

Dear Math 343 students and auditors:

Welcome to the Fall 2021 term. Here's some information on our class that I hope you find useful.

Despite the covid-19 pandemic, the class will be offered in person and on campus. Below you will find a short summary of Portland State's policies and requirements for this Fall's in person learning. Your cooperation with these policies and procedures is greatly appreciated.

Attendance is not required, and while many students bring from earlier study a working facility at the level of the mechanics of the basics of the subject which we go over in the first through third weeks, in my experience most students find the mechanical underpinnings of the subject quite challenging and have difficulty mastering these notions and procedures from written materials alone. In the latter half of the course, we develop the fundamental linear algebraic tools of modern computational reasoning, tools that the discipline spent three quarters of a century puzzling out, and again in my experience, most students find this material difficult to master from written materials alone. I believe you will find that in addition to lectures, text, and homework, extensive discussions with your colleagues and peers will be most helpful. Additionally, classes in general will not be recorded, so having a colleague or two available to share the day's lecture notes if you need to miss a given day will prove to be very useful. Of course, you can always arrange a time during my office hours or a more convenient time to meet with me privately to go over the topics of that day's class.

**Text:** We will be working through nearly the entirety of Gilbert Strang's Linear Algebra and its Applications. You will need a copy.

**Assessment:** Course assessment is based entirely on your performance on written solutions to the exercises taken from the text. All are to be considered hereby assigned, though no one is expected to do them all. Your written solutions will be evaluated based on the extent to which they are correct, clear, and concise, in that order. Your selection of problems will also factor into your assessment (e.g. problems whose solutions can be found in the student manual carry less weight than those whose solutions are not). The deadline for submission is 7:20 pm Tuesday December 7, 2021. There will be no extensions or exceptions. Your assessment is determined by the number and choice of successfully completed problems and is monotone increasing as the number of your successfully

submitted solutions grows, i.e. there is no performance on a given problem that takes points away from previously successfully completed ones. Problems may be submitted early at any time before the deadline. If revisions are required to bring your submissions up to an acceptable standard for credit, revised versions can be resubmitted at any time before the deadline to without penalty. I *strongly* suggest you *do not* wait until close to the deadline to begin your submissions as you may lose the opportunity to revise solutions if they cannot be returned to you in time for revisions to be made. You are free to use whatever reference material you need, however, per PSU's [Student Code of Conduct & Responsibility](#) academic integrity in your submissions is expected. This means that all materials and collaborations employed in a solution are to be properly referenced; for websites this includes the date of access.

**Office Hours:** Tuesdays 11:30am -12:30pm, Thursdays 3pm-4:15pm and by appointment.

### **PSU Classroom Requirements for All Students and Faculty Due to Covid-19:**

The University has established rules and policies to make the return to the classroom as safe as possible. It is required for everyone to follow all the Return to Campus rules and policies. To participate in this class, PSU requires students to comply with the following.

#### **Masks Required at all Times in Classroom**

- [Wear a mask or face covering indoors](#) at all times. Your mask or face covering must be properly worn (fully covering nose and mouth and tight fitting). Mesh masks, face shields, or face covering that incorporates a valve designed to facilitate easy exhalation are not acceptable. **Because a mask must be worn in the classroom, there should be no eating or drinking in the classroom.** If you have a medical condition or a disability that prevents you from wearing a mask or cloth face covering, you must obtain an accommodation from the [Disability Resource Center \(DRC\)](#) to be exempt from this requirement.
- CDC, State, and County guidance does not limit class size for in-person instruction or require physical distancing.

#### **Vaccination**

- Be vaccinated against COVID-19 and complete the [COVID-19 vaccination attestation](#) form. Those students with medical or nonmedical exemptions or who will not be on campus at all must complete the process described on “COVID-19 Vaccine Exemption Request Form” to establish those exemptions.

### **Health Check, Illness, Exposure or Positive Test for COVID-19**

- Complete the [required self-check for COVID-19 symptoms before coming to campus each day](#).
- If you are feeling sick or have been exposed to COVID-19, do not come to campus. Call SHAC to discuss your symptoms and situation (503.725.2800). They will advise you on testing, quarantine, and when you can return to campus.
- If you test positive for COVID-19, [report your result to SHAC](#) and do not come to campus. SHAC will advise you on quarantine, notification of close contacts and when you can return to campus.
- Please notify me, (i.e. your instructor), should you need to miss a class period for any of these reasons so that we can discuss strategies to support your learning during this time.
- If I become ill or need to quarantine during the term, either I or the department chair will notify you via PSU email about my absence and how course instruction will continue.

### **Failure to Comply with Any of these Rules**

As the instructor of this course, the University has given me the authority to require your compliance with these policies. If you do not comply with these requirements, I may ask you to leave the classroom or I may need to cancel the class session entirely.

In addition, failure to comply with these requirements may result in a referral to the Office of the Dean of Student Life to consider charges under PSU’s Code of Conduct. A student found to have violated a university rule (or rules) through the due process of student conduct might face disciplinary and educational sanctions (or consequences). For a complete list of sanctions, see Section 14 of the [Student Code of Conduct & Responsibility](#)

### **Guidance May Change**

Please note that the University rules, policies, and guidance may change at any time at the direction of the CDC, State, or County requirements. Please review the University's main [COVID-19 Response](#) webpage and look for emails from the University on these topics.

**Summary:** The linear algebraic techniques that we will study are regarded by many as some of the most beautiful mathematics of the late 19<sup>th</sup> and early 20<sup>th</sup> centuries and in many ways have proved to be the foundation supporting the modern edifice of computational science. Linearization is a methodology found in nearly all the 4/500 and 600 level mathematics courses you will encounter and a solid foundation in the techniques we study will make the content of those courses far more accessible and understandable.

I hope you find this class both useful and enjoyable.

Best-

Steve