### MATH 2B: Applied Linear Algebra

Class 9: Monday 5/3/2021 (Week 5) In-Class Meeting: 1:30PM – 3:45PM

# **ANNOUNCEMENTS**

- 1. No in-class meeting for Math 2B on Wednesday 5/5/2021. Jeff has a previously-scheduled family event planned for that day. We will resume normal in-class meetings on Monday 5/10/2021. Please do your best to make progress in this class and update your learning portfolios.
- 2. Updates on Lab Kits for students who need p-blocks: below is our draft lift of students who indicated that they need to visit the Foothill library to get working lab equipment. Please confirm that this list is still valid:

Missing Pieces List: add your name here if you have a kit but it's missing some pieces

- Xuechi Zhao: missing all p-blocks
- Jiaxin Chen: missing all p-blocks (green circuits)
- Smarpan (Summer) Monga: missing p-blocks/green circuits
- Linda Vuong: missing all p-blocks
- Huston Scharnagl: Missing all p-blocks
- Kojiro Asano: Missing all green circuits
- Muzaffar Sharapov: Missing p-blocks
- Alex Bokovikova: Missing all p-blocks

Haven't yet picked up my kit and need access to one

- Adrian Barajas
- Cary Lefteroff
- Hao Feng
- Zachary McCormick
- 3. To pick up (or exchange) your lab kits, please see the details below:

For detailed instructions, see this document. In order to pick up the Electronics Learning Lab kits, you will visit the following location:

Foothill Sunnyvale Center 1070 Innovation Way, Sunnyvale, CA 94089

We have a few options available to you, including the following

Option 4: Tuesday May 4, 2021 from 10am – 2pm

Option 5: Mon 5/10/21 from 10am – 2pm

Option 6: Tues 5/11/21 from 10am - 2pm

Option 7: Wed 5/12/21 from 10am - 2pm

Please do check the <u>Foothill Library Website</u> before you plan to arrive so that you can be aware of all updates to pick-up and drop off logistics. All items are on quarter-long check-out basis and DO NOT NEED TO BE RESERVED. They are on first-come, first-served basis.

# **IN-CLASS PLAN:**

# IN-CLASS JOURNAL ENTRY PROMPT:

This class is organized on a subversive set of assumptions. In particular, I am working to create a really different set of working assumptions than what you experience in your other classes. Most classes are based on a control-based theory of motivation. In that structure, your teachers control almost every aspect of the class including the class calendar, the pace at which you study, the content you get tested on, the grade you receive at the end of the course, and your progress toward your degree. In my class, I challenge almost every one of those policies. You have control over the pace at which you study, the content that you focus on, and the way that you study. You also have a lot of control over your final grade, though that aspect of the course is still shared between the two of us.

One challenge that this poses is that you now share a huge responsibility for creating self-discipline and self-control to make progress in this class. Specifically, I notice that more than 33% of the class is falling behind on content because of tests in other classes. In other words, because your other class has a punitive grading structure with controlled pacing and this class does not, many students are making decisions to prioritize other work and let this class take a back seat. Today's journal entry is on that topic.

With that in mind, where are you in your progress:

- behind your desired progress?
- at your desired progress?
- ahead of your desired progress?

If you are at or ahead of your desired schedule, what have you been doing to help stay on track? In other words, what habits or techniques have you been using to make sure to keep on schedule independent of other demands on your time?

If you are behind your desired schedule, please come up with some goals that you want to meet for your progress between now and next Monday 5/10/2021. Also, why are these goals worth it to you? In other words, why should you finish this work rather than putting this on the back burner for tests or other punitive grading structures. Think back to your previous journal entries on motivation, goals, and the people in your life that you study for as you craft this narrative.

# **LEARNER RESPONSES:**

### Jeff Anderson:

I don't think I'm behind on my work, necessarily. I definitely feel that my students deserve way more attention than I can give under the current funding structures in education. This quarter, I am setting limits on the amount that I work each week. Specifically, I refuse to work more than 45 hours each week. That is not fair to my students, since each of you deserves at least 2 hours of my week, every week. Last quarter I worked 60 - 80 hour weeks and got 3 - 5 hours of sleep every night. I can't do that anymore. So, I'm setting my limits and disciplining myself to work less. I worry about my students and want to make sure you have the support you deserve. I make those rules for my wife and my kids. They deserve to have me fully present at home and I struggle hard to find the right balance. My real question is: how can we change the funding structure in education so that my full-time job allows me to work with no more than 20 students each quarter. That is a multiple decade-long project that I'm working on in other spaces in my career...

### Room 1: The 4s

Sean: I would say I'm on track with my desired schedule, although I usually like to be a little ahead because there's always something that comes up and I like to have some breathing room so I never fall behind. I'm a natural procrastinator, so I ignore any given deadlines and I set my own to fit my schedule better. If I create my own deadlines and break down bigger projects, I find I am able to spread my work out more instead of cramming everything last minute. My schedule this quarter isn't the busiest I've been, although I expect that to change as Foothill returns to campus and training starts back up. That being said, I have a good amount of free time so I think there's definitely more I can be dedicating to the tasks I have. I stay focused while working with the pomodoro technique, which uses 25 minute work sessions with 5 minute breaks in between to keep me productive. Every four sessions, I take a longer break.

Wenying: I was pretty much on the desired schedule, and I was ahead of my schedule by going to the tutoring center. I think it is really important that we have a environment of studying, and since we are during the period of covid, I would prefer talking to someone about the materials. But I didn't do anything the past two weeks, cause the exams and I got sick over the Covid vaccine.

#### Theo:

I am currently slightly behind schedule, but that is because I know I can catch up thanks to this week only having one class session, so with that in mind, maybe I am actually right where I need to be. I am curious to see what people who are ahead have to say, as I personally find myself procrastinating things until they need to be done more often than not, and making myself stay on-schedule without grading deadlines for this class has been a bit difficult. However making goals and arbitrary deadlines that I set for myself have been a great way to circumvent that. Another motivator for me is that when my scheduled meeting comes up, I want to have enough work done to talk to Jeff and get something out of that meeting, or else it feels like a waste of both his time and mine.

### Taku:

I am now a little bit behind the desired schedule mainly because of the midterms in the last week. As you might have expected, I prioritized other subjects to prepare for these exams. The goal by the next Monday is to catch up to the schedule and work on miscellaneous topics covered in the other week because I haven't yet created a solid portfolio on some topics since I was looking for a better strategy that fits me back then.

## Room 2: The Transfers

### Radha:

I am currently a little behind my schedule. However, I think I am less behind than I was originally. I think that my group members helped me start getting on track. I've been having trouble staying motivated in a lot of my classes this quarter, but knowing that my group members are working with me at the same content has been helping me feel a little more motivated. Also, another thing that helped me was starting to work on my portfolio notes starting from the most recent lesson. I felt like I had to do the lessons in order, however, knowing I had to start from the beginning made me feel overwhelmed. However, Jeff and my group members suggested that I start from the latest lessons and work my way back as I get time, and once I started doing that, I feel like the work for this class has been more manageable.

I still think I could be doing a lot better in managing my work for this class, though. Some goals I want to accomplish before the next class are to finish my portfolio notes from lesson 8-10, and also work out some examples on my notes. I hope to get started on some of the earlier lesson notes, but I'm giving this goal a little less priority.

# Zachary:

I am currently at the desired progress that I had decided on at the beginning of the quarter. Most of my progress has been designed around a routine that I stick to in order to manage my schedule of classes and be able to study the optimal amount, as well as read, note take, and practice the material to the best of my ability. Sticking to a disciplined schedule has been beneficial because I know the progress that I plan to complete for each day in the specified class. Being able to structure my own schedule in order to keep up with the material for each class has helped my education through the time I have been in community college over the last few years. On top of this, the material in this class is learned without a stressful behavior. In other words, not having to plan stress-oriented "cramming" for tests has allowed me to construct a schedule to complete the weekly

objectives of this course at a rate that I am comfortable with, and I can spend time learning the material at a more independent and less stressed plan. This is why not allowing myself to put the material for this course on the back burner is almost effortless. I know the objectives that are required to be completed weekly, and I know that I can complete them without having to design a structure around what my teacher thinks is important about the material. Jeff has allowed me to find my own personal importance in the material, and push myself to **WANT** to learn, rather than finding specific anecdotes in the lectures to copy the presentation and memorize how to find a solution for a test. The thirst for scoring high on an exam sometimes pushes me to learn material for a course with short-term memory, whereas in this class, I can learn the material for myself rather than a grade.

#### Huston:

I am currently a little behind schedule. I am tailing by one lesson due to some unforeseen events that took place over the weekend. I just need to work harder to ensure that I am able to keep up with my group. They are very understanding and helpful when I am trying to catch up or don't understand something that would set me behind. I have a tough time with staying on a schedule in general as well as finding a schedule because my personal schedule is changing. I am finding more time to do my work and I am working to slot all of my class work into the new schedules

# Room 3: AlgeBROS

# Smarpan (Summer) Monga:

I am behind on my desired progress. I wanted to get ahead on the lessons but I have stayed in tune with Jeff's schedule. I have also fallen a few lessons behind but I will be taking this week to catch up and get to my desired progress by next Monday. It can be hard at times because I take a lot of time with each lesson and make sure I retain all the information to the best of my ability. I want to stay on track because I want to get the most I can out of this class and also it is less stressful knowing that I am on track with my desired progress. My main goal before next Monday is to complete the lessons until lesson 10 and possibly begin lesson 10 as well so I can have a head start on that lesson. Also, I want to be able to reflect on my work with Jeff before our next meeting.

@Summer: you are doing great work and I agree. The level that you are learning at takes a lot of time. But I see you doing deep work and I think it will pay off in this class (and in the future if you decide to use linear algebra moving forward). Keep it up: Slow and Steady! -Jeff @Jeff: Thank you! I really appreciate your comment and encouragement. I am loving this type of learning because I can actually focus on the content rather than cramming it in for tests and other deadlines.

### Alex:

I am a little behind schedule since I have been studying for my Physics test tomorrow. My goal for this week is to finish a few lessons this week, especially since we do not have class on Wednesday. These goals are important to me because I want to stay on track in class.

#### Jiaxin:

I am behind on my desired schedule. By next monday, I planned to finish Lesson 9 with all for the second draft. Since I am having two drafts for each note, it did take more time than I imagine to finish a lesson. I think it is worth it to get to lesson 9 because I won't have shallow learning but still catching up the classes. I know there is certain content that we need to finish for every class but the deadline always gets rid of our procrastination. I want to try my best to catch up with the content but I don't want to have shallow learning so I guess the goal I set for this week is suitable for my progress.

### Linda:

I am a bit behind my desired schedule as the last few weeks' lectures required a lot more attention and understanding. I've also been feeling very under the weather recently as I'm worrying about transfer acceptances as well as focusing on my performance regarding other classes which made me burn out. I hope to get back on my feet this weekend by managing my time better and giving myself regulated breaks rather than finishing things in one go. I hope to give myself more sympathy as one simply can't finish 5 different assignments in one day (although I kinda wish I can) and reassure myself that with efficient study habits will come great learning and results. I should finish this work and treat it as I treat my other classes. Methods of learning for the classes differ, but nonetheless it is learning. If I slack off in this class now, it'll come back to bite me for sure.

# Room 4: We gonna get A's

# Cary:

I am behind on my schedule, however I am not too concerned so far. My goal is just to push through and finish what I can until Monday, and hopefully catch up to the schedule. I think if I just dedicate some time outside of class to work on the lessons then I should be able to meet this goal and get back on track. I'm not too concerned right now though, as I don't feel that I am too far behind, I just want to catch up and do not want to continue falling behind. If I continue to fall behind, then I will become concerned, but right now I don't feel that I have dug myself in a hole that I can't get out of.

# Megan Andrews:

I am slightly behind on my desired schedule. This past week and this current week are anomalies in terms of the amount of stuff I have going on outside of school. I think that I might be able to get back on track this weekend. By next Monday I hope to get to lesson 12-13. Hopefully? My goal is to really find a balance between doing work for my different classes and giving myself time to relax. These goals are worth it because I would like to get the change to learn or at least start learning some of the more advanced material.

### Xuechi Zhao:

I've been slightly behind the schedule for the past 2 weeks and am now catching up. I believe I will be ahead of schedule by next week. I've spent spending more time on other subjects than as expected, and fortunately I've got things sorted out by now. My goal now is to have a balanced workload of all things that demand my time and attention, and I am well on track of acheiving it.

#### Owen:

Right now I am actually at my desired progress. To help me stay on track I would make to do's from Monday to Friday each week. Typically I would finish 2 tasks which will be different each time. For example, first can be on writing a rough notes and the second would be to rewrite them in an organized manner. I believe this helps solidify what I learn through watching the video. Other times it can be adding new informations on my already organized notes while I do the practice problems. When I do the practice problems there will be gaps in my knowledge that I have to fill out and when this happen I think it is a good idea to read more on the topic and also add necessary informations into the organized note. If I find myself to be behind my desired schedule, sometimes I would catch up by spending a whole day just doing math tasks. Things I do to do task more efficiently is by having minimum distraction, usually wearing a headphone and blasting music. I don't really have a designated studying spot (I actually study in the living room, since that's the only place with a table in my house) and as a result I get distracted when my mom or sister suddenly come up to me and talk for hours. So when I am wearing a headphone it is a sign for them that I am studying and not up for a chat.

# Room 5: The Group

### Ivana:

I am at my desired schedule, and I believe it is due to a combination of working on the lecture notes a little everyday and sticking to a disciplined schedule. I think that following a schedule by spacing out the work given (i.e. get a few videos done in a day), helped me stay on schedule. Likewise, I believe that staying on topic within my group has helped me thrive in class as well. I think collaborating with each other and striving to fulfill the respective lecture notes we are on has assisted me in trying my best to finish my notes on time.

### Jennifer:

I am somewhat where I want to be in regards to this class. I feel like something I need to do more is deep learning, but finding a pace that allows me to deep learn and meet deadlines has been a challenge for me. I keep going because I had lacking off and trying to rush through things. Instead I would like to be focused and make sure I am at a steady pace instead of just being behind. I really like being able to slowly work though things instead of trying to rush through things. That actually makes me feel too rushed and I wont learn much that way. I also do have some surveys I need to do, so I am hoping to finish these by Monday and work together with my team to be on the same page.

#### Hao:

I am of the opinion that I am up to date on the schedule that our group has set, though we could all use these extra few days to progress a little further. I am aware that I still have some surveys that I have not yet finished, and that I should get on those as soon as possible. What has kept me on track with regards to the content of the course and the expectations that we set as a group is dividing the lectures over the course of several days as opposed to trying to watch all of it in one sitting. Basically I set some time aside each day for certain tasks or responsibilities, and I follow that to the best of my abilities. This approach helps me greatly because it makes it clear to me what I need to do and when I need to do it, so that all the work doesn't get piled up onto the last day.

#### Rachel:

As our group is slow paced, my group members and I often communicate to discuss what lesson we need to finish by this week to stay on schedule. I am on schedule but there were a few times where I would fall behind because it has been quite challenging to stay motivated these past few weeks and in those times I would not force myself to study because I wanted to make sure I am practicing deep learning as I am learning the lectures. On days that I do feel motivated to get things done, I would write down tasks that I need to complete by the end of the day. That has helped me a lot in completing my work.

# Room 6: Wed Group

# Angel:

I'd say I am a little behind one where I desired to be in the beginning of the class. Some goals I want to set for this upcoming week is to prioritize my portfolio over my other classes. I think it is worth it because I am on pace with the other classes but not so much with what I expected of myself in this class. I plan to do at least 2 lessons for the portfolio

### Taishi:

#### Abdullah:

I'm behind my desired schedule, Ill definitly use this week to try my best to reach to atleast lesson 9. This goal is important to me because linear Algebra is something I really want to learn, and learning this class will help me in my future plans. As I said before I'm not only learning for myslef, but I'm learning to benefit my community and to use this knowledge to do my best to help the people I care about.

#### Jade:

I am currently behind my progress because I just jumped into a new life, and I'm getting used to it slowly. I usually manage my time well, and I think I'll catch up with space next week.

# Room 7: Hainanese Chicken Rice

Anderson Lam: I am at my desired progress and on my schedule and doing well so far. I just try to push myself beyond my limit and follow the lecture videos. I want to finish lecture 15 by next monday and lecture 18 by the end of next week because I wanna finish this class and gained some great knowledge These goal are worth it for me because I know what I am doing and learning. I tell myself to finish what lecture everyday and making sure I keep track on it

Xuhan Chen: I am at my desired schedule so far. In order to maintain my track, I will always force to set aside at least two days to watch the video, review and do the exam. At the same time, raise questions and discuss with the group members. However, as I took 2 math courses in this quarter. Therefore, some surveys that I did not finish on time. But I will make up them in this week.

QiJun Liang: I have finished my work every week on time. To keep my schedule going, I set aside time each week to read videos and organize notes. I use time planning and note-taking to help with my planning.

### Room 8:

# Kojiro Asano:

I am 2 lessons behind . I have to catch up with my desired schedule in a week. To achieve my goal, I have to finish those lessons in a week.

# Room 9: Creative group

#### Erik Bach:

I'm slightly behind my desired schedule. However, I still feel pretty good about my ability to catch up to where I want to be. This week, I'd like to do at least one lesson a day. Instead of grinding out 3 lessons on the day of class, I really want to just distribute it evenly throughout the week. These goals are important to me because I really want to learn the content of the class and I also really want to test the extent of my discipline and motivation. This class gives me an opportunity to work on my study skills, I can't waste this chance.

#### Kelvin Tsui

If you are at or ahead of your desired schedule, what have you been doing to help stay on track? In other words, what habits or techniques have you been using to make sure to keep on schedule independent of other demands on your time?

I am slightly behind of the class schedule but have been on track with my current schedule. I goal to stay on track is to plan and list out exactly what I am going to study each day of the week such that there will be no instance of last minute realization that I have to complete a lot of work.

If you are behind your desired schedule, please come up with some goals that you want to meet for your progress between now and next Monday 5/10/2021. Also, why are these goals worth it to you? In other words, why should you finish this work rather than putting this on the back burner for tests or other punitive grading structures. Think back to your previous journal entries on motivation, goals, and the people in your life that you study for as you craft this narrative.

As I have mentioned above, I will write out my schedule and plan to complete so and so chapter per day such that I will be able to complete my desired chapters by the following week while most importantly, being able to do my work as a pace that allows me to have deep learning.

### Muzaffar Sharapov

To achieve my goals, I have to make sure to follow my good habits. Right after waking up, I start working on lessons, but do not check my phone. I need to exercise(hike, lift weights), meditate at night time(so I could calm my mind and go to bed early). And if something bothers me, I should face it and write down what bothers me instead of distracting myself with my cell phone. Sundays, I should do a dopamine detox(do not use a smartphone or tv, do not stimulate my brain so I could increase my brain sensitivity to dopamine).

Also, why are these goals worth it to you? In other words, why should you finish this work rather than putting this on the back burner for tests or other punitive grading structures? Think back to your previous journal entries on motivation, goals, and the people in your life that you study for as you craft this narrative.

I should finish lessons as part of my goal. This class is essential for my life mission. This class will help me create new brain wrinkles, neuropathy in my brain if I put effort into it. It will help me to understand better cryptography and other computer subjects.