- 5.) Please end your letter with something to encourage the reader.
 - a. Dusty will tell you very funny jokes from time to time.
 - b. If I can get it this far, you'll probably made it through as well.
 - c. It might not seem like it, but Dusty is a good teacher.

Dear Future Linear Algebra Students,

My name is Carmelle, and I am a Running Start student working to earn an associates in computer science before I move to UW in the fall for my bachelors degree. This quarter was a bit easier for me since my other two classes were to finish up some highschool credits— so I was chilling with a pottery class while my classmates were dealing with physics.

As for some advice, go to study groups, if you can because you get extra credit. Even if you don't need help and end up just doing some homework the entire time, you basically get extra credit for doing your homework in a certain location.

The most difficult or most common questions that you will ever lose points on in an Assessment are proofs. They're annoying. But Dusty is extremely predictable. As in, the proofs you'll be quizzed on are usually from the notes, and he isn't gonna want to read a whole essay. And it'll usually be on a theorem that was the most emphasized in class. Meaning the options for which theorem you'll have to write a proof on, narrows down to about 2. And since you usually have the proof in your notes, you can memorize both of them, and then pray that on the assessment, your memory doesn't betray you. At least that's what I did, and it worked about 80% of the time.

Personally, Dusty was not the first instructor I had that has done the flipped classroom model. I wouldn't say that I favor one classroom model over the other, each has its own pros and cons. For the flipped classroom model, there's a lot more interaction with your classmates as you're working through the problems. But you are expected to go through the material and watch the lecture beforehand, which can make group work challenging if someone in your group or you yourself haven't at least glanced over the notes beforehand.

Don't stress too much though, you'll survive.

Carmelle

Dear Future Student,

My name is Trupen Dangariya, I am majoring in computer science and systems. Winter 2024 was my last quarter at highline and now I am at UW Tacoma. I am taking this class because this is one of my major classes.

Welcome to the exciting world of linear algebra! As you embark on this journey, I wanted to take a moment to introduce you to the wonderful realm of matrices, vectors and linear transformation.

Linear algebra is not just another math class; it is the language of modern mathematics and its applications span across various fields including computer science, engineering, physics, economics and more, it provides a powerful framework for solving problem multiple variables and dimensions.

Through this course, you will explore fundamental concepts such as a matrix operation, vector spaces, determinants, eigenvalue and eigenvectors. While these may sound daunting at first, fear not! With patience, practice, and a curious mind, you will come to appreciate the elegance and utility of these concepts.

Remember, linear algebra is not just about memorizing formulas; it is about developing problem-solving skills and a deeper understanding of mathematical structures. Embrace the journey, stay curious, and don't hesitate to reach out if you need assistance.

I wish you all the best as you embark on this exciting adventure in linear algebra. May your mathematical journey be filled with discovery, enlightenment, and a newfound appreciation for the beauty of mathematics.

Sincerely,
Trupen Dangariya
Current Student at UW Tacoma