# What's Going To Happen Now: Adv. Precalculus

This document is going to be an addendum to our course expectations.

## Greetings:

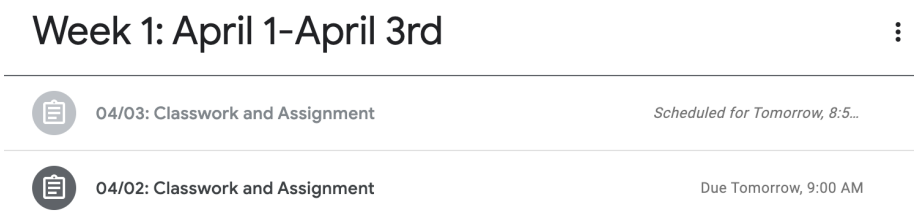
Howdy, friends! Wow, things are going to be different as we transition to this world online. I want to reassure you that I'm here for you as we make this transition, and *we're going to be fine*. I know people are currently experiencing a lot of uncertainty about what remote learning is going to look and feel like. I feel that too. In this document, I hope to share with you a draft of how things are going to look when we start our live classes -- so at least for our class, you'll have a sense of what to expect. *The number one thing that I want you to know is that I'll take all our experiences into account as we move forward, so things will change based on how this all unfolds so I can make things better.* I will be very clear about any changes that I make.

As I determine what we'll be covering as we move forward, I'm not going to try to cram everything we were supposed to do into our time together. We're going to cover the most essential content in depth, and go at a reasonable pace. We only have 30 minute classes, after all, and everyone has different home/personal circumstances.

Most importantly, this is going to be a big change for all of us. Some of us will find this transition works really well, while others will find it more challenging. If you do find this transition to be hard for you, the number one thing I want you to do is to reach out to me! I hope that in these times, you'll have grace for me. I promise I will have grace for you as we navigate this brave new world.

## Organization for the Class:

*Central Hub for Communication*: We'll still be using Google Classroom as our primary communication center. Under the "classwork" tab, I'm organizing our materials for each day.




As usual, for nightly work, you might be asked to do work on paper and camscan it, you might be asked to do work on delta math, and you might be asked to do work on student.desmos.com. We will likely be doing more work on desmos than before.

*Class Meetings*: As of now, I plan on holding most of our classes live using zoom. For now, if our class meets on a particular day, you should be on zoom for our class. If you go to your school's google calendar, you will see our classes appear on your calendar. If you click on our class, you'll get taken to a zoom link! It's that easy!

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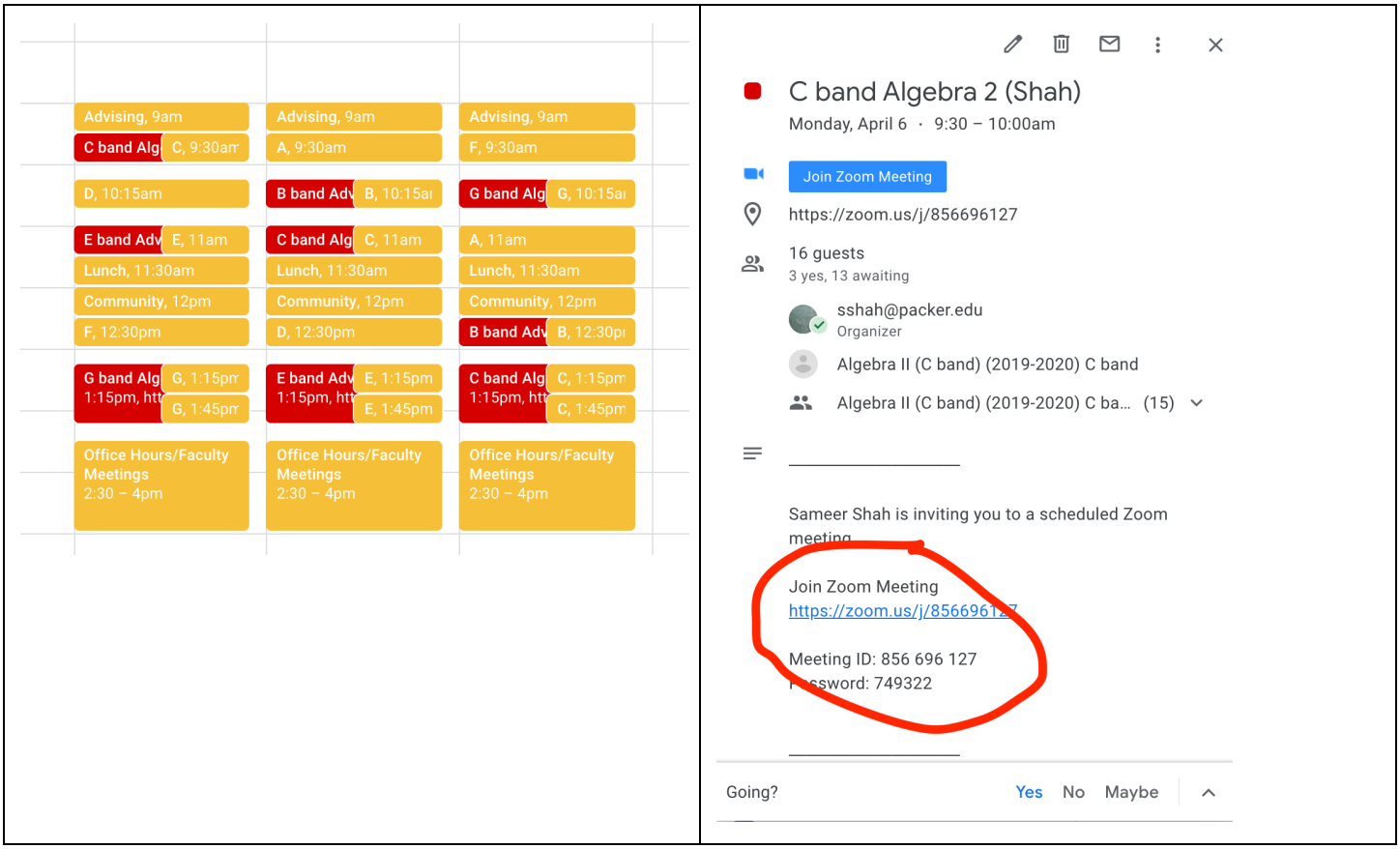
|---|---|
| A screenshot of my google calendar (yours should look similar, but maybe not as fancy) | Where you get the link for our zoom session (once you click on our class meeting) |




## What Class Will Look Like:

There are some core values that I strongly believe in as a teacher, which I hope will extend to our work together virtually. These include:

- having students be the mathematicians, discovering the main ideas
- making sure everyone is supporting everyone else -- not just me supporting y'all, but y'all also supporting each other -- as we make sense of the material
- students understanding conceptually "why" things work rather than simply how to do them
- having a focused but relaxed atmosphere

For this to happen, our live class may take different forms based on what we're learning:

- we may all be together on a zoom meeting, and I'm talking with y'all about some ideas, and we're sharing thoughts and questions and ideas together on a virtual whiteboard -- which we will save and everyone will have access to it
- y'all may be in your groups in zoom "breakout rooms" -- where you'll work together on a few problems to discuss (using a virtual whiteboard, or all working together on a desmos activity) before we come back together for a whole class discussion
- I may have you keep two windows open on your laptop, each taking half the screen. One half will be of our zoom discussion, and one will be a desmos activity. We'll toggle between y'all working on parts of the desmos activity, and us discussing parts of the activity as a class

In this environment, I can't walk around and listen to your groups as attentively or look at what you're writing to give more immediate feedback. *What this means is that you all are going to have to be very proactive about*

*your own learning.* That means you are going to have to be in charge of really figuring out “what you understand” versus “what you don’t understand.”

As we work online, you’ll get feedback in different ways. As you do delta math assignments, you’ll be able to see what you’re getting right and wrong -- and even see solutions when you get something wrong to guide you. In class, I’ll be asking questions to check your understanding. On desmos, teachers now have a way to give you feedback (in addition to the desmos activity itself), so I’ll be doing that. If you turn in a PDF of written work on google classroom, I may leave you a comment. I also plan to end each week with you filling out a form giving me feedback, but also having you think about your own understanding of what we’ve done.

*You shouldn’t ignore all these forms of feedback*. I’ll be looking at your work and talking with you to understand what you may know and not know, but I’ll be giving you feedback so you can be proactive about doing something with it and targeting where you want to improve your understanding. The feedback is for you to take action on!

## Additional Support & Communication with Mr. Shah

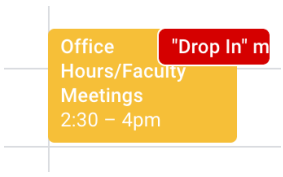
We all need to find ways to adapt to this new virtual world, and one important way I’m doing that is by limiting my own screentime.

*Extra help:* If you are having trouble with a concept or something in the nightly work, you should:

1) Review your notes from class (and any other resources I might have provided)
2) Talk to one or two other students from class. Many of you already do this informally, but this is now a formal requirement. It’s important that in this new online world, y’all still continue to collaborate and work with each other.
3) If you can’t resolve your issue, then I would love for you to set up a time to meet with me during office hours so we can talk through your issue via zoom (see below how to do that). *Please do not email me with questions about the nightly work. I’ve found it’s much easier and takes less time if we can talk through the ideas together. Explaining math over email is not as effective.*

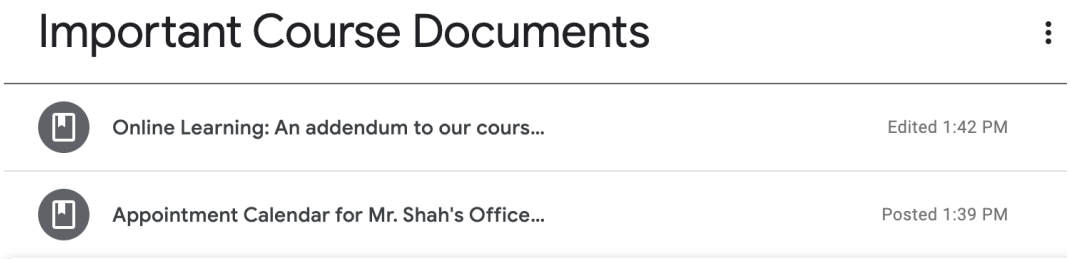
If you and a couple classmates all want to zoom together with me to go over an idea, I’d love that! Just one of you should sign up for the zoom meeting during office hours, and send the zoom url and password to others who want to join. Or you can all join in a “drop in meeting” which I have for the first 20 minutes of each set of office hours.

*Drop In Meetings*: If you have a quick question, I’m going to have the first 20 minutes of office hours be “drop in.” You and any classmates can just join in to a collective zoom meeting -- for anything short to talk about! I’ll be at my computer from 2:30-2:50pm on Days 2, 4, 6, and 7, and you can simply join the meeting. To do this, go to your calendar and you should see my “drop in" meeting.



*Office hours:* I have office hours from 2:30-4pm on Days 2, 4, 6 and 7. You simply have to go to my appointment page and click the time and day you want to meet. (The first 20 minutes will be "drop in" meetings. See above on how to drop in!) Just know that at the beginning of our individual meeting, if you're asking about content, I am going to ask who else you talked to or worked with to help you resolve your question first. *Please set up your appointments before 2:30pm, because I may not see you signed up if you sign up afterwards.*

So you don't have to bookmark this link, I've also included the appointment page on our google classroom, under the "classwork" tab, at the top of the page. You also have access to this document you're reading right now, posted there.




*Email*: As I said, I'm trying to keep my screentime reasonable. Please set up times for us to talk during office hours if you need help with any of the course material. However, I encourage you to email me if you have a logistical question about something going on (not content related), you want to let me know if something is going on for you, you want to letting me know of any technological or internet issues you might have, or just want to share something cool with me.

## Assessments and Grading

Our assessments are going to look very similar to what you've experienced in the past. You'll be given a series of questions (either on a google doc, or on desmos, or both), and you'll respond to them. Just like on all the assessments you've taken this year, you'll have to show your work and make your thinking visible. You will likely have to take clear pictures of your writing and include them in your google doc or by uploading them to the desmos activity (closer to the time, I will explain how this works).

Like always, you'll be asked to work on the assessment in one sitting, and you will be given a set amount of time to work on the assessment. You needn't worry too much about time: the amount of time you will be allowed to work on an assessment will be generous. (If you have extended time, like always, you'll be able to work for a longer period of time.) Of course, you're expected to work honorably, as you've done all year. We'll talk a little bit more about this as we get closer to an assessment.

Before an assessment, I will provide you with a topic list. It will look something like this:

- Topic 1: "Students can articulate where lines of symmetry appear in polar graphs and why."
- Topic 2: "Students can sketch basic polar graphs given an equation."
- Topic 3: "Students can explain features of basic polar graphs by relying on what the rectangular form of the equations look like (e.g. y=cos(x)+0.3 and r=cos(theta)+0.3"

You can use these topic lists to focus your preparation for the assessments.

After you take the assessment, I am going to mark it up as I normally would (but digitally). I will have in front of me the topic list that I hope you have mastered. I will look through the assessment, and based on your work, I will use this rubric to give you a score for each topic on the topic list.

**Score of 5.** Your work shows that you have totally mastered the skill or concept involved, meaning that you have demonstrated a full understanding of the concepts involved, have clearly shown all steps of your reasoning, have used notation correctly, have organized your work neatly and logically on the page according to the standards expected by mathematicians around the world, have written exemplary and clear prose, and have made no algebraic errors. *(A 4.5 will be awarded if there is a very small error in computation.)*

**Score of 4.** Your work shows that you have a good grasp of the skill or concept involved, meaning that you have demonstrated a strong understanding of the concepts involved, however you made some minor error OR you failed to present your work in a neat and organized manner according to the standards expected by mathematicians around the world. A minor error would be something like (i) not showing all steps of your reasoning, (ii) not using notation or vocabulary in a consistent and appropriate way, (iii) not writing your mathematics in clear academic language, and/or (iv) making a small error in computation.

**Score of 3.** Your work shows that you have some conceptual understanding of the skill or concept involved, but have not thoroughly mastered it, meaning you have made one or more major errors such as (i) not completely answering the question, (ii) showing confused reasoning, (iii) not using consistent notation, (iv) writing muddled prose, and/or (v) making multiple errors in computation.

**Score of 2.** Your work shows that you have a minimal conceptual understanding of the skill or concept involved, but are still unsure about basic aspects of the topic, meaning you have made one or more major errors such as (i) not completely answering the question, (ii) showing confused reasoning, (iii) not using consistent notation, (iv) writing muddled prose, and/or (v) making multiple errors in computation.

**Score of 1.** Your work shows that you have a very weak understanding of the skill or concept involved, meaning you may have confused reasoning, poor prose, and/or one or more serious errors in computation.

**Score of 0.** You left the problem(s) blank, or have nothing of substance written.

You can use this feedback to determine what you need to work on. I want your focus to be on learning. What that means is that for any skill that you earned a 0, 1, 2, or 3 on, you can try it again. You can fill out this google form to ask to retry a skill *once*. And if you do better, I'll literally replace your score with the higher score -- up to a maximum of 4. So it's like that lower score never existed. To me, that puts the focus on student learning and improvement! You didn't know something, you figured it out, yay!

So I can keep this manageable for me, I'm going to say you can't reassess a zillion things. I'm going to put a cap at reassessing four skills for the semester. This means you should still be preparing well for assessments. And you should still stay honorable. And you should know that if you mess up on something or didn't know something as well as you thought you did, that's *fine*. All you need to do is rework it to show an improved understanding.

*FAQ:*

*Q: Is there going to be a final exam?*
A: I don't know yet. We haven't been given any guidance on that. I'll let you know once that has been talked about.

*Q: How do I know if you passed or failed the semester?*
A: As of now, I'm going to look at the semester as having two parts. The "live part" and the "virtual part." At the end of the year, I'll look at both and if you've passed both, you'll get a passing grade.

For the online part of the semester, to determine if you've passed, I will look at two things: your nightly work grade (20%) and your scores on assessments (80%). Your nightly work will be graded as it always has (on completion and being turned in on time). For assessments, I will be dividing the total number of points you earned for all the skills and dividing that by the total number of possible points.

*A personal note:* I like that we've gone to this pass/fail system. Some students and faculty members are in challenging circumstances right now, not-conducive to learning and teaching as our best selves, while our whole idea of schooling is changing. To provide breathing room both for students and faculty alike, and keeping an eye on equity, it only feels right to me that we turn to a lessened focus on grades. (I believe that's healthy in general, not just with remote learning.) That being said, I find learning to be a gift. It's precious, and you're especially lucky that you are at an institution like Packer which can work with all of you to make this a positive experience (given the circumstances). I think about my recent trips to Lesvos, Greece and all the kids who are refugees who don't have access to things we take granted for -- including basic schooling. So my advice to you, if you will permit me to, is to **grab hold of this gift and continue to push yourselves to make the most of it**. After spending so many months with y'all, I can't imagine that you would do anything different. But I want you to really use this time to focus on the process of learning and taking feedback and improving. Not for some grade, but to really see where you shine and push yourself to improve when something is challenging… to prove to *yourself* that you are capable (something I've seen day in and day out).

## Our Classroom Community: Expectations and Community Norms

Packer has provided y'all with a set of student norms and behavioral expectations which all seem really reasonable. A few that I want to highlight are: making sure you let someone know when you're feeling overwhelmed and confused, practicing gratitude, minimizing unrelated windows when we're together on zoom, and not taking photos/videos of us together on zoom (which seems to be a popular type of video on the tiktok community).

After we experience the world online together for a while, we'll together create some norms so we can have a positive classroom culture… just like at the start of the year when we talked about what we owed ourselves, our group, and our class, or like when your groups wrote down group commitments to each other.

However there are some expectations I have for our classes, which I will outline here:

- Y’all know punctuality is important to me. So show up to our live zoom classes on time. I’ll have the zoom session opened 5 minutes early, so y’all can jump in and chat informally with each other while we get class started. Join early and tell everyone a “dad joke” or stump us with a riddle!
- Communicate early on with me if you’re having technical/emotional/health issues so I can find ways to support you.
- During our class, y’all should share your thinking frequently.
- Your responsibilities as students isn’t just to yourselves, and isn’t just to me. As we’ve talked about throughout this year, it’s to each other. We’re a community of learners, whether we’re together in person or connecting via the computer.
- If you’re absent from a live class for some reason, just like when we were in school, you’re still expected to talk to a classmate to learn what we covered.

## Technical Difficulties, Emotional Difficulties, Health Difficulties:

If at any point you start to experience technical difficulties, you should contact the tech department. But also, if you’re missing our live sessions or unable to complete the work assigned because of technical difficulties, because you’re feeling emotionally overwhelmed, or you’re feeling ill, please send me an email. I recognize things aren’t going to go as planned for various reasons, and I want to make sure to be able to support you. And the best way for me to be able to do that is if you reach out sooner than later.