

MATH 2940: LINEAR ALGEBRA FOR ENGINEERS

Fall 2020

Instructor: Alex Townsend	Time: MWF, L1: 10:20 – 11:10 L2: 12:40 – 13:30
Email: townsend@cornell.edu	Place: Zoom, online

Lecture zoom links.

The 10:20 – 11:10am lecture will happen here:

<https://cornell.zoom.us/j/97197194666?pwd=ZlIxM1BvVmZzc2ZnUG5RQVpNcDU0QT09>.

The password is “Matrix”.

The 12:40 – 1:30pm lecture will happen here:

<https://cornell.zoom.us/j/97041838923?pwd=YVhtUXU1SXFJQ085UUdEbnFURmRLdz09>.

The password is “Rank”.

Canvas, Gradescope, and Piazza.

1. **Canvas.** Course assignments, lecture materials, and practice exams will be posted on Canvas. Canvas is how the instructor and TAs will send out course information. Lectures will be recorded and posted on Canvas.
2. **Gradescope.** You will submit your homework and exams through Gradescope. You will also see your grades here. Gradescope is how you will send in your work to be graded.
3. **Piazza.** There is a Piazza forum for your questions. Please avoid using email for questions about course material. Piazza is how the instructor and TAs will answer your questions throughout the week.

We strongly encourage you to attend all classes and discussion sessions as you can. Attendance is not part of the course credit, but there is a **very** strong positive correlation between attendance/engagement and grades! Especially, for Fall 2020, we are strongly encouraging you to find a study partner.

Discussion sections. Here are the discussion sections.

Instructor/TA	Section	Time	Room/Zoom	Password
Elena Hafner	DIS 201	W 8:40 – 9:30pm	MLT 251	
	DIS 202	W 7:30 – 8:20pm	MLT 251	
	DIS 204	R 10:20 – 11:10am	MLT 251	
Nimrod Hajaj	DIS 215	R 12:40 – 1:30pm	https://cornell.zoom.us/j/99583143394?pwd=dkFLMjhJK2RSM1JUME5pZXcreGhLQT09	
	DIS 217	R 1:50 – 2:40pm	https://cornell.zoom.us/j/99583143394?pwd=dkFLMjhJK2RSM1JUME5pZXcreGhLQT09	
	DIS 218	R 5:20 – 6:10pm	https://cornell.zoom.us/j/99583143394?pwd=dkFLMjhJK2RSM1JUME5pZXcreGhLQT09	
Phillip Jang	DIS 203	W 4:10 – 5:00pm	WRN B25	
	DIS 205	R 12:40 – 1:30pm	MLT 251	
	DIS 206	R 3:00 – 3:50pm	MLT 251	
Jeffrey Jiang	DIS 207	W 4:10 – 5:00pm	https://cornell.zoom.us/j/92734172896?pwd=YTVkNnNTWwXabWUvdHRCekhpYWIzd09	953800
	DIS 208	W 5:20 – 6:10pm	https://cornell.zoom.us/j/92734172896?pwd=YTVkNnNTWwXabWUvdHRCekhpYWIzd09	953800
	DIS 216	R 1:50 – 2:40pm	https://cornell.zoom.us/j/92734172896?pwd=YTVkNnNTWwXabWUvdHRCekhpYWIzd09	953800
Trevor Jones	DIS 211	R 8:00 – 8:50am	https://cornell.zoom.us/j/99097954404?pwd=ZEJLNEFhcVpGdjdtRnJsenBybDZlQT09	361485
	DIS 213	R 9:10 – 10:00am	https://cornell.zoom.us/j/99088064745?pwd=enVubmZoaHd2d1ZhK01tr1BCZDFWQT09	849187
	DIS 214	R 11:30 – 12:20pm	https://cornell.zoom.us/j/93761407311?pwd=NGVMRVJHSVZMZmAxWkEYR2F4dGZyQT09	920210
Tianyi Shi	DIS 210	W 8:40 – 9:30pm	https://cornell.zoom.us/j/492699834?pwd=TkhqWdk5MU02NWYyQ25hc09jQUpiQT09	328904
Heather Wilber	DIS 209	W 7:30 – 8:20pm	https://cornell.zoom.us/j/98462782274?pwd=SVU5a2VuaUxyODM3ek1iVVk4UEtSZz09	LinAlg209
	DIS 213	R 10:20 – 11:10am	https://cornell.zoom.us/j/91829036506?pwd=RXZlVjhhbkOVVcnBVVTFnMHNZV21wQT09	LinAlg213

Office hours. Here are the office hours

Instructor/TA	Time	Room/Zoom	Password
Elena Hafner	W, 11 – 12 pm; R, 3 – 4 pm	https://cornell.zoom.us/j/98902840573?pwd=enBZQVZpWHRmZmZYVd1cUxtZlpaUT09	
Nimrod Hajaj	F, 1 – 3 pm	https://cornell.zoom.us/j/9664175452?pwd=NnNTbHFwMHVYenZWekh1QjZsMctwdz09	
Phillip Jang	M, 12:45 – 2:45 pm	https://cornell.zoom.us/j/4788914127?pwd=QTLpY2gwN3duTytaOVp6N05CVGRqQT09	
Jeffrey Jiang	T, 2 – 3 pm; M, 4 – 5 pm	https://cornell.zoom.us/j/94482929826?pwd=RnZCV0dsM2cwcFk5TnMwMUp3ZHM3dz09	
Trevor Jones	W, 1 – 3 pm	https://cornell.zoom.us/j/96637696688?pwd=dXlnZERaTTBWTDFZE5uQzJ20UNEQTO9	
Tianyi Shi	F, 10 – 10:40 am	https://cornell.zoom.us/j/102953752?pwd=ai9JdURiWlpCckhzSmRZUzhSkhoUT09	
Alex Townsend	M, 2:45 – 4:25pm	https://cornell.zoom.us/j/91835837403	OH
Heather Wilber	W, 2 – 3:20 pm	https://cornell.zoom.us/j/97851243784?pwd=cVR5VUNvQWZyUUXqWmtQdk9kdnQzUT09	

Textbook. You will need access to Lay, Lay, McDonald, “Linear Algebra with Applications”, 5th edition, Pearson. We will be covering Chapters 1-7. There is an enhanced version of the text available through Canvas. Look for “Instant Access”.

Prerequisites. MATH 1920

Grading Policy.

The grade breakdown is

Percentage	Description
15%	Homework
15%	Quiz
20%	Prelim
30%	Semi-final exam
20%	Final

We calculate your overall raw grade as

$$\text{Overall raw grade} = 0.15 \cdot (\text{homework}) + 0.15 \cdot (\text{quiz}) + 0.2 \cdot (\text{prelim}) + 0.3 \cdot (\text{semi-final}) + 0.2 \cdot (\text{final}).$$

At the end of the semester, your raw grade gets converted to a letter grade. For Fall 2020, the median grade for this course will be a “B+”. In normal semesters, it is a “B”. After each prelim, we will release the prelim distribution and approximate (unofficial) grade boundaries. This will allow you to get some sense of what letter grade your current performance is achieving. **Nothing else decides your letter grade in this course.**

The prelim and final will be 1.5 hours long and the semi-final will be 2.5 hours long. You will have an additional 30 minutes to submit your solutions. You will take the exams through Gradescope. Each examination will have a morning and an evening slot. You can freely select which slot you take, though you may only take one. As soon as you open the exam on Gradescope, you must submit solutions to that exam.

Exam grading. The exams will be taken individually online and will be open-book. Non-graphical calculators are allowed. You should not use the internet, forums, or messaging services during examinations. **You must submit your solutions in your own handwriting, unless you have special permission; otherwise, anything typed up will be given 0.**

Homework advice. You are allowed to work together on homework, provided you write up the solutions as an individual. Here is a good way to do the homework:

1. Carefully work through the appropriate section of the book or internet resources, before looking at the homework.
2. Attempt the homework closed-book and without the internet for at least 2 hours. Being stuck on a question is learning in mathematics. Brainstorm ideas with yourself or a friend.
3. You cannot do all the questions: Go to step 1. If this is the second time here, then ask a TA for a hint (not the answer).

Grading mistakes. We try our best to grade everything correctly. On rare occasions we may make a grading mistake. Please submit a grade review request through Gradescope. You must notify us about a grading mistake within 1 week of having the script returned to you. All contested scores must be resolved before the start of the final exam.

Late work policy. Be sure to pay close attention to deadlines – there will be no make ups for homeworks or quizzes. Late work is not accepted. If homework, quiz, or exam answers are totally illegible, then it may be given a score of 0. Please write neat enough so that we can read your answers.

Gradescope. We will use Gradescope this semester to grade homeworks. You will receive an invitation at the start of the semester to make an account. Homework is always due on **Mondays at 10pm**. Late

homework will not be accepted. You can hand in your assignment on Gradescope anytime. There is really no reason why you should wait till right before the deadline.

Uploading homework to Gradescope will be your responsibility. Please read the [following pdf](#) or consult the [Gradescope help website](#) for information on how to do that. The document you upload should be a high quality scan. Either use a scanner or take a picture with one of your devices using one of the recommended apps to enhance its quality.

Gradescope Homework Submission Checklist.

- Easy to read: you should make a high quality, high contrast scan. Use a scanning app on your phone. If you take a picture, use a scanning app to crop it so the scan only contains the page. If you did your work in a spiral notebook, rip the page out of the notebook before taking a picture.
- Make sure your pages are in the right order. When you upload your work to Gradescope, you can reorder the pages there. Also, make sure your scans are not upside down or tilted. You can rotate the scans in Gradescope after you upload them.

Take a look at the [Homework Submission Video](#).

WeBWorK. We will be using [WeBWorK](#) to administer and grade quizzes. You are strongly encouraged to take the quiz at the beginning of your Discussion section for the week, but will have a time window during which you may take it.

Quiz and HW grade drops. The lowest scoring homework and the lowest scoring quiz will be dropped.

Email policy. The number of students in this course means that emailing the instructor is not the best mode of communication for most matters. For most issues (including questions about grading, test conflicts and accommodations, missing class) you should first talk to your TA. If this fails, then try next to resolve your issue with the Head TA (Ilya Amburg at ia244@cornell.edu). Math questions are almost always better to ask in person or on Piazza.

Disability services. Students with Disabilities: Your access in this course is important. Please give your TA your Student Disability Services (SDS) accommodation letter early in the semester so that we have adequate time to arrange your approved academic accommodations. If you need an immediate accommodation for equal access, please speak with me after class or send an email message to me and/or SDS at sds_cu@cornell.edu. If the need arises for additional accommodations during the semester, please contact SDS.

Academic Integrity. Each student in this course is expected to abide by the Cornell University Code of Academic Integrity. Any work submitted by a student in this course for academic credit will be the student's own work. More information about this code is at <http://cuinfo.cornell.edu>.