

R.S. , conceptual, study groups, pros/cons of flipped class 

Dear Future Dusty Students,

Hello, my name is Andy Luu, and I am majoring in mechanical engineering. I am currently a running start student in my senior year of high school about to graduate and am going up to UW Seattle in the fall. I am Asian American specifically Vietnamese. I enjoy cars which is why I decided to pursue mechanical engineering, I am not the best at math or physics, but I am finding my way as of now.

Some challenges faced during the quarter were definitely understanding concepts. Linear algebra is slightly different because it is mainly learning conceptually, and the work is based in which you understand that concept which is also why there are so many proofs. (Proof based class) In previous classes, I got into the habit of memorizing how to do certain problems but in some cases such as this class, you should and actually need to learn the concept as if you don't, you are going to struggle a bit. I also struggled with vocabulary, since this class is a bit wordy, we used terms quite often and I would usually forget after a while. Also, since it's my senior year, a personal problem for me was slacking off as I knew I was going to graduate. Don't get me wrong, I still tried my best during test and homework, but with having the ability to skip the entire homework if I pass the homework was quite the challenge as I needed self-control to make sure I go back and actually get some practice with the homework. But I made it through, I am writing this the day of our 8th assessment and now it's the final stretch.

Advice I would give is to for sure go to the study group, not only will it help you, but you also get extra credit points towards your second to worse assessment, Dusty is trying to help as much as possible and is will to give as much opportunity as possible so taking them while you can. I also recommend meeting some new people as they might know a lot and forming a group of friends is one of the best learning methods since you have someone to talk to when Dusty isn't there. Speaking of, talking to Dusty for any questions is a great way to get them answered, Dusty is a really nice and friendly person that you shouldn't be shy with asking questions.

I would say good parts about the flipped class model is that it gives students the extra practice they need to not only help them complete the homework but time in class to ask questions and fully understand what is going on. Many times, I have been taught through lectures and during the class times, I would not know what is happening at all, and wouldn't get the chance to talk to anyone or get some extra practice. But even though I say that this is a good system is having great outcome, the hardest part of the class is definitely, you as a student needing as much self-motivation self-discipline as possible since you will be needing to watch about an hour of videos almost every single day for notes. These videos will make sure you are prepared to do the flipped class.

So, future students, I think you will be great and perform greatly as well!! You got this, if you are struggling, just know that every will be alright and just make sure you do what you need to do.

R.S. missing class, spend the time.

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Hello Future Students,

My name is Tin Tran, a student in linear algebra and I am not pursuing a major. However, I will attend UW Seattle in the fall of 2023 to pursue a bachelor's in computer science. I'm a student at Foster High School, and I've done Running Start for the past two years and this quarter is my last. Technology has always been a part of my life, growing up I always gravitated towards technology and I decided to make it my career in the future.

This quarter, there were a lot of challenges personally and academically. I've gotten pretty used to life at Highline and going in person, however, I can still improve my time management skills and procrastination. As for personal struggles I've always been heavy in doing sports and extracurriculars so it was hard balancing the two. Going to peers or Dusty helped me out tremendously, they were open to answering any questions or helping out in any way.

My advice to be successful in this class is to learn and understand the concepts, you must comprehend the fundamental idea of each unit. Being able to deduct and use your critical thinking skills is a key to your success in this class. Asking for help is also a great way to learn and understand the concepts better, don't hesitate to raise your hand or go to student study groups. They are all great things to help you in this class.

The flipped model in the class was doing notes at home and being in groups in class, this method of learning was good if you did the notes and went to class. I, unfortunately, wasn't able to get to class every day, making it harder for me to learn and practice. However, it's still a great way to learn as students like yourself are working together, groups are amazing since they can help explain the problem right there. A challenge with this was not doing the proofs more often

and sticking to just regular problems. Practicing proofs can help you tremendously with not just memorizing it, but learning the concept it covers.

To wrap up, it's a lot more challenging if you don't spend time doing the homework, notes, and studying. If you do all those things, then you'll pass, at least, I hope so.

Sincerely,

Tin

R.S., trials, study groups, responsibility

3

Dear future students,

My name is Andy and I'm a high school senior that is currently doing running start. After what has seemed like forever, I will be graduating from Highline with an associates and transferring to the University of Washington at the end of the year. I will be majoring in engineering at UW, specifically material science engineering.

As a student, I have faced numerous challenges, both personally and academically. This quarter, in particular, was quite demanding compared to my previous quarters. Balancing coursework, extracurriculars, and work proved to be pretty challenging. I found that prioritizing my time and setting small goals for myself helped me stay focused and organized throughout the quarter. One of my biggest challenges this quarter arose near the end of it. I had thought everything was smooth sailing until it wasn't. Something happened in my personal life and that left a lasting impact on how I navigated the rest of the quarter. At the same time, I was trying to balance all these things in my life, and I didn't think I could hold on for much longer. That was until I found support through the people within my class. They helped me get through it and focus on my studies.

For those taking a class taught by Dusty, I would advise them to stay on top of their work and be proactive in seeking help whenever needed. Additionally, they should make the most of the resources available to them, such as office hours and tutoring services. One thing that helped me throughout the quarter were the study groups led by different students. I was one of the leaders of the study groups, so after class, I would go to the MRC (math resource center) and everyone would all learn from each other. Sometimes each of us spent time doing our own work, while other times, we would all work together to figure out how to solve a problem. The study groups helped my understanding of the class as well as the peers around me (plus there was a bonus of extra credit). These study groups also helped me get closer to my classmates and learn about the people around me.

One of the noteworthy aspects of the flipped class model is the emphasis on active learning and student engagement. Instead of passively absorbing information, you will have the opportunity to participate by solving problems on the whiteboards. The problems we did in class correlated to the homework problems, so it was easy doing parts of the homework after we learned how to do them in class. The flipped model also provides an opportunity for students to engage in collaborative learning. However, this style of classroom requires a higher level of responsibility and self-discipline as you are expected to come to class prepared, having reviewed the materials beforehand.

One thing I want everyone to understand is that your understanding of the subject will depend on you. This class isn't supposed to be an easy one, however, it's also not really a difficult one either. Everything will be based on how you want to approach the class, and the time you spent studying or learning about the material. With this style of course, you have more freedom and flexibility as a learner. You have a wide range of resources and support opportunities available to you at highline. The first step in learning is to have that willingness to learn and wanting to know more.

Best,

Andy Huynh

returning student, parent, watch videos before class.

4

Discussion Seminar VIII: Letter to a Future Student

Hello, my name is Cassidy Augustine and I am not your typical college student. The decision to return back to school after a long hiatus of starting a family was definitely a tough decision, but it has always been a dream of mine to earn a degree in Engineering. With a Civil Engineering degree I plan on giving back to my community in helping build homes and new roads. I am definitely grateful for the help I have received here at Highline and hope to transfer next year to a four year college.

This quarter it was challenging for me to balance work, school, and also parenting. After many trials of different routines I was able to find what worked best for me. It was important for me to stick to a routine and also to schedule in time to rest and to reflect on the week. This helped me plan for the future so I wouldn't get overwhelmed with too much.

Some advice I would give in being successful in this class is to schedule a good time to watch the videos before the next class and make sure you are ready to discuss. It is also important for you to get familiar with reading and understanding the proofs. Having a flipped class model was something different for me so it took me a while to get used to but I enjoyed the flexibility of being able to watch the videos on my own time. I enjoyed coming to class and collaborating with students and working together on problems. As long as you stay on tasks with the material and homework you will succeed in this class. The environment Dusty creates in the classroom is very encouraging so don't hesitate to reach out for help when you need it.

working student, lots to track, don't fall behind.

5

Dear future student,

My name is Imogene Frederick and I have had the privilege of being Dusty's student for Calculus 3 as well as Linear Algebra. I am currently aiming to get an Associate of Science degree at Highline so I can transfer to UW Seattle and pursue something in the Engineering field. I do have a job which has made staying on top of my school work more difficult, but in my experience Dusty is very understanding and has always tried to give me lenience. What will best help you succeed in this class is simply putting in effort. Dusty does a great job of providing as many resources and opportunities to get help as he can. It is a good idea to attend all the study groups you can and try not to miss class.

While you aren't taking notes during class most of the time, the group activities and practice problems are really helpful for applying the material and working with others to get a better understanding. The material in this class can sometimes be confusing, there are lots of variables that can be hard to keep track of but having clear notes and practicing will help. A lot of the struggle I faced was with the proofs, they take a little extra effort to understand but Dusty will always do his best to make them easy to get.

This class is definitely tough, but as long as you do your best you will probably be okay. As long as you remember to not fall behind and to reach out when you need help then this class should be interesting and a good math course. Good luck and you got this!!

balancing hard classes, do the HW, prep questions
for office hours

6

Dear Future Student,

Allow me to introduce myself, my name is Yandy Lema. As I write this letter I am preparing to take the final exam of this Linear Algebra course. I am currently in my last quarter at Highline College. I am a computer science major and I will be transferring in the fall of 2023 to Washington State University. Math is my favorite subject and it has been since I was a child. I was born in New York City although my family is from Ecuador. I want to major in Computer Science because I want to work as a software engineer.

During this quarter in Linear Algebra I struggled with the homework workload and overall class workload. I usually plan out my quarters to take 2 "hard" classes and 1 "easy" so this quarter apart from this class I took Physics 202 and an elective. I strive to earn a 4.0 in all my classes but I am unsure of reaching that goal this quarter. Each of my classes demand a lot of study time to really understand the concepts at a 4.0 level and I feel like I have not had enough time to dedicate enough study time for each subject. As for the homework workload I have completed about 80% of the homework assignments which is not where I wanted to be at. Last quarter my homework grade also held me back from a 4.0 grade. So I would recommend you do your homework if you want to get a really good grade.

To be successful in Dusty's class I would say you need to be comfortable with learning through online content such as the textbook and videos. There is no in-person lecture in this course. If you are like me and struggle in online learning environments I would recommend to be disciplined with the video schedule. I would recommend attending all office hours as well as this can be a replacement for in person learning. To be well prepared for office hours I would prepare questions from the previous day's lecture video. I want to give you a warning that problems you will be asked to solve in class and in the homework are different. When studying for a test I would

recommend practicing the questions worked on during class. I would say the good part of the flipped class model this quarter is that it allowed us the students to practice our knowledge. Sometimes this way of learning can really cement learning for certain students. For me ideally I like the combination of practice and taking notes to really understand a subject.

If you have made it through Calculus III you will do fine in this class! In my opinion Calculus III was more challenging than this course. Always remember that you are not alone in your struggles so please reach out for help if you need it! Reach out to other students, professors, or the tutors on the 6th floor of the library.

Hard to focus on prep., pay attention to content
flipped better than lecture.

(7)

Dear future student of Dusty's,

Welcome to Dusty's class! To introduce myself, my name is Bonds Le and I am majoring in Civil Engineering. I have a passion for video games and drawing, and I enjoy playing sports like soccer and swimming. I did Running Start for 2 years, where at the time of writing this letter, would be my last year here at Highline and sadly my last quarter here with Dusty. I will soon be transferring over to UW Seattle, so that's pretty exciting for me. I took Dusty's Linear Algebra class in Spring 2023 and I am here to reflect my experience.

A perfect way to start out this letter is to talk about my challenges with this class to discourage you about taking it. My challenges with this class were pretty minimal, because for the most part, this class is well handled by Dusty. Dusty's class isn't just straight up sitting there and taking notes, but you are actively working. What you are expected to do is watch his videos online or take virtual notes. The slight problem I had with this was that because it was online, I felt the lack of enthusiasm to sit and watch an hour-long video of him explaining a concept. It also didn't help that my habit of procrastination got in the way a lot of the time, so I was actively taking notes every 5 minutes and doing something else for a solid 10 minutes. Really, my main challenge was just staying focused, and this was more for me and not about Dusty's class. The way I handled this was to slap myself awake and force myself to stay on topic. Really, the challenge was me, so I had to take it upon my own hands to make myself concentrate. Other than that, Dusty's class is really manageable.

Like I said earlier, Dusty's class is relatively manageable. He has a whole schedule laid out in front of you, so definitely try to stay on top with it so you are constantly caught up and not missing out. He also has a flipped class model where you do group work with others, and I highly recommend you pay attention to the problems he gives. Those problems help out with understanding the concepts a lot as well as getting in the practice of working with them. Besides that, talking and engaging with other students is also a good idea. I have made numerous friends with my peers in my class and we actively talk with each other. Dusty is also very approachable, so don't feel shy to go up to him when you need assistance, he is really friendly. Those were my own experiences for being successful in his class, but you can also approach his class in a different way. But really, all you want to be doing is to pay attention to the content.

I talked briefly about Dusty's flipped class model where you do group work in class instead of lectures. The main benefit of this is that you get hands-on work with problems involved in the topics you learn. All the concepts and definitions are expected to be learned beforehand, which shouldn't be tough. Coming into class is when you actually apply those definitions / concepts. In this model, not only do you get the practice you need to prepare yourself, but you also work with others, and if you still need help understanding, Dusty is super approachable and can help you out anytime. When I took a previous class of Dusty, he didn't really have this model, so transitioning to his new flipped model was a bit of a challenge at first, but after getting used to it, I much prefer it over his old style.

At the end of the day, you should leave my letter knowing that Dusty is a very rude, unhelpful professor (jk please don't mark me off). Dusty's class is a fun, new experience for those taking him for the first time. He is helpful, understanding, and a good math professor. If you ever need help, he is there. So don't enter this class feeling scared or hopeless. Dusty will be there to help, and he will make math more enjoyable (I think). So good luck, you got this!

-Sincerely,
Dusty's Past Student
Bonds Le

R.S. , study groups, skipped videos

8

Dear future Linear Algebra student,

My name is Di Ramirez-Diaz, and I'm a Running Start student and a senior at Foster High School. I'm majoring in Computer Engineering and will attend UW Seattle next fall.

This quarter is the hardest and most intense quarter of my two years at Highline, though I feel like I haven't been as stressed as in previous quarters. As an engineering student, I'm required to take a lot of math and science classes so this quarter I stacked up on classes and I'm taking Chem161, Physics 203, and Linear Algebra. Managing these classes was pretty tough and all the work was time-consuming. I tried to spend more time doing things I enjoy, like playing video games or hanging out with friends. Because of this, I don't really spend as much time on my work as I could and end up with results that aren't my proudest, but get the job done, whether this is a good thing or a bad thing.

Being successful in this class isn't easy, and you have to stay on top of your work because this class moves fast. One of the most helpful resources in this class is the student-led study groups. These study groups are sessions that meet in the MRC and you can work with your classmates which allows you to learn from each other. I definitely recommend attending these sessions.

The good thing about the flipped model is that you are given time to practice skills that you learned, instead of just spending the whole time listening to a lecture, where you might not even understand all the material. Personally, lectures aren't the best way that I learn, and I prefer a more hands-on approach where I can actually apply what I learned, instead of just listening to how to apply the skills. The biggest downside for me was finding the time to actually do the notes and online video lectures. I watched a few of the lectures at the beginning of the quarter but skipped them all after the first week. Even then, I often slacked on doing the notes on time and sometimes came to class without knowing what we were doing.

Linear Algebra is tough, you might find the math relatively easy, but understanding the theory and concepts is challenging. This class may seem intimidating, but you can overcome any roadblocks and succeed if you try hard enough.

R.S., working, website, liked interactive class.

Hello to future students of Dusty. My name is Bao Truong, and I'm studying Computer Science. I'm almost done with my second year as a running start student and I'm also a senior at Foster High School. Technology is something that truly excites me, and I'm currently working hard to finish my Computer Science prerequisites and hopefully get into the University of Washington. When I'm not studying, you can usually find me playing video games or hanging out with my friends.

One of the biggest hurdles I faced this quarter was managing a demanding schedule. Although I only had three classes, they required a lot of time and effort to understand the concepts thoroughly. Adding to the challenge was the fact that I was working during the quarter, which made my schedule feel overwhelming at times. I knew that I needed to do well in my classes, so I decided to move my work shifts to the weekends and prioritize my studies during the weekdays. Despite the difficulty, I found that the class structure was straightforward to follow. Watching the videos before class helped me grasp the materials more easily, and attending study sessions and interacting with my classmates gave me more confidence. If you are a future student of Dusty's, my best advice would be to make the most of the resources that he provides. Dusty's website is an excellent source of videos, notes, answer keys, office hours, and much more, so be sure to check it out regularly, even if you can't attend class in person. I found myself going through the website 1-3 times a day to look for resources to help me. Additionally, I would recommend prioritizing your performance on the assessments, as they carry significant weight, with 7-8 of them throughout the course. Moreover, looking through the true/false questions and recalling the main proofs of each section each day has helped.

Looking back, I wish I had known this earlier, as some of the earlier assessments were relatively easy, and I could have done better if I had focused more on them. This quarter, Dusty made a significant change to the way he conducts classes. Instead of the traditional lectures and note-taking, he now focuses on in-class activities where we work on homework problems together in groups, with Dusty available to assist if needed. I found the old lectures to be tedious. However, with these new activities, I have been more engaged and proactive in my learning. I have found that I learn better by doing things, and being able to ask questions about specific problems has been incredibly helpful. While it was a bit

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awkward at first, as the quarter progressed, I grew to enjoy these activities to the point where it was a primary reason why I looked forward to attending class every day.

I want to end this letter by letting you know that this class is not entirely difficult; however, isn't entirely easy where you shouldn't attend class or do the homework. I believe if you put effort and dedication into asking questions, forming study groups, I guarantee that you will succeed. If you ever feel overwhelmed, remember that Dusty is an accommodating professor, and there are plenty of resources available to help you out. You are not alone in this academic journey, and with hard work and determination, anything is possible. Best of luck to you!

flexible learning, prefers lecture

10

Drake Cope

Math&220 – Linear Algebra

05/31/23

Dear future students,

Hello, my name is Drake Cope. I am majoring in a Bachelor of Science in Mechanical Engineering. I grew up in Washington my whole life and want to be involved in space exploration, specifically building rockets in my future career. This quarter was manageable in terms of difficulty. With linear algebra I also took physics 203 which made it challenging for me to manage my time in study hours, homework, and self-care throughout the quarter. What allowed me to be successful in getting through the quarter was to set time aside to rest and decompress because it is important to rest when our minds and bodies go through a lot during school.

When taking Dusty's class, my best advice is to ask lots of questions even if they don't seem to make sense to ask. Dusty is a nice person and wants all his students to succeed in his class so don't hesitate to speak up. Dusty teaches a flipped class model which is much different from the standard lecture format. I would say the good part of it is that the class is flexible. Many of Dusty's lectures are online on his highline homepage. He also gives out the entire quarter of work along notes at the beginning of the quarter, so you have access to really organized notes to use for homework and studying for assessments. The challenging part for me in a flipped classroom is that in-person class days are very individual and group-work oriented. In a typical school week, 3 days are group work, 1 day of catch up, and 1 day for assessments. The class will challenge you to develop teamwork abilities and independent learning both in-person and outside of class hours.

Overall, the class was pretty good. I am personally not a fan of no in-person lectures. However, part of college is to become an independent learner and seek your own path of what you want to do with your life. Ask for help from Dusty and other professors and peers that want to help you succeed in your education. When the going gets tough, keep moving forward, even when it hurts and is exhausting. Remember to always keep your eyes on the end goal you want to achieve and with enough determination and persistence, you will accomplish it.

working, time management, watch the videos,
pros/cons, slack

11

Dear Future Students,

I hope this letter finds you well as you embark on your academic journey. As a former student who took this class, I wanted to share some insights and advice to help you navigate through the ups and downs of this course.

Firstly, let me introduce myself. My name is Mohamed, and I'm majoring in Computer Science at Highline. Just like you, I was filled with excitement and a bit of nervousness when I started this class. Beyond academics, I have a passion for chess and various sports, which provide me with a much-needed break from the demands of coursework.

During my time in this course, I faced several challenges that I believe you might encounter as well. One significant hurdle was managing my time effectively, especially since I had to balance my studies with work commitments. It was tough, but I found ways to overcome this challenge. I made sure to prioritize rest and create a schedule that allowed me to watch the required videos the night before each class. This way, I entered the classroom feeling prepared and ready to participate actively.

To be successful in a class taught by Dusty, my advice to you is to prioritize watching the videos before each class session. Trust me, it makes a significant difference. By doing so, you will have a better understanding of the topics being discussed and will be able to contribute meaningfully to group activities.

Now, let's talk about the flipped class model, there are some great aspects to it. One of the positives is the emphasis on collaboration and teamwork. Working with your classmates not only enhances your learning but also exposes you to diverse perspectives and approaches. It's an opportunity to learn from one another and develop crucial communication and problem-solving skills.

However, I won't sugarcoat it—the flipped class model also comes with its own set of challenges. Watching the videos can sometimes feel boring or unnecessary, but I encourage you to approach them with an open mind. They lay the groundwork for in-class activities, discussions, and application of concepts.

Another challenge lies in managing the various components of the course. With different assignments, readings, and group work, it's easy to feel overwhelmed. My advice is to stay organized and create a system that works for you. Utilizing tools like Slack, to ask questions or to seek clarification can come in a clutch. Also make sure to use the calendar that Dusty made for you, I'm pretty sure he didn't make it for no one to use it.

Let me leave you with an encouraging quote "A journey of a thousand miles begins with a single step." As you begin this journey, remember that every small action you take, every decision you make, and every effort you put forth contributes to your progress. Each step, no matter how small, propels you forward on the path to success.

In conclusion, cherish this learning journey and make the most of every opportunity. Remember to seek help when needed and don't hesitate to reach out to your instructor or classmates. Together, you can overcome any obstacles and achieve great things.

Wishing you all the best in your studies and beyond!

Sincerely,

Mohamed Mohamed

R.S. scheduling, understand concepts, proofs

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Dear Future Linear Algebra Student,

Hello! My name is Samantha Rock, and as of now I am majoring in computer science. I am also a running start student about to graduate from highschool. This is my second year doing running start and my last quarter at highline. As a result this quarter was quite difficult for me, as I had a very busy schedule. This was the quarter I had to complete a lot of graduation work, creating an even more difficult time. Along with this I was taking this class, physics and calc 4, so to stay on top of all of my work, I had to prioritize, I made a list of what I needed to do, and whatever needed to be done first I did so right away. This type of schedule did not keep me ahead of work, but it kept my head above the water and helped me get everything done.

Taking a class from dusty can be very helpful or not, depending on how present you are and how prepared you are for the lessons, especially with the flipped class model. I would recommend before each lesson, even if you cannot get the notes done, to expose yourself to the math. This way you can understand Dusty's mini lectures at the beginning of class more, and you can be more successful in groups when completing group work. Another piece of advice I have for those taking Dusty's Linear algebra class is not to just memorize the math but to try and understand it conceptually. Out of all of the math classes linear algebra is definitely not the most difficult, that's not to say it isn't hard, but it can seem easier to just memorize everything, including the proofs and true and false questions. In the long run however, it will benefit you more to understand what you're doing. This way you will produce the proofs more easily, you will understand the True/False statements, and lastly you will be able to retain and perform the mathematics more readily, for assessments, and eventually for the final exam.

At first all of the proofs and conceptually questions can be intimidating, but they really are not, as long as you take time to understand them. If you are feeling this way I highly recommend asking Dusty lots of questions. He is always willing to answer any and all questions (well at least all the math related questions) to really help you understand all the material. I urge you to take advantage of this. Along with this, I urge you to go to study groups. Talking with your peers and asking them questions will not only help your understanding but theirs as well. Attending these groups is really a win-win situation.

I hope you find all of this advice helpful, whether you're a math person or not, linear algebra can be a really interesting class to take. I hope you find the time to enjoy it and learn a lot of new math along the way. Goodluck and thank you for reading my letter.

Sincerely,
A former Linear Algebra student.

motivation, studying proofs, watching videos.

13

Dear future student,

Hi my name is Nader shamdeen and I am a full time student at highline college and am currently pursuing a bachelors degree in mechanical engineering, I'm planning on transferring to UW Tacoma in the fall, as this is my last quarter at highline college. So I decided to take Math 220 linear algebra for my final requirements for transfer and ended up in dusty's class.

One of the challenges I faced this quarter was losing motivation as I got closer to achieving my transfer requirement's, a way I dealt with that was just planning my time better by writing it down instead of just jumping at each assignment that was due, having a plan made it easier to complete my tasks without feeling overwhelmed.

To be successful in Dusty's class I recommend communicating with dusty and other students to try to get a better understanding of topics. While attendance is kind of optional I recommend showing up as much as possible because you might get left behind if this stuff is hard for you. For me I struggled a lot with proofs throughout the quarter but got better towards the end as I studied the notes more and more and asked other students for help in understanding what proofs are and how to do them.

A good thing about the flipped class is that it gives you more free time in class, which helps because dusty can help us go through problems in class rather than assuming we just gained a perfectly clear understanding from the videos. One thing that was challenging with the flipped class was actually watching the videos at home, because they were a little on the longer side, but dusty was helpful in shortening his videos from previous quarter so out of respect I took the time to watch the videos.

As long as you try your hardest and ask questions when needed this is a class that you should be able to succeed in. Best of luck in completing whatever it is that you are pursuing.

Sincerely,

Nader shamdeen

R.S., procrastination, ask questions, watch the videos!

(14)

Dear future linear algebra students,

My name is John Kim and I am majoring in computer science. I am a running start student and this was my first year of running. I was not very experienced and linear algebra was the first in person math class I have taken. I am currently tutoring at the MRC and working for Highline's Thunderword. I have a sister, who is currently studying at UW Seattle and is also majoring in computer science. She also did running start here at Highline and helped me out sometimes.

One of the biggest challenges I faced this quarter was time management. I did a lot of my assignments last minute and would end up starting to study for the assessments the night before I took it. I wouldn't get enough sleep which would lead me to take naps and fall even more behind on schoolwork. To overcome this, I just tried to do my work the second I had free time. I tried my best to avoid procrastinating and putting off all my work for the night. It would also help to try and sleep early, so I can have more time in the day and more energy to better focus on schoolwork.

To be successful in a class taught by Dusty, I really recommend watching the videos. The videos on Dusty's homepage are really helpful and cover almost all the topics of Linear Algebra. They are a great tool to understand the material and can be much more helpful than just taking a look at the notes. I also recommend asking questions, you have so many places to ask questions, like during class, group work, study groups, slack, etc and you should. If you don't understand any of the materials, asking questions can be really helpful to get an explanation suited to your needs.

I think that the flipped class model that Dusty uses can be good, but only if you watch the videos. You will usually work in groups but if no one watches the video, it can suck because you guys will just sit there not knowing what to do. Dusty will go around the class and you can ask questions, but it is much better to just watch the videos or take a look at the notes to get a basic understanding. If everyone gets the basic understanding, I think that the group work can be really helpful in the applications. You can discuss with your group and meet new people. I think that it is much more fun than just doing a HW assignment on your own. Though, you may be lost if you didn't get the chance to watch the video before class.

When the quarter first started, I wasn't really used to the class structure or material. Matrices were foreign concepts to me and having to memorize the proofs was tough. Still, I didn't give up and you guys shouldn't either. If you are ever feeling lost in the class, go talk to someone. You can go to a study group or go to Dusty's hours or even ask in the slack. Learn from your mistakes, but don't ever get discouraged by them.

Best of luck,

John Kim

God's plans, burn out, attend class, review, self-doubt
working ahead, imposter syndrome. (15)

Letter to a Future Student

Hello!! My name is Rukia Adan, I'm majoring in Electrical & Computer Engineering. I used to want to be a surgeon... I had a bit of an obsession with the medical world and I always imagined I'd end up in the medical field but it's quite funny how fate moves and how unexpected God's plans are for us. Now I'm transferring to UW and I plan to work on medical devices and indulge myself in innovation. I'm a young Somali lady in hopes of achieving things bigger than myself!

I'd say this quarter was interesting, I made a whole lot of mistakes but at least I made them while at Highline where there's a great community to support me. I overcommitted and exhausted myself in a short period of time, I can tell everyone was dealing with a lot of burnout. It makes sense though considering we're all nearing the end of college journey. Taking all stem based classes in one quarter is difficult but having a heavy course load this quarter gave me a glimpse of what I'll be dealing with when I transfer to UW. It's a little scary but if others do it then so can I!

Certainly come to class EVERYDAY you can. Even if you think, oh there are videos it doesn't make a big difference whether I go or not. Trust me it's going to be more worth it if you just go, you're paying for the class anyway so why not take advantage of all the resources. Going to class is going to help you fill in gaps of knowledge you weren't even aware you had. You get the chance to ask questions and hear other people's questions. Getting frustrated over certain topics is normal, in those times you ask for help, go to office hours and trust that you'll walk out with a little more confidence in those topics. Another piece of advice is to make sure you review the past topics covered in class, every day just skim through the last packets and make sure you understand the main idea of each one. If you have the time to attempt some questions and test yourself, this is going to save you so much time and stress when the finals roll up. I learned this from my older sister and every time I've done it, I've seen great results so try it out.)

Maybe because it was different and new, or maybe because I wasn't used to linear algebra, a conceptual heavy kind of math, I struggled in this class. Before I took Dusty, I heard of this new flipped class model he was doing and I thought it was so great. What a perfect chance to practice in class and ask questions when you get stuck instead of just listening to lecture then going home to practice problems only to get stuck. I thought it was an amazing experiment, until I got to it and I started off on the wrong

footing. Hesitancy, indecisiveness and self doubt will get you nowhere and simply make you lose confidence in yourself. I'm sure I could've had a great experience in the flipped class model, word of advice for you upcoming student, look ahead on the notes and workalongs before coming to class so you're not lost when you're there.

If you've been putting in 100% effort throughout the year, the end of the year is probably the hardest for everyone and for that exact reason you should put in 120% effort. If you feel like you're having a hard time with Dusty's class, talk to him. He is a great teacher and will definitely lend you a hand. If your imposter syndrome is kicking in, try to talk positively to yourself. Find a support system or try to spend time doing things you enjoy. A very important thing is to take care of your health, your well being comes first before school!!! Don't skip meals and always try to come to school with enough sleep. You can not do well in school if you're not taking care of yourself. Remember, this time in school is just a stepping stone for you to accomplish big things, work hard and you'll see it pay off :)

overcoming challenges, ask questions, enjoy the moment. (16)

Hey there, future students!

I hope this letter finds you all doing well and feeling excited to begin this quarter. As I sit down to write this, I am studying for my assessment, and I feel ready to start working on this letter, So, let me introduce myself and give a bit of information like who I am and where I'm coming from.

My name is Ledvin and I'm currently majoring in Electrical engineering (EE). I've always had this incredible passion for electricity and how we can use it in different ways. The way of helping people to know how electricity can help us all in every corner of the world captivates me beyond any words that I can probably say.

Now, let's talk about how I'm doing at Highline; College life can be harder and makes us think if we are going in the right paths. Trust me, this past quarter hasn't been the best one for me either. I've confronted a variety of challenges. Both personal and academic. But you know what? I firmly believe that challenges are like those spicy ingredients, colors, sounds, etc. that make life interesting. When the going gets tough, I've learned to lean on my peers, instructors, I will say that together, we can face anything that comes our way.

To set you up for success in Linear Algebra, I want to share some tips that have worked for me. Firstly, keep an open mind and embrace the idea that learning is a journey, but be careful or you will be struggling if you chill too much. Don't be afraid to step out of your comfort zone and take risks. Remember, "growth happens when we push our boundaries". Don't be afraid to step out of your comfort zone and actively participate! Engage with the class, jump into discussions, this will allow you to meet with new classmates, and ask questions. Dusty will be here to guide you, and no question is too small or silly.

Now, let's talk about the flipped class model. I will say that It's cool! Instead of those traditional lectures, we'll dive into interactive group work on activities during our class time. But here's the thing; it might take some getting used to. I am telling you this because for me was hard. I was struggling and feeling that I was not doing anything when I was working with my classmates during activities class time. Trust me, I get it. Change can be intimidating at first. But fear is not!

Dusty told me "Manage your time wisely and make the most of the resources available and remember, I've got your back throughout this whole process." He

will give do the best for you to understand anything related to the class or also something else that you will need help with it,

I want to leave you with something. This journey you're about to take is amazing and filled with boundless opportunities. It's a chance to explore, discover, and unlock many things in the real-world. Soak up every moment, enjoy the learning process, and don't forget to connect with your classmates and Dusty, Remember, success is not just about grades, and I'm not saying this because my grade is low, or maybe, whatever the case, it's about personal growth, connections, and enjoying while you are moving forward.

Regards!

calculation vs. concepts, proofs, friends! watch the videos

17

Dear future Dusty students,

I'm Mahri Yalkapova, and my major is Computer Science. I have taken calculus series, differential equations and linear algebra. I'm also a math tutor on Highline campus. I started taking classes at Highline in Summer 2021 online from my country, Turkmenistan, and I'm graduating with my AS this year. Next Fall I'm hoping to go to UW Tacoma.

Linear algebra class was nothing like all other math classes I've taken, because the math part and working with matrices was fairly easy, but understanding where to apply different methods and knowing the concepts was a little bit hard for me and I struggled a lot with True or False questions on the assessments. To me what helped dealing with these type of questions on the assessments was practicing them from the group work.

Another thing that was challenging are proofs. There's a lot of proofs in linear algebra, and that is one of the most important parts of the class. What is hard about proofs is that they're very conceptual. And if you understand the concept, then the proofs will be much easier for you. Another thing that helped me to memorize them was writing them down multiple times before the assessment. Overall, I don't think proofs are super hard to deal with as long as you don't just think about memorizing, but more about comprehension, and that way you'll be more likely to remember it. What also helped me to get through this class was studying with friends and explaining concepts to each other, or if you don't have friends in this class, then go to study groups, as it helps a lot to study together and you also get an extra credit.

Linear algebra is my first class with flipped class model and at first it was very confusing to me. But what I liked about this model, was that when working in groups, each of us gets to try the question on our own and even if you didn't watch the video beforehand, it will still make sense by the end of the class. But the challenging part was actually watching those videos, and I did watch them in the beginning of the quarter, but then I started procrastinating and stopped taking notes before the class. And it would've been much better if I actually watched videos instead of coming to class without knowing the chapter, because that way whatever I learned at home will be more clear to me during the group work. Another thing I didn't enjoy about the flipped class model is that I would prefer to actually write down the steps of solving the problems in my notebook, rather than on a board in class, because I want to look over that later at home, but I can't. What helped me deal with that, was trying out the questions from the group work by myself.

While this class is not the easiest class, as long as you stay on top of your assignments and don't procrastinate on the videos, then the material should be simple to understand. The homeworks and assessments are not hard and if you're ever stuck ask for help. Really, please ask for help

from Dusty or from other students. Sometimes the material was much better to understand when one of the other students explained it to me. I wish you all the luck in this class! :))

R.S. , read carefully , prof cons.

1

(18)

To: Math 220 Students
From: Seth Colombelli-Silva, Former Student
Subject: Letter to a Future Student
Date: 1 June 2023

Hello, future student my name is Seth, I am a Running Start student here at Highline on track to get my AS degree in General Engineering. I am working toward transferring to a four-year university to get a bachelor's in mechanical engineering.

Some of the challenges I faced this quarter have stemmed from the fact that linear algebra is much more different than other math classes I have taken. Linear Algebra seems to be a very nuanced topic in mathematics as compared to the field of Calculus. There are a lot of proof-based topics that require quite a bit of attention to detail. What helped me was to brush up on my reading and interpreting skills. Write the proofs out and try to understand what is being stated in each step.

To make your time in this linear algebra class valuable, I recommend that you utilize all outside resources you can. YouTube has excellent videos that cover topics that the class will go over. I also recommend that you go to the MRC whenever possible, there are some excellent math teachers and tutors there. Even if you ace the homework quiz and don't have to do as many homework problems, practice is a benefit.

This linear algebra class is structured as a flipped class model and has been referred to as the Reverse learning style. I was not the utmost fan of this way of learning as I preferred a more structured lecture. One of the few benefits I saw to this teaching method style was that you had a better grasp of where the rest of the class was at understanding the material at hand. A major downside I had was that it limited the amount of time you engaged with the professor.

Don't get bogged down by misconceptions about this class. Even if you don't enjoy Linear Algebra there are still a lot of cool applications of it used in the real world. If you have a problem or concern Dusty is quite considerate and willing to help if you communicate with him.



(19)

Minh Nguyen
time management, seeking help is a strength, hard
at the start, active learning

Dear Future Students,

I hope this letter finds you in good health and high spirits as you prepare to embark on your academic journey. My name is Minh Nguyen, and I am excited to be your instructor for this upcoming class. Before we begin, let me take a moment to share a bit about my background.

While I don't have a specific major at Highline, I am thrilled to inform you that I will be attending the University of Washington as a Computer Science major. My passion for technology and problem-solving has been the driving force behind my decision to pursue this field. Growing up in Vietnam, I developed a strong work ethic and a deep appreciation for the transformative power of education. Throughout my journey, Dusty has been an incredible mentor and guide, assisting me with various school work and providing valuable support.

As you embark on your academic journey, challenges are bound to arise. Reflecting on my own experiences, I have faced numerous hurdles both personally and as a student. Time management was a challenge that I grappled with, balancing coursework, extracurricular activities, and personal commitments. However, I overcame this obstacle by developing effective organizational strategies and seeking assistance from mentors and resources available on campus. Remember, seeking help is a sign of strength, and there is a network of support ready to assist you.

In terms of the flipped class model, I found it to have several advantages. It encourages active engagement and participation, fostering a collaborative learning environment. The pre-recorded lectures and resources provided ample opportunity for self-paced learning, allowing me to review and reinforce complex concepts at my own convenience. In-class discussions and activities enriched my understanding of the subject matter by encouraging critical thinking, problem-solving, and the application of theoretical knowledge to practical scenarios.

However, adapting to the flipped class model posed its own set of challenges. It required a shift in my learning approach, as the responsibility of acquiring foundational knowledge rested largely on my shoulders. Initially, I found it overwhelming to navigate the vast amount of material outside of class. Nevertheless, I developed effective study strategies, such as setting aside dedicated study time, breaking down topics into manageable chunks, and seeking clarification when needed. With time and practice, I gradually embraced the model and reaped its benefits.

Now, as you prepare to embark on this class taught by Dusty, I would like to share some advice for your success. Firstly, embrace a growth mindset. Approach challenges as opportunities for growth and view mistakes as valuable lessons. Be curious, ask questions, and seek deeper understanding. Secondly, take an active role in your learning. Engage in class discussions, collaborate with your peers, and make use of the available resources. Lastly, practice effective time management. Plan your schedule, prioritize tasks, and allocate time for both academic pursuits and personal well-being.

In closing, dear students, I want to offer words of encouragement. Your journey through academia will undoubtedly have its ups and downs. Embrace the challenges, for they will shape you into resilient and adaptable individuals. Celebrate your successes, no matter how small, as they signify progress and growth. Remember that Dusty and I are here to support and guide you along the way. Together, let us make this class an enriching and transformative experience.

I eagerly look forward to meeting each and every one of you and embarking on this journey together.

With warm regards,

Minh Nguyen

works fulltime, good/bad groups, slack

(20)

Discussion Seminar VIII: Letter to a Future Students

Dear Future Dusty students

My name is Wubetu Amsalu, I am majoring in Computer Science and I plan on transferring UW Tacoma. I am from Ethiopia and I graduated in chemistry back home and I came here in 2019. I like to play soccer, volleyball and basketball and also, I like to read books specially science book and fiction.

I faced many challenges as a person and as a student. The first and the most challenge that faced on me is loss of attention; my expectation about the course is it focus on application specially on my major but I didn't see any part of the content as a result I lost my focus on the course and my grade is not good as compared to Cal 1 and 2. The second challenge is Dusty's flipped class model, I know class model has many benefits but it depends on the group; if you join group that gives a chance to everyone to try to solve the problem it will be good; and if you join a group member that have a great focus on what expect to do it is also very good, unless it is challenged. As a person I am working fulltime therefore, I didn't have enough time to do homework and study for quiz and exam.

To succeed in in Dusty's class you keep up the notes, watch the video lectures. Thanks to Dusty, there is a nice flatform called Slack that helps to communicate with the teacher including ask question and also helps to ask students different questions that challenges you. Specially to be very successful in Dusty's class communicate and ask a lot of questions. Try to do homework earlier because you get time to ask questions how to solve and understand the problem and also you should try do Dusty's past assessment.

Flipped class model is one of the best active learning teaching methodologies. One good thing about flipped class we can share knowledge and idea with each other, it gives a chance to solve the problem ourselves and if we get a challenge, we get help from Dusty. The second good things you can easily solve the problem because before the flipped class we watch the lecture videos and take notes in our home. The bad part of this class model is if the group member doesn't give a chance for one another to practice the problem and if the group member doesn't focus on what expected to do, we can't share idea as well as knowledge.

Overall, Dusty is a very nice instructor, he treats every student like a family therefore, to be very successful communicate and ask any challenge questions even if he give a nice advice on your persona life if you get a challenge.

"I never dreamed about success. I worked for it." Estee Lauder

Adjusting to class, watch videos, concepts!

(21)

Dear Future Dusty's Students,

My name is Navpreet Kaur. I am graduating from Highline this year with an associate degree. I am transferring to UW Tacoma to major in Mechanical Engineering.

The challenges that I faced this quarter were time management and balancing work and study at the same time. It was difficult to manage to study and work together, but I was able to manage somehow. The other challenge that I faced at the start of the quarter of understanding how this class works and how to do assignments and homework. But I overcame these challenges as the quarter went on.

The advice that I would like to give to be successful in this class is to do your homework regularly and watch the videos before coming to the class to understand the material. Practice the problems and try to understand the process instead of just finding the answer. Focus more on the concept and how we can connect that with other topics. If you don't understand the topic, just ask questions in class. To do well in assessments just try to study notes and understand how things relate with each other. Also, this class is a fast-paced class, try to complete notes regularly and use the time wisely.

The good part of the flipped class was that you can do the problems with other students. It is a good way to connect with other students and make new friends. I personally enjoyed working together with other students. It is a good way to hear the explanation for the questions from other students and understand the topic in a better way. It is a good opportunity for students to do group work and go over the problems together and learn more about the topics.

This class is different from other math classes, but the topics are simple and interesting to do once you understand the topic completely. Lastly, I just want to say stay motivated and do your best in this class. Just believe in yourself and bring the best out of you.

Sincerely,

Navpreet Kaur

LOL, needs English & Imagination, parent, proofs

(22)

Letter to a future student

Dear future truth seeker,

My name is Andrew Pritchett, and if you find an obese leprechaun looking person, that's probably me, Although I might also look kind of like beaker from the Muppets, if beaker put on say, 1000 lbs.

To truly understand linear algebra, is to understand the "math family". Algebra can be characterized as your grandpa math, ancient and still useful. Calculus is the busy dad that always performs and works really hard yet can't get that bum linear algebra to get a job. And linear algebra is of course, the hippy child that is misunderstood and does this "different". Linear algebra is not as math heavy as calculus, has some inherent qualities as algebra, yet isn't a "square" (you'll get that joke later, while Dusty is reading this and laughing so hard he's snorting). Calculus says x is equal to something, algebra does this in a simple way, but not linear algebra; linear algebra says "yes, but what if x wasn't x , what if it was a platypus with a lazy eye?".

To excel at linear algebra is to excel at English, math, and imagination all simultaneously. In other words, be good at understanding words and numbers, like we always have been, and you'll do mostly well. Also, remember that the "due date" isn't the "do date", use study groups, and of course most important is to enjoy yourself and other's company. No need to suffer in silence or be antisocial here. I did this course as a father of 2, meaning anyone can pretty much do this stuff and pass. Ultimately, be patient with yourself and don't waste time on needless self-doubt or anti-social behaviors.

The most difficult part of this class is proofs and more proofs. This is where that English stuff comes in, along with most other things that come in such as understanding how to use the math part.

Good luck with your endeavors, and may you educate the masses with your hippie math knowledge, without....." other" hippy behaviors.

Now about Dusty, that hippy teacher math guy, that wears silly hats on his noggin. Everyone has to have their trademark, and Dusty, the hippy math lord is no different. He isn't your garden variety hippy, if there is one but he has hippy parents, thus explaining his love of his brother-in-existence, linear algebra. Of course, Dusty takes showers so that makes him more bearable. He's also really friendly, dorky and entertaining. Feel free to not be a closet dweller, wallflower, or general anti-social critter. Be a butterfly, or bumble bee, or another being, or maybe just be a not-wallflower or mean creature IE a hornet.

Sincerely

Andrew

keep up w/ the notes.

(23)

Howdy future student

My name is Daniel, I am pursuing an engineering degree at the UW. For most of my life I've studied mathematics and have always enjoyed making and playing any and all types of games (video, board, tabletop, etc). I've also enjoyed learning about languages, I have learned German, Chinese, and a little Russian but nowhere near proficiency.

The main challenge I faced in this class was remembering to do the notes on time, every week you need to do the notes for that week as well as a slack assignment. I'd recommend doing the notes either during the videos, right before class, or shortly after.

To help get through I'd recommend you pay attention, do the notes before the relevant class. In addition, get used to gradescope early on.

This class is a "flipped class" which means that education is at home and "homework" is in class. The main pro is that you can go at your own pace, the main con is that you are expected to keep pace with the class.

This class has some complex parts but it's fairly fun to take, and once you get past all the dense language and focus on the concepts its fairly easy.

- Daniel

Don't miss class, easy if you do the work, flipped classes hard if lazy.

(24)

- 1) My name is Indiana Easter, I am a sophomore at Highline, and I'm majoring in Civil Engineering. I grew up all around the south side of Seattle, and moved probably half a dozen to a dozen times. I really enjoy all of math, linear algebra included, although I think it's the hardest math class I've taken.
- 2) The main challenge for me was showing up to class. I rarely showed up on Mondays, and even missing one day hampered my learning significantly. It meant I was always catching up to the content in class rather than being on top of it. I also struggled with another class of mine that was all online and had a very loose deadline format (everything was due at the end of the quarter). It has helped me realize what strategies are best for me to learn. In person lectures and problem solving are far and above the easiest way for me to understand new things, while online/ hybrid or flipped class formats are not necessarily as easy.
- 3) I have taken Dusty's classes twice, for Calculus 3 and for Linear Algebra. I'd say the number one thing is to put yourself in a position where Dusty does all the heavy lifting as far as teaching you, so to say. If you aren't showing up to class everyday, or not doing homework ahead of time, he has a harder time getting the concepts through to you and everyone else in his class. But if you are punctual and dedicated to his classes then understanding his teaching is incredibly easy, after all he is a very good teacher. This also goes for any other class and any other subject you learn at Highline or anywhere else.
- 4) The good parts of a flipped class structure are that it trains you to do day to day work at home, by watching lectures. I'm not a big homework guy and like to push things off until the last minute, but homework also isn't nearly as necessary as lecture in my opinion. By making lectures something you do at home, it trains you to tune into the class everyday outside of going to school. I will say that even though this is a benefit of the flipped class structure, I am still not entirely a fan. I would prefer to be lazy and do minimum work at home if at all possible, and sometimes the lectures are very long and somewhat boring. If they were more concise I wouldn't have any complaints.
- 5) I wish you all luck with his classes and math in general. The subjects are hard, and I think it's key to find enjoyment in your prowess or understanding of such topics. That's what's gotten me through STEM classes even when my grades were worse than I liked, or I was overwhelmed and overworked. Remember, you WON'T remember your day to day struggles and frustration in this class a year from now, or even a couple months from now, so power through and don't let the day to day drag you down. :)

Pace of class, studying for Assessments, attend class
ask questions (25)

Dear Future Linear Algebra Students,

My name is Alejandro Ramirez, an Electrical Engineering student and at the time of writing this, in my second to last quarter here Highline. I'm someone that isn't too fond of the maths, and Linear Algebra was no different. Despite my dislike of math, there are a few pieces of wisdom that I can pass on to future Linear Algebra students to help them through this class with more ease.

My first tip for those starting this class is to understand and get used to the structure of this course. The Highline Linear Algebra course is organized in an odd way, where instead of having 2-4 large exams throughout the course, we have an assessment each week. This was like nothing I've ever experienced before and so I had a hard time adjusting to this schedule. Normally I would try getting through the weekly content, then 1-2 weeks before the exams I would begin reviewing and studying for that exam. This format, however, forces you to study 2-3 days before each assessment. This caused some struggle for me because while we were supposed to study for the assessments, we were also learning new stuff as well. I had difficulty with time management, so I didn't know what content to focus on.

Another tip I have for students is to read the sections and watch the videos one to two days before class. Normally with other classes you are given a lecture when you come to class, which is what I initially expected. This was not the case, and instead we were given video lectures online that we were meant to watch before coming to class. Once in class, we were given a quick 10-minute example problem, and then split up into small groups to complete group work. This was hard to get used to and made me feel as though coming to class was a bit of a waste. However, there were many instances where if I came to class, it would have made learning the content much easier. Attempting to learn many of these concepts at home alone created misunderstandings and confusion. And with no one to ask, it made everything so much harder than it needed to be. Go to class and be prepared!

The last tip I have for students is to ask questions. One of the main parts of Linear Algebra that I struggled with was the proofs. Something that I believe would have aided me a lot is to simply ask the professor what we should expect to come up in the weekly assessments. This

would have made memorizing the proofs much easier and could have bumped up my grade by a lot. Don't be like me and suffer in silence and instead speak up and ask questions in class.

Those are pretty much the only tips I have for you future students. Linear Algebra can be a hard or easy class, depending on how you approach the course. I hope my words stick with you throughout your quarter exploring Linear Algebra. Remember: Get used to the class structure, learn the content before class and attend each class, and always ask for help when confused. I hope you all have a great quarter!

Sincerely,

Alejandro Ramirez.

R.S., proofs, vocab, videos vs. notes.

26

Hello everyone, my name is Andy Nguyen. I am a running start student going for an AS in general engineering here and then going over to UW to major in mechanical engineering. I work at the sharetea next to us so you may or may not have seen me though I'll probably be gone by the time you're reading this. Some things about myself is that I like my chair, playing video games, and going out with friends.

This quarter has been tough because one, linear algebra, and two, physics (as usual). Linear algebra is very different from any math class I've taken including geometry since it focuses a lot on the definitions and vocabulary more than the usual plug and chug. There are also the infamous proofs that you guys may or may not have heard in linear algebra. They are in each assessment and I've accepted defeat from each one. Its hard to know what the proofs are asking for if you don't know what its even saying.

The biggest advice I have is to know your linear algebra vocabulary whenever they pop up at first. If you try to leave it be and hope that it'll disappear next chapter, then uh oh. The vocabulary will stick throughout the whole course and will be used with other ones so you better make sure you know the vocabulary or you wont even know what the question is asking for. Another piece of advice I have is to just ask Dusty if you're confused on something. He'll clarify it pretty well using words we are familiar with.

The good parts of the flipped class is interacting with other students. When you talk to other students, whether you understand the topic or not, you get to see their point of view. If you don't know what youre doing but someone else does, you get to hear what they think. If you understand it but the other doesn't, you can explain it to them and see whether you really understand it or not. If everyone in the group doesn't understand, then at least you have someone to struggle with. Since you're constantly engaging with the problems or with others, time goes by pretty quick and it wouldn't have felt like you spent 50+ minutes in class doing math so that's a plus.

The not so good part of the flipped class is that you have to come in ready, having already learned the material before coming into class, whether it be watching the video or taking the notes. I wasn't a big fan of this as I rather not learn new material at my house since its hard to focus. Its also hard to balance other things like other classes and work, so having this flipped class made it a bit harder. So, I stopped watching the videos as they consumed too much time and just went off of my notes for understanding the material. I'm not saying this is the method though, watch the videos if you can as they are a lot more helpful than the notes.

Linear algebra isn't going to feel like any of the previous math classes you may have taken. It has a lot more conceptual stuff than the usual remember this formula and plug and chug. With that being said, don't get bummed out the first couple of weeks. It's going to be hard and quite frankly weird, but it'll get better as you get a better sense of how this class works, trust.

R.S. , Senioritis. , Notes, focus and Flipped class

27

My name is Jacob Weber. I am majoring in Mechanical Engineering. I am a running start student at Highline and this is my senior year of high school. I am taking Linear Algebra with Dusty. I faced a lot of challenges this quarter.

One of them being missing days of class. I had a trip with a club planned for the beginning of the quarter so I couldn't miss it. These few days of class I missed led to a good amount of catching up that I had to do. Another challenge was that all of my senior friends and I are about to graduate and go to universities, so I have been dealing with senioritis. I just want to be done with school especially because the summer is here and there are so many fun things to do. To combat these mistakes and challenges I would wish to go back and hopefully not miss the crucial classes in the beginning of the quarter, and ignore fun things with friends until I am done with my homework for the day/weekend. To succeed in Dusty's class I would say bring notes to class, meaning that you should have already looked at the content beforehand. Doing this ensures that you can have questions and ask Dusty for clarification. Also, practice good communication. If a situation or challenge ever arises and you feel like you might have a difficult time following through with a task in class, communicate with Dusty and try to let him know ahead of time. He is understanding and will most likely be flexible with you. Use group work the best you can. For me I found it hard to adapt to because the questions are weird, but use them to conceptually help you with the content.

The flipped classroom model is ok to me. I like the fact that I can attend either class during the day or even both. I also like that all the notes are completed online in case you need to catch up on them. The challenging parts were much more difficult for me. I go to class and am used to a lecture. I'm used to listening to the teacher teach and writing down good notes. In this case, you come to class and have to be the teacher yourself in a way because you and classmates are working together to solve the problem. The format of this class doesn't fit me too well. Personally, I prefer to learn the content in class and then go home and quiz myself with the homework or study what I learned. Watching the videos at home is tough because I have more distractions surrounding me. In the classroom I have to force myself to stay in my seat and learn the content. While at home I can just walk away and not do the work immediately. This is a problem I have with myself. If you are good at learning at home and managing your time then this classroom model will probably be great for you.

In the end I believe that everyone can pass this class, it just takes a lot of work and the ability to stay focused. Also being able to visualize the conceptual things will help a ton in this class! Good luck to all of you future students.

Hard to get going, adjusting to the
schedule, vocab, class easy.

Benhur Buenarte
Dusty Wilson
Math 220
5/21/23
5/30/23

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Letter to a Future Student

Hello reader! My name is Benhur (ben-har) Buenarte, and I am a student pursuing Electrical Engineering. I would like to be able to get my AS-T in Engineering and use that to transfer to University of Washington. I am leaning towards Tacoma, but I have looked into Seattle's even though it is competitive lol. If you meet me in person, it'll seem like I'm not the type to be interested in math or any sorts because of my mannerism, and just the way I act towards friends and stuff. But math is my favorite subject (or at least I'd choose that over any other subject), and I think math is the most important subject to be able to understand, because it is literally all around us. I like to play video games, watch anime, listen to music (recently I have been bopping to kpop, but I have dabbled in almost all genres except country), play instruments, do sports, and sleep. If any future reader would like to add me on Instagram or Discord, @benbuen.inc, belia#8639 (Yes I self-plugged)

The biggest challenge for me was getting my ass out of bed and actually attending class. I've felt extremely lazy and tired this quarter for absolutely no reason. It is still something I need to work on, that I have to keep pushing myself and put the effort into learning the material I paid for. Another challenge would be my horrible sleeping schedule. I'm sure you can relate to this, reader. I've had countless amount of times where I've stayed up working on something (or sometimes just staying up just because) then sleep horribly late, which then connects to me being lazy and tired. None of the reasons are because of the class material or that the class is extremely challenging. I guarantee you, if you like to go 'behind the scenes' on how algebra functions and all that good stuff, this class will be very interesting to you. I guess the way I managed to push through is literally just forcing myself go through the day and chugging energy drinks (not literally chugging but). Nothing that unusual though, I mean that's literally the average Engineering student lol.

With my experience in this class, though it wasn't that great and hope that you don't experience it as well, this class is fairly not heavy on class material. Understand that you do have these seminars, slack assignments, notes, weekly assessments, and online homework (saying all that didn't seem to help), but once you get into the routine on the first week, you'll be able to handle it swiftly. First week of class, Dusty will do these 'assignments' called "Day 1" "Day 2" "Day 3" and so on, which basically gets you accustomed to how the class will run. Another piece of advice is to be prepared to be thrown a bunch of letters and symbols and whatnot. Make sure you are not overwhelmed and to be able to understand literally the smallest amount of characters on the board, because that is legit the proof language. Dusty does a great job of keeping his students on track and makes sure no one is lost, because everything does become complex at some point.

Z

 Letter to a Future Student

Make sure to also be active in your group work. As someone who is somewhat socially inept, try to put that fear aside and don't be afraid to make silly approaches/answers in your work. Remember, everyone else is in the same position as you, trying to learn and understand Linear Algebra. Learning the concepts in this class by yourself will be a hassle and going back and forth with your groupmates would be the faster way to progress.

This leads me to the next point, the flipped class model. At first, I didn't really like it because it was a new thing to me, that I'm basically "teaching myself" to study the material; I'm using zoom lecture videos to make it feel like I'm in class with everyone but not really lol. But as the quarter went on, I got accustomed to it very quickly and helped me learn material in my own time. Though I would've liked to have taken advantage of this idea, again, I had it in myself to be lazy and not come to class, losing progress with others and slightly falling behind, so try your best to come to class lol.

As you finish reading this letter, it may seem like I'm being forced against my will writing this letter and everything is all nonsense (I am writing this at 3am on the day this is due, so I am forcing myself in a way), but I hope it does come to make sense that I am just like you, reader, the average student struggling and pushing through to make ends meet. From how this class is, at least how Dusty taught this class, I think this is one of the more easier math classes you'll have, solely because instead of memorizing equations and stuff, it's more on just "oh this logic makes sense", as simple as a step-by-step process. Given with how this class is, a student can literally take this class after Algebra II, because the Calculus concepts are not covered in this class. I honestly think the only reason why Calculus II is required is because of introducing Matrix Calculus, and also math maturity; one needs to be in a higher degree of thinking when it comes to Algebra.

This entire class is literally not a difficult class, I just made it difficult myself. Dusty made this class as chill as possible with engaging icebreakers and just being relatable to everyone. So don't even be scared to talk to him about anything, because guaranteed he has a comment/explanation on everything!

Good luck to you this quarter!

Benhur Buenarte

R.S. , don't be lazy , videos long,

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To whomever is reading this, my name is Andrew Rios, and I am in Dusty's Linear Algebra class. I am a running start student getting my general AA but will be going to UW in the fall majoring in CS hoping to get my bachelors and eventually my masters. This quarter feels like my toughest one yet and is making me a bit anxious for the transfer to UW. The workload is medium but with everything I have going on outside of school I struggle to find time for study. Dusty is a great teacher and I believe he teaches his class at the perfect level of difficulty. This may veer some students into being lazy, one thing I would advise you to do is to take studying seriously. Don't rely on what he teaches during class to be the only time you learn, make time outside of class as well. Take advantage of all the extra credit opportunities he offers, slack assignments, pointing out his mistakes during lecture, study groups. Before, Dusty's teachings were 90% in person, 10% other. He changed it now so that you come to class prepared with the days lecture already, providing previous lecture videos and notes to take and come to class with. This allowed students including myself to come to class prepared with questions and concerns. One thing I don't like about it though was how long the videos, it seemed like the further we got into the quarter, the longer the videos got, but this was mostly because of all the proofs he derived. Learning is not meant to be easy; some people learn faster than others and that's okay. I'm a student who does not fully understand concepts the same day it is learned. Ask questions, be curious, and always communicate with you instructor and other peers, it helps a lot to keep an open mind.

mental health, work w/others.

Hello to a future reader,

My name is John Anthony Mart Diego. I am taking a major in Computer Science. Going through this quarter I've faced personal issues, burnouts, and I don't even know if I had depression. As the finals come closer day by day, I realized that it became harder for me to focus. But one thing I do know that helped me get through this are: managing my time, and talking to my advisor or close friend. An advice that I'd give to you is that to take the notes and group works to your advantage, they will help you through the assessments. In a flipped class model, you can collaborate with your colleagues and it can help you understand how to solve a problem on a specific section. A con would be that sometimes, it might feel like it's not helping you but just keep on attending his classes.

When you feel like your mental is getting to the point where you know there's something wrong with you, reach out to your advisor or your friends. Don't bottle it all in, and don't inflict harm towards yourself.

Sincerely,

John

concepts vs. just solving.

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Minh Doan

introduce yourself, what you are majoring in, and a bit about your background.

Hi future linear algebra students, my name is Minh. Mechanical engineering is my major. I am Vietnamese and I don't like Pho.

What were some of the challenges you faced this quarter (personally or as a student) and how did you make it through?

Concept questions are ones of the challenges I faced this quarter. My style of doing math is to find "x" and "y" systematically. I had not really cared what those meant and why I solved for those until I took this class. I started encountering True/False questions and was asked to explain. I realized I didn't really know math as much as I thought I did. Actually, this is a good thing. Thanks to that I have changed my style of study. I have begun to pay more attention to context rather than just focus on solving the problems.

What advice do you have for being successful in a class taught by Dusty.

My advice is to watch lecture videos and do work-along before class for better understanding.

He is pretty cool and funny, so you don't need to hesitate to ask a question even if that question has been answered to another student.

And there are previous assessments on his website. Take a look before taking your assessment.

What are the good parts of the flipped class model? What made it challenging for you?

A good part of the flipped class model is that you have more practice and time to ask questions in class instead of lecture. And you get to work with others in groups, which is my challenge. As an introvert myself, working in a group everyday drains my sanity pretty badly. I am often left out in a group conversation for being unactive. The worst case is to form a group with two other members who already know each other. I am completely left out.

Please end your letter with something to encourage the reader.

Overall, linear algebra is not that hard and easy to understand if you are not slacking.

We were able to remove T/F questions and proofs out of our assessments at 2/3 of the quarter by constantly complaining after each assessment. If you have T/F and proofs and being overwhelmed by them I recommend doing the same thing to get rid of them as early as possible but be ready to deal with unexpected questions which replace those proofs and T/F questions.

Dusty is a dad joke generator, so math class is less boring with him.

R.S., multiple methods of solving, precise language
rewarding, overcoming failure.

(31)

Hey Future Linear algebra student!

My name is Rishik Chand and I'm a computer science major. At the time of writing this letter I'm a running start student enrolled at Federal Way High School in my junior year. I've honestly never really liked math, but I always have found it somewhat interesting and understood why I need to do it (like eating vegetables).

I think with this class specifically, I found it to be a pretty refreshing change of pace at first as I started it right in the middle of being in the calculus blender. I took this class alongside calculus 3 (probably a mistake but oh well), so because of that I found learning concepts in this class a little weird. Without getting overly spoiler heavy, this class sort of toys with concepts from 163 in a weird little way, but where it goes from there is really really different. You'll mess with a lot of concepts from 163, except way less crunchy and more mind bending and weird.

Since you're probably reading this in week 2 or 3, you've likely found this out on your own by now but the math itself is really the easiest part of this class. There is very little actual math in this class that will actually challenge you as it's almost entirely high school algebra concepts. This class really gets you in 2 places: finding the right tool for the job and being able to consider a looooooot of possibilities. The second of the two is likely one that you've ran across at this point, but it's how you'll be asked to do something, and then asked if it works 100% of the time and if not, when it doesn't work. This is especially true with those tricky true false questions that are always worded in funny ways to trap you.

That first point though is one that you may have not had to deal with yet, but it's a really tough one. There honestly isn't that many tools in this class that you'll get (basically every single unit is about rref in some way), but it's what you do with that result that really gets you to where you need to be. However, that connection from the rrefing to what you're actually trying to do is what I've found to be the most difficult part. I highly recommend not trying to memorize steps for different types of questions, and instead actually get what you're doing and what information you're getting out of each problem. It will save you tons of stress in my opinion.

As far as how to manage Dusty as a professor, honestly he's pretty fun overall you just gotta get used to his style. He has an interesting sense of humor when it comes to making questions, so be ready for some interesting little trick questions that will lead you to do way way way too much work.

Flipped classes aren't my favorite, but I didn't really mind this one. The way I sort of did things was I used the workalong/video to get exposed to the topic and familiar with the terms, the in class groupwork as a way to help yourself conceptually understand what's going on, and then the MyLab homework as a way to actually get test ready on the crunchy stuff. Plus honestly even if you want lectures, I feel like they'd be boring as all hell and barely help you get it.

Practice is really what counts in this class.

I know overall I've made this class sound really tough and unnecessarily difficult with the tricks, but honestly once you get the hang of things it's really one of the most rewarding classes I have ever taken. Especially coming from the calculus blender, it really does feel rewarding learning this new interesting way of thinking that was difficult to get the hang of. It might feel really hard at some points, but don't lose motivation and keep practicing and you'll get through it :). I got my lowest grade I've ever gotten on a test at highline in this class, but by just putting in the work and changing my approaches to studying, I was able to turn it around. Good luck this quarter :)

Stay ahead, do HW right away, boring videos

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Hello students! I am Nathan Eng. I am majoring in Mechanical Engineering at the University of Washington Seattle.

One major challenge I faced this quarter was the course load this quarter. Both my Engineering and Physics classes got significantly harder than all other previous quarters in terms of workload. This along with having to do proof gave me a really rough start. I combated this by changing my work schedule. I do all my work like a week ahead giving me time to do the difficult assignments. I think doing the work early is underrated because if you want to be lazy one day you can.

The best advice I can give to being successful in Dusty class is completing the homework right after reviewing materials. As well as trying to see the connection to previous math classes. This made it easier for me to understand. The good part of this flipped class model is that it's very easy to take notes. What made it challenging is the videos are so boring that I couldn't pay attention to them unlike in class lectures that I ended up just not watching them and trying to understand the problems myself. I found that to be a better use of my time, but your experience will probably be different than mine.

Just remember if you ever feel like you are going to fail the minimum grade for this class is 70%.

Dear Future Students,

My name is Arafa, and I am majoring in computer science with the goal of becoming a software engineer. I came to America in 2015 as a refugee and immigrant, life has always been quite challenging for me. When I first arrived, I had to take ESL classes to improve my English skills and effectively communicate with others. It was during this time that I developed an interest in computer science, despite initially having limited knowledge about how computers actually worked.

The journey of understanding computer programming proved to be difficult due to both the language barrier and the complex nature of the subject. However, I refused to give up. I sought assistance from the Writing/Tutoring Center, where I connected with many helpful individuals who guided me through the areas I struggled with. This quarter was particularly challenging as I had to work two jobs, totaling 14 hours a day, with only 5 hours of sleep. This demanding schedule made it hard to focus in class.

The responsibility of taking care of my parents and my nieces and balancing all these responsibilities left me with very little time to study or practice what I was learning. Thankfully, my peers provided invaluable support, and I took advantage of the opportunities to ask questions during the flipped class sessions. The interactive nature of the class, where students actively engaged with each other and wrote equations on the board, was refreshing and beneficial for my learning.

Looking back, I would like to offer some advice for success in a class taught by Dusty. Firstly, I must say that Dusty is an approachable and easy person to talk to, so don't hesitate to reach out for assistance or clarification whenever needed. However, it is important to note that Dusty's grading can be strict, and even small mistakes can have a significant impact on your overall assessment. Pay close attention to detail and take extra care to avoid those little errors that may cost you valuable points.

During assessments, it is crucial not to panic. I used to get overwhelmed easily, but I learned the importance of taking deep breaths and approaching assessments calmly. Try not to view them as tests, but rather as opportunities to showcase your understanding. Practicing at home, discussing concepts with fellow students, attending classes regularly, and participating in group study sessions will greatly enhance your understanding and performance.

The flipped class model has its advantages, such as the interactive learning environment and the opportunity for collaborative problem-solving. However, it can also present challenges, especially if you have limited time for self-study. I encourage you to make the most of the class structure and engage actively in discussions, as it can greatly enhance your understanding.

In closing, I want to encourage you, future students, to embrace your journey in this class and stay determined. Remember, challenges will arise, but with perseverance, support from your peers, and effective time management, you can overcome them. Believe in yourself, ask for help when needed, and never underestimate the power of practice. You have the potential to excel, and I wish you all the best in your academic endeavors.

Sincerely,
Arafa Mohamed.