University of Michigan
Fall 2020 Preliminary Instructor Report With Comments
ROB 101-881: Comp Lin Alg
Jessy Grizzle

12 out of 13 students responded to this evaluation.

Responses to questions about the course:

	SA	A	N	D	SD	N/A	Median
This course advanced my understanding of the subject matter.(Q1631)	7	4	1	0	0	0	4.6
My interest in the subject has increased because of this course.(Q1632)	6	3	2	0	0	0	4.6
I knew what was expected of me in this course.(Q1633)	6	6	0	0	0	0	4.5
Overall, this was an excellent course.(Q1)	7	2	2	0	0	0	4.7
I had a strong desire to take this course.(Q4)	10	1	1	0	0	0	4.9
As compared with other courses of equal credit, the workload for this course was...(Q891)	0	2	7	3	0	0	2.9
How did you participate in this course? (Q1854)	5	6	0	1	0	0	4.3
I gained a good understanding of concepts/principles in this field. (Q121)	5	6	0	1	0	0	4.3
The amount of work required was appropriate for the credit received. (Q239)	6	4	1	0	1	0	4.5
Grades were assigned fairly and impartially. (Q365)	10	1	0	0	0	0	5.0

Responses to questions about the instructor:

	SA	A	N	D	SD	N/A	Median
Overall, Jessy Grizzle was an excellent teacher.(Q2)	10	2	0	0	0	0	4.9
Jessy Grizzle seemed well prepared for class meetings.(Q230)	11	1	0	0	0	0	5.0
Jessy Grizzle explained material clearly.(Q199)	9	3	0	0	0	0	4.8
Jessy Grizzle treated students with respect.(Q217)	12	0	0	0	0	0	5.0
Jessy Grizzle appeared to have a thorough knowledge of the subject. (Q207)	9	2	0	0	0	0	4.9
Jessy Grizzle acknowledged all questions insofar as possible. (Q216)	11	1	0	0	0	0	5.0

Written Comments

Given the format of the course (e.g., fully online, in-person, etc.), what teaching methods worked well? (Q1855)

Comments
The livestreamed lectures were professionally handled.
I liked the office hours and recitation. If I was having trouble with homework, office hours were just the click of a button away.
The lecture –> homework –> project workflow of the course greatly helped me to internalize course content.
Project based learning worked well because it made abstract concepts more concrete.
Fully online was great that I can choose a time where I am freer to take the course.
Textbook is well written and I never had issues getting myself to read it. The various opportunities to see linear algebra topics actually applied such as with lidar data and segways helped in having me stay engaged and interested in course content.
The textbook and piazza were very useful
I enjoyed the lecture like background making it more engaging and being able to see the instructor in the room as they taught, even though I was in a zoom call.
The recorded lectures, with lectures notes shared after were really useful. I also appreciate my instructor's taking into account when the recording starts and ends to ensure that students watching the recordings don't miss out on anything.
I personally found that attending in person made me much more engaged during lectures
Lectures covered material to a good amount of depth to provide an understanding of the subject.

What were the greatest challenges to your learning in this course format? (Q1856)

Comments
Lack of individual office hours. Having to wait so long for others to get their questions answered before you get a chance. An appointment system for office hours would have been better.
I took this course to find a sense of community among another engineering freshman of type to take a pilot course in Robotics, but due to the online and socially distanced nature, it was hard to meet people.
My asynchronous approach to taking the course required me to go to more office hours sessions than I otherwise would have gone to. However, this 'challenge' ended up helping my performance in the course greatly, and teaching me the importance of office hours, as I was able to understand course content better than if I had not frequently attended office hours.
Watching online lectures in general was tough this semester, but given the circumstances, ROB 101 did the best it was able to.
Less engaging.
Synchronous zoom lecture isn't ideal, but Professor made it work :) JuliaHW sometimes had ambiguous directions, but overall it was open–ended enough to where I had to challenge myself to come up with solutions, and at the same time guided enough so I could have an idea of what is expected as a result/output.
New concepts and demonstrations attended remotely
I had another class at the same time. This made it easy for me to skip lectures and fall behind
Not much written documentation to understand the programming aspect.

Which aspects of this course were most valuable? (Q908)

Comments
Having a small class size, the coding assignments
The projects were super valuable because they allowed us to apply our understanding of the material in real–world context with real data.
The projects of the course were extremely valuable. by applying linear algebra concepts to tangible problems, I was able to grasp exactly how and why these concepts worked and were applied.
Methods of data analysis, optimization, and regression.
The projects are the best. I learned so much from it. QUizzes are good for assessing how well you learned.
Getting to see linear algebra actually applied (handling LiDAR pointcloud data from Cassie, bringing a LiDAR to class, Segway for optimization). Question 1 on the drill problems does a good job at ensuring that I never flake out on the reading :)
New experience
The projects and how all the math topics were related to Julia and programming.
The Julia HW's provided good examples and made it easier to visualise problems.
This class taught me how to use many of the skills I was picking up in Calc III in the "real world." I feel like the different techniques learned in this class will be invaluable to be as I continue in my career
Learning the integration for the subject into the real world robotics experimentation.

Which aspects of this course were least valuable? (Q909)

Comments
The quizzes
I think that at times the textbook was more beneficial than the lectures, but maybe that's just me.
All aspects of the course were valuable to understanding course content. However, the weakest part of the course was for me the written homework, which at times required me to tediously work out algorithms by hand. However, this exercise was important, as it better helped me to understand the foundations of algorithms we were applying in the class.
Abstracts concepts of linear algebra, however, they are necessary for understanding.
Don't think the drill problems helped out much on getting familiar with the materials, juilia hws are enough and are much more helpful.
Certain assessments (aka quizzes) could've been a little bit more challenging.
The struggle with this course being pilot was a bit difficult, however it was manageable
Some of the drill homework problems felt a little repetitive, and a wider variety of questions asked would have been nicer to enforce the material.
Although I did enjoy the projects, I would have enjoyed them more if one of them was applying the skills we learned "in production." I know from personal experience that just as there is a difference between knowing an algo and coding it, there is a difference between implementing something in a Jupyter notebook and implementing it in production. I realize this might be incredibly difficult, especially qith Covid–19, and so I see why it might not have been done
N/A

Please comment on the quality of the course as a whole. (Q911)

Comments
A very high quality course that provides an excellent introduction to linear algebra as a first year student with a lot of practical applications
I think was a great way to learn Linear Algebra, and definitely exposed me to the real–world applications of it.
The quality of the course was extremely high, and I look forward to taking more courses like it in the future.
10/10
It was a great course like no others. Just enough pressure for you to get going but not too much that it will crush you.
Very well planned out. I loved the pace and topics covered and I definitely feel I will be seeing and applying the topics wherever I end up. The projects were all very interesting and excellent at wrapping together the topics learned in a nice package with a rewarding outcome.
8 out of 10
Very much enjoyed taking it, and glad I made the decision at the beginning of the semester.
The course was really well designed. Although some of the lin alg hurt my head, I found it to be incredibly informative and useful, and allowed me to understand the material without having taken 217
I enjoyed the course but had a couple challenges that required more outside research that I think necessary.

How can Jessy Grizzle improve the teaching of this course? (Q901)

Comments
Neither the textbook nor the lectures went over many examples. Both only discussed the theory. Doing the drill problems without any help become impossible towards the second half of the semester since there were no examples to refer to either in the lecture notes or textbook.
The projects should involve uploading our code to real robots (or at least a real–life demo of Cassie).
At this point, Professor Grizzle's teaching of the course is close to perfect. After the increased focus on examples and explanation, the course went smoothly for me.
It was pretty great already.
Sometimes I feel like he talks a bit slow, but overall he IS a great teacher.
Sometimes Prof Grizzle's tablet writing can be a bit slow, but other times it's perfect for my own notetaking speed. Not a huge gripe as I much prefer this format over slides.
more examples that are graded for effort so we can experiment
I would put a spend a bit more time on vector spaces, as those really confused me
By providing clear written documentation describing the programming and explaining the necessity of some complex subjects and equations for real world integration.