

(Sender Copy) Welcome to Math 48A and here are the first few assignments

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Fri 4/7/2023 7:33 PM

To: Jeff Anderson <andersonjeff@fhda.edu>

Subject Line: Welcome to Math 48A and here are the first few assignments

Date: Friday 4/7/2023

Greetings,

My name is Jeff Anderson.

I will be your instructor for spring quarter 2023.

I am very excited to work with you and to serve you. I feel so blessed that I get to work with powerful, thoughtful, and smart students like you. I feel honored to be able to help you develop your genius. I believe you are smart, strong, thoughtful, and capable. I also believe you can accomplish anything you set your mind to.

I can sum my approach to teaching up with a series of five learning objectives that I hope to co-create with you during our time together. I'll have you read those for yourself (I write these in the first person so that, as you read, you can think about what these goals would mean for you):

Jeff's Hope for Our Learning Objectives

"When I finish my learning journey in college, I will:

1. Develop deep belief in myself, faith in my abilities to accomplish anything I set my mind to, and hope for my future.
2. Create and refine a deeply-held sense of purpose for my life that includes my thoughts about myself, the people I love most, my communities, and my society. Moreover, I will be able to draw on this purpose and use multiple sources of intrinsic motivation to give my best effort and drive my learning far into the future.
3. Practice strategic deep learning skills so that I can teach myself anything I want to learn at any level, build teams of people around me to support my learning, and manage myself like a professional to successfully navigate my world as I work towards the goals I care most about.
4. Cultivate and reinforce content expertise and mastery in subjects that I care about that relate to my academic, career, and personal goals, improve my capacity to grow and learn, and help me enjoy freedom in my life.
5. Know how to advocate for system transformation so that I can use my hard-earned knowledge, strength, and wisdom to empower future generations, create the world I want to live in, and fight for people in my communities who have the least systemic power.

Here is early access to our first few assignments

In honor of these learning objectives, I want to give you advanced access to our first few assignments in this class. Below I share a description of these assignments, the due dates for this work, and some coaching on how you might think about these assignments.

Here are a few things to remember as you look at this work:

- A. The more work you do right now, the easier the quarter will be.
- B. Do your best to complete this work thoughtfully, slowly, and for yourself. We will refer back to these introductory assignments throughout the quarter. The more thoughtful and deeply you do this work, the more meaningful our quarter will be together.
- C. I have been using these assignments for about 1 year. In that time, many students did this work for me (their teacher) rather than for themselves. These students reported that they did the work as quickly as possible to get a grade and then move on. In other words, they did shallow work rather than deep work. As the quarter went on, these students reported feeling regret. They also reported that their goal to minimize effort during the first few weeks of the quarter caused more pain and suffering later in the quarter. I encourage you to learn from their mistakes: take this work as seriously as you can. Do this work for yourself and be as thoughtful as you can to complete this work.

Assignment 1: Conquering College Lab 1 - Schedule to Succeed

Assignment 1: [Conquering College Lab 1 – Schedule to Succeed](#)

Due date: At the start of our second in-class meeting date (you will share your work in small groups during this class)

How you might think about this work:

Creating a schedule for success in college STEM classes is not an easy thing to do. Moreover, our college system does not do a good job of coaching you through this process.

I want to help you develop productivity systems that propel your learning and help you accomplish difficult tasks. This Conquering College lab 1 activity helps you create more effective scheduling routines to improve/enhance how you schedule your time and manage your energy. If we are serious about helping you learn deeply, you must manage your time and energy like a professional.

This first lab helps you think really deeply about your commitments. I also ask you to create scheduling tools that you can use throughout winter quarter 2023 including a weekly schedule and term-long calendar. As you create these documents, recognize that I want you to be able to use, edit, update, and return to your this work throughout the quarter. This activity is important if we are to unleash your potential.

My previous students tell me this takes them between 4 - 8 hours to complete this activity. Some of my high-performing students who push themselves to create learning-systems for long-term growth/success say they spend up to 12 hours on this work. This lab is due at the start of class 2 (the second day we meet each other).

Assignment 2: Conquering College Lab 2 - Prepare for Deep Learning

Assignment 2: [Conquering College Lab 2 Activity – Prepare for Deep Learning](#)

Due date: At the start of our third in-class meeting date (you will share your work in small groups during this class)

How you might think about this work:

This lab helps you learn how to talk and think about learning. One of the major goals of my work with you is to center authentic conversations about learning without using letter grades. Sadly, most students have never had the chance to think deeply about what learning is, how it works, and what systems they use to learn deeply.

The letter grading system avoids dealing with this problem. Our entire education system uses grades as a tool to ignore our responsibility to explicitly center conversations about how learning works and to help students develop research-based learning techniques. In fact, many college teachers have not studied this stuff deeply. We use grades to motivate students to do work out of the fear of punishment.

I will no longer conform to that model for human behavior/motivation. Instead, I will provide you with alternative, research-based models for how learning works and what you can do to be a more effective, efficient, and engaged learner. This conquering college lab 2 activity is designed to help you develop vocabulary, ideas, and techniques to learn more deeply, more effectively, and to direct your own learning experiences.

The blog posts for this lab are based on a bunch of books in cognitive science, the psychology of learning, and the science of expertise. [How learning works](#), [Make It Stick](#), [Deep Work](#), [Creating Self-Regulated Learners](#), [The Talent Code](#), [The Little Book of Talent](#), [Peak](#), [Drive](#), [Grit](#), [Ultralearning](#), [Talent is Overrated](#) are some that come to mind. I'm sure if I thought harder, there are more books that influenced me as I wrote those blog posts.

I won't ask you to finish reading those all those books in the first 2 weeks of our course. However, over the last five years, I have worked very hard to write a series of thoughtful blog posts that distill many of the important lessons in those books down into manageable chunks. Now, I ask you to engage with these ideas. This is exactly what lab 2 is all about.

My previous students tell me this takes between 6 - 12 hours. Some of my high-performing students who push themselves to create learning-systems for long-term growth/success say they spend up to 16 hours to complete. This lab is due at the start of Wednesday of week 2 (we have a national holiday on Monday of week 2 so that the third day we meet will be on Wednesday of week 2).

Assignment 3: Conquering College Lab 3 - Prepare for Flipped Learning

Assignment 3: [Conquering College Lab 3 Activity – Prepare for Flipped Learning](#)

Due date: At the start of our fourth in-class meeting date (you will share your work in small groups during this class)

How you might think about this work:

For many, many reasons, I ask my students to create a portfolio of work that we use as the basis of all our learning conferences. In fact, I will challenge you to create your own “textbook” for our course. In order to guide your work, I challenge you to create a resource that you can look back on 10 years from now and, when you look back, you should be able to understand your work at a deep level just by looking at it. I want you to create written evidence that documents your journey of building real, meaningful, and deep expertise in our course content. I want you to do this so well that you can look back at many years from now.

This portfolio-based learning process is novel for many students. Lab 3 helps you get your head around how our course works, how I expect you to learn, and what I will be looking for in your work. If lab 2 an overview of the theory behind our work, then lab 3 are the practices that I encourage you to create based on that theory. In other words, this is where you start to put theory into your learning practices.

My previous students tell me this takes between 6 - 8 hours. Some of my high-performing students who push themselves to create learning-systems for long-term growth/success say they spend up to 12 hours to complete. This lab is due at the start of our fourth in-class meeting.

Assignment 4: Conquering College Lab 4 - Create Your Dream Binder

Assignment 4: [Conquering College Lab 4 Activity - Create Your Dream Binder](#)

Due date: At the start of the first in-class meeting during week 5 of this quarter

How you might think about this work:

This assignment is designed to help you define and refine your vision for the next 5 years of your life. One of the most powerful practices we can use in our work as learners is to cultivate a deep sense of purpose for our work. To do this well, I encourage you to think about the various time horizons you are working towards in college as well as the reasons why you believe your learning matters. This activity helps you do that.

My previous students tell me this takes between 10 - 15 hours. Some of my high-performing students who push themselves to create learning-systems for long-term growth/success say they spend up to 20 hours to complete a first draft of this assignment. This lab is due at the start of Monday of week 5.

Assignment 5: Read Ultralearning to enhance your strategic deep learning skills

Assignment 5: Read [Ultralearning: Accelerate Your Career, Master Hard Skills, and Outsmart the Competition](#) by [Scott Young](#)

Due date: At the start of week 8 of winter 2023

How you might think about this work:

The beginning-level content of our course will be designed to help you master the basics content and technical concepts in this course. To do this, you will be working through videos and course content that I've put together for your course.

As you watch these videos and work through this content, I will ask you to write out every idea you study in our own language for yourself and capture these thoughts in your learning portfolio. I also hope you write a bunch of ideas, thoughts, and diagrams that I didn't write in the videos/content that I've created for you. The best learning happens when you direct your own mind to ask and answer your own questions. I'll ask you to use the content I've prepared for you as a starting point for your explorations.

For students who want to dive into the intermediate and advanced versions of the course, you will be creating and working on your own applied projects related to our course content. In this case, I encourage you to develop an applied project that relates to your future academic and career interests.

As you create your project, I want you to base your work on many of the lessons that [Scott Young](#) presents in his fantastic book [Ultralearning](#). For you to do this, you'll have to read that book and incorporate what you learn into your project proposals. Don't worry: I will work closely with you to help you create your vision for your project.

Also, for students who need help developing a project, I have a ton of ideas for great projects I can share with you. I care deeply that we help you develop skills for your future and that you explore topics that you are interested in. Please feel free to get started on this reading ASAP.

Note: Assignments 1 – 4 take priority because their due dates are much sooner. However, reading a book is something to do over many weeks. So, it's possible to read 20 – 40 pages per week while working on other material. I do recommend that you get access to this book ASAP. If you're worried about how to afford your own copy, please visit your local library.

Final Thoughts

With that, I'll end this email.

Please don't get too overwhelmed. I'm not officially going to assign these activities until the first day of class. Still, over the years, I've had many students tell me that they appreciate a head start.

In this email, I'm highlighting some of the most important learning-skills work that we'll do in the first 6 weeks of the course. I love giving students advanced access to this material so that you can get ahead and make our time together more meaningful.

Finally, many of my students tell me that when they complete the work listed above thoughtfully, they are more effective and efficient learners. I routinely have students tell me that this work propels their learning not only in our class but also in their other classes. I hope to help you make this a reality also.

Cheers to your learning and I look forward to meeting you in person on the first day of class.

Best,

Jeff

PS. If possible, I kindly request that you minimize your emails to me. You can read more about my email policy below:

<https://www.appliedlinearalgebra.com/blog/jeffs-email-policy>

PPS. If you'd like to take a look at our course homepage, click the link below:

Math 48A: <http://www.appliedlinearalgebra.com/blog/for-students/welcome-to-math-48a>

Math 1C: <http://www.appliedlinearalgebra.com/blog/for-students/welcome-to-math-1c>

Math 2B: <http://www.appliedlinearalgebra.com/blog/for-students/welcome-to-math-2b>

The course content on these pages and many of the other resources are ready for your eyes. Feel free to click around.

PPPS. In the coming years, I plan to write much more about learning skills, my teaching philosophy, and teaching practices I find to be effective on my [Jeff Anderson Math Blog](#). My writings on that blog are focused on three major goals including:

1. Help readers develop and refine your learning/productivity/work systems.
2. Inspire and support the next generation of STEM educators.
3. Provide content, ideas, research, and curriculum to revolutionize college STEM education.

If you'd like to look at my previous writings, please see either of the two lists:

<https://www.appliedlinearalgebra.com/blog/jeff-anderson-math-blog-posts>

<https://www.appliedlinearalgebra.com/blog/jeffs-tlc-blog-posts>

If you have an interest in any of these topics, I encourage you to follow that blog as I plan to do a lot of deep work in that space for decades to come.