Tufts UNIVERSITY

School of Arts and Sciences
School of Engineering

Individual Report for Fa19-MATH-0070-04-Linear Algebra (Robert J Lemke-Oliver rlemke01)

Project Title: **Fall 2019 AS&E Course Evaluation**

Courses Audience: **39**
Responses Received: **32**
Response Ratio: **82.05%**

Creation date of the Report: **Tuesday, December 17, 2019**

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Summary of Results

The Course

Question	Course		Subject (MATH)	
	Mean	Standard Deviation	Mean	Standard Deviation
1. How would you rate the success of the course in accomplishing its objectives as stated on the course syllabus?	4.41	0.80	4.30	0.89
2. How would you rate the use of class time (lectures, discussions, demonstrations, labs, studio work, etc.) to promote your learning?	4.34	0.94	4.18	1.03
3. How would you rate the use of out-of-class activities (reading assignments, homework, papers, projects, studio art practice, etc.) to promote your learning?	4.22	0.79	4.01	1.00
4. How would you rate the way the course engaged your interest?	3.88	1.21	3.80	1.14
5. Based on your answers above, and any other factors you consider important, please provide an overall evaluation of the course.	4.22	0.79	4.08	0.97
Overall	4.21	0.93	4.07	-

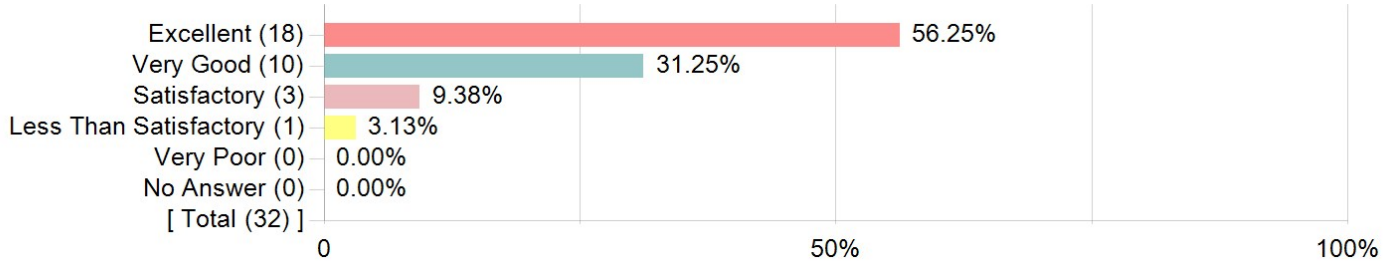
The Instructor

Question	Course		Subject (MATH)	
	Mean	Standard Deviation	Mean	Standard Deviation
9. How would you rate the instructor’s organization of each class?	4.63	0.61	4.26	0.98
10. How would you rate the instructor’s success in explaining concepts and ideas?	4.28	0.89	4.12	1.11
11. How would you rate the timeliness of the instructor’s feedback on assignments, exams, and other work?	4.59	0.71	4.42	0.84
12. How would you rate the usefulness of the instructor’s feedback on assignments, exams, and other work?	4.28	0.89	4.10	1.03
13. How would you rate the instructor’s success in creating and maintaining an inclusive class, respectful of all students?	4.53	0.88	4.53	0.78
14. How would you rate the instructor’s communication with you outside of class?	4.41	0.80	4.32	0.91
15. Based on your answers above, and any other factors you consider important, please provide an overall evaluation of the instructor.	4.44	0.76	4.28	0.95
Overall	4.45	0.80	4.29	-

Detailed Results of Course Evaluation

1. How would you rate the success of the course in accomplishing its objectives as stated on the course syllabus?

1. 1. How would you rate the success of the course in accomplishing its objectives as stated on the course syllabus?

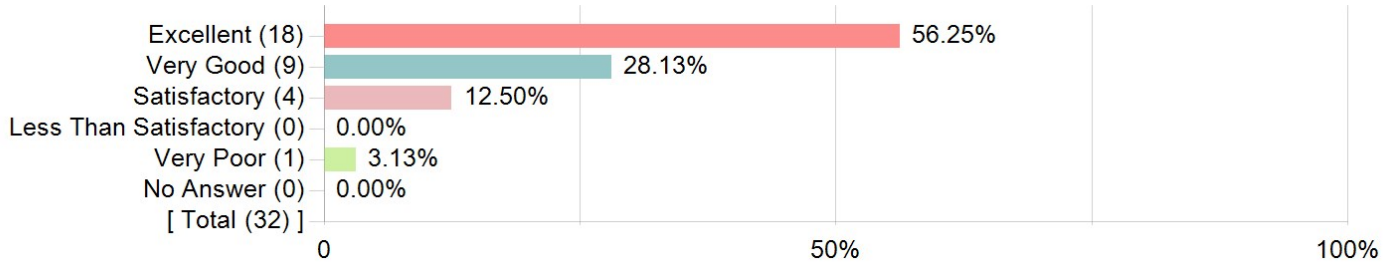


Options	Score	Count	Percentage
Excellent	5	18	56.25%
Very Good	4	10	31.25%
Satisfactory	3	3	9.38%
Less Than Satisfactory	2	1	3.13%
Very Poor	1	0	0.00%
No Answer	NRP	0	0.00%

Statistics	Value
Mean	4.41
Standard Deviation	0.80

2. How would you rate the use of class time (lectures, discussions, demonstrations, labs, studio work, etc.) to promote your learning?

1. 2. How would you rate the use of class time (lectures, discussions, demonstrations, labs, studio work, etc.) to promote your learning?

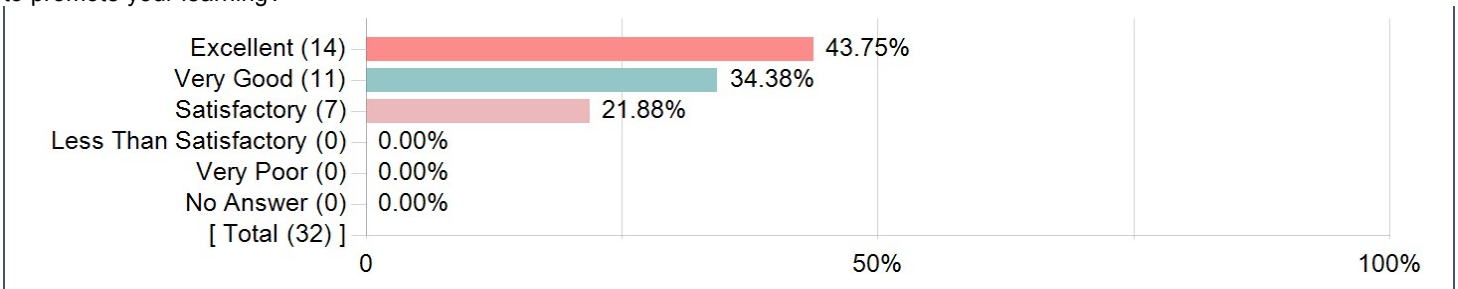


Options	Score	Count	Percentage
Excellent	5	18	56.25%
Very Good	4	9	28.13%
Satisfactory	3	4	12.50%
Less Than Satisfactory	2	0	0.00%
Very Poor	1	1	3.13%
No Answer	NRP	0	0.00%

Statistics	Value
Mean	4.34
Standard Deviation	0.94

3. How would you rate the use of out-of-class activities (reading assignments, homework, papers, projects, studio art practice, etc.) to promote your learning?

1. 3. How would you rate the use of out-of-class activities (reading assignments, homework, papers, projects, studio art practice, etc.) to promote your learning?

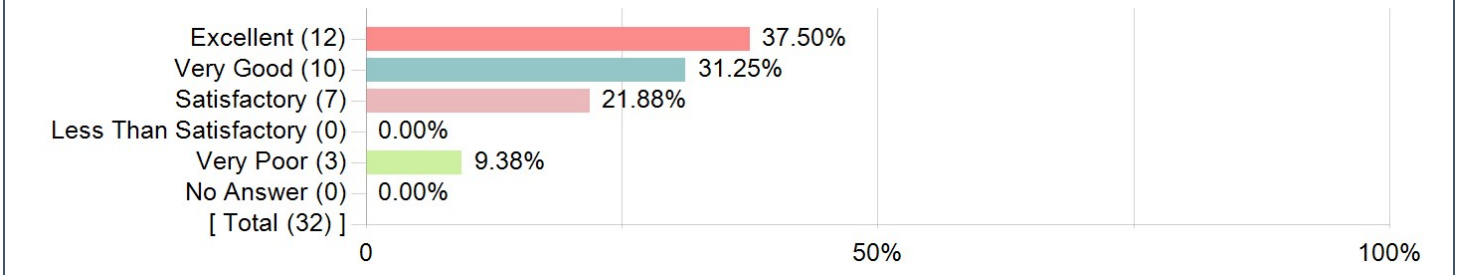


Options	Score	Count	Percentage
Excellent	5	14	43.75%
Very Good	4	11	34.38%
Satisfactory	3	7	21.88%
Less Than Satisfactory	2	0	0.00%
Very Poor	1	0	0.00%
No Answer	NRP	0	0.00%

Statistics	Value
Mean	4.22
Standard Deviation	0.79

4. How would you rate the way the course engaged your interest?

1. 4. How would you rate the way the course engaged your interest?

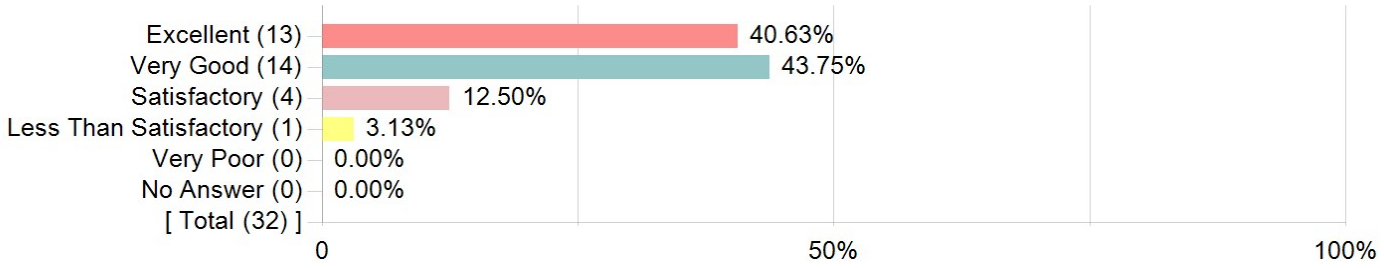


Options	Score	Count	Percentage
Excellent	5	12	37.50%
Very Good	4	10	31.25%
Satisfactory	3	7	21.88%
Less Than Satisfactory	2	0	0.00%
Very Poor	1	3	9.38%
No Answer	NRP	0	0.00%

Statistics	Value
Mean	3.88
Standard Deviation	1.21

5. Based on your answers above, and any other factors you consider important, please provide an overall evaluation of the course.

1. 5. Based on your answers above, and any other factors you consider important, please provide an overall evaluation of the course.



Options	Score	Count	Percentage
Excellent	5	13	40.63%
Very Good	4	14	43.75%
Satisfactory	3	4	12.50%
Less Than Satisfactory	2	1	3.13%
Very Poor	1	0	0.00%
No Answer	NRP	0	0.00%

Statistics	Value
Mean	4.22
Standard Deviation	0.79

6. In what ways has this course made you think differently or more deeply? Please provide examples.

Comments
This course made me realize how Math is everywhere and really important, and I feel that I will actually use Linear Algebra in my life.
Interesting lessons
apply skills involving matrices to other subjects
The homeworks allowed for new, different applications of the knowledge we had learned in class
I have learned the concepts of linear algebra.
It is a traditional math course that requires high–quality logic thinking, so I think I gained something from that.
The course covered a style of math that I had never really covered before so I really had to adapt my knowledge for this class.
It's made me think of mathematical problems more logically
There are relationships between all of the different topics of the class, and the interconnectedness of the topics even for seemingly unrelated topics made me think differently about the other math classes I've taken and how eveyrthing is related even though they are broken up into different classes.
I liked when we talked about applications of linear algebra. A lot of the time I had a hard time doing all this really complicated stuff and not really knowing why I'm doing it.

7. What aspects of this course worked best to facilitate your learning?

Comments
HW assignments and practice tests helped with my learning
Discussions and structured class
office hours
The lectures! Professor Lemke–Oliver is a phenomenal lecturer and I've never learned as much from lectures as I have from his.
The textbook and lectures.
Homework practices helps me to understand the concepts.
I think the lectures were the best part of learning for this class.
the lectures
Reviewing homework problems in class.
Visuals!! I know Robert says he's not a very good artist (that's okay), but maybe find some pictures online/from the textbook? I'm a very visual person and that would've been super helpful.

8. What suggestions do you have for improving this course?

Comments
I hope the lecture is not so fast paced, I needed tutoring to fully understand and stay on top of the course work
Most of the homework is long, but busy work. It would be more engaging if it were shorter and more interesting
I wish the class was motivated more by geometry. I watched some videos online, and I think that is more intuitive for me. However, this is rather limited with a chalkboard. I can only see this being rightly accomplished in a room that has access to a projector. However, I think additional course materials could also be provided. I also had varying success with learning from the textbook. I wish I could provide concrete examples, however, I think it was just that the material was not motivated in an intuitive way.
less homework
Some of the homework assignments were a little tedious, and some had a lot of the harder questions towards the end of the section which made them stressful. Tweaking the assignments just a little is my only suggestion.
None
I feel like the course really failed to maintain my interest, since it was unclear from the beginning what exactly linear algebra was used for. Having a "bonus" review lecture towards the end of the course that finally gave examples of how linear algebra can be applied was extremely helpful in helping me conceptualize some more abstract concepts in real settings, but I feel like that sort of lecture should have been given earlier on to at least give the class some sense of purpose. An alternative to that would be to just present in–class examples that use real–life examples throughout the semester.
The class moves far to quickly with legitimately zero support of students or their learning. I understand there is a certain amount of material that has to be covered in the semester, but lectures are crammed with tons of material that is objectively difficult to grasp the first, even second time around, because of how abstract it is. If you really want to do well, you need to put in tons of hours outside of class and find extra resources online or tutors that explain things in different ways. The course needs to build up concepts better. Too many times I felt like it was assumed that discussions and terminology about vectors in abstract spaces that cannot even be defined were simply understandable like 1+1=2. This is not an easy course for anyone, I have a A– going into the final and I still found myself struggling constantly throughout the semester. Professors shouldn't assume it is just because they have a PhD.
The class time is too short for the professor to cover all the required materials. I wish we could have more class time, so the lecture speed could slow down a little. Otherwise, it is hard for me to comprehend the materials.
I think the HW schedule is a little too aggressive and could be relaxed a little bit.
there should be less homework
Homework should be worth more in the overall grade

Detailed Results of Instructor Evaluation

9. How would you rate the instructor's organization of each class?

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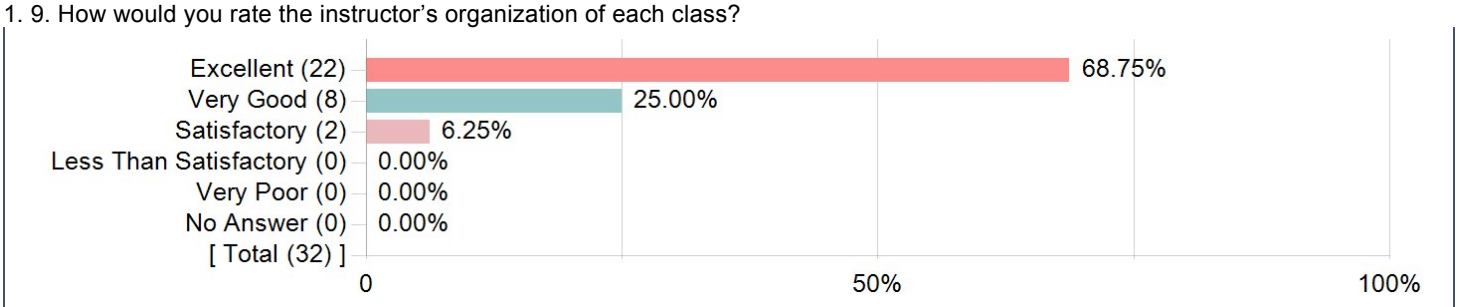
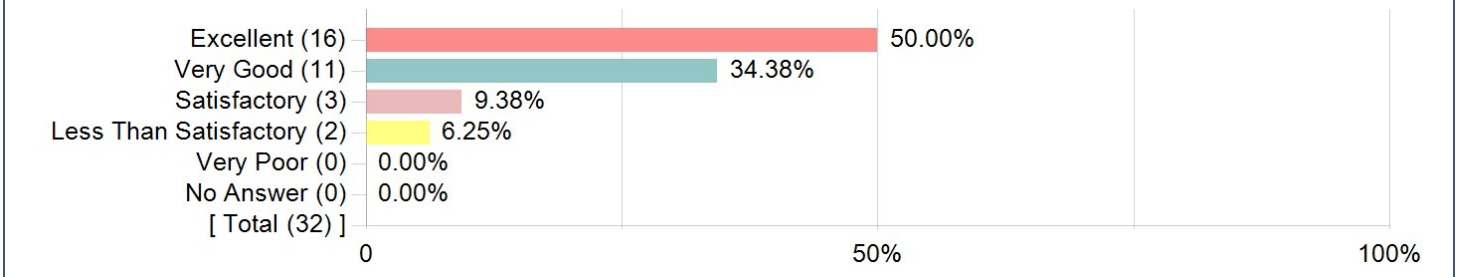


Options	Score	Count	Percentage
Excellent	5	22	68.75%
Very Good	4	8	25.00%
Satisfactory	3	2	6.25%
Less Than Satisfactory	2	0	0.00%
Very Poor	1	0	0.00%
No Answer	NRP	0	0.00%

Statistics	Value
Mean	4.63
Standard Deviation	0.61

10.How would you rate the instructor's success in explaining concepts and ideas?

1. 10. How would you rate the instructor's success in explaining concepts and ideas?



Options	Score	Count	Percentage
Excellent	5	16	50.00%
Very Good	4	11	34.38%
Satisfactory	3	3	9.38%
Less Than Satisfactory	2	2	6.25%
Very Poor	1	0	0.00%
No Answer	NRP	0	0.00%

Statistics	Value
Mean	4.28
Standard Deviation	0.89

11. How would you rate the timeliness of the instructor's feedback on assignments, exams, and other work?

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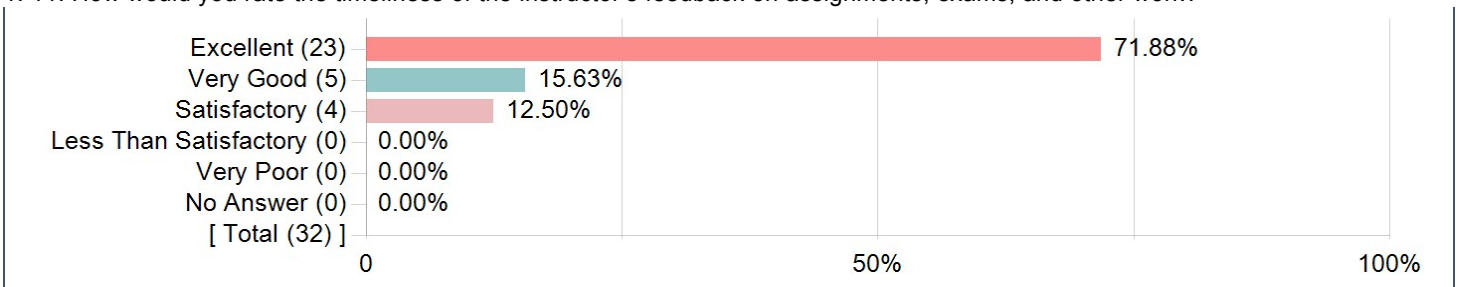
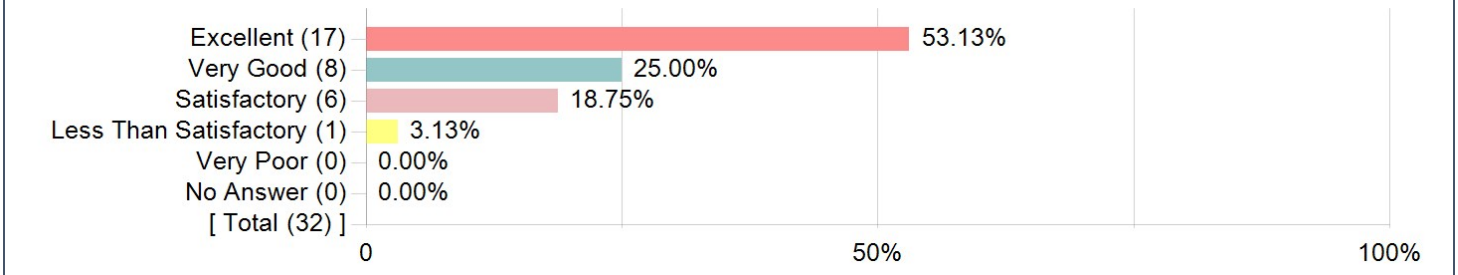


Options	Score	Count	Percentage
Excellent	5	23	71.88%
Very Good	4	5	15.63%
Satisfactory	3	4	12.50%
Less Than Satisfactory	2	0	0.00%
Very Poor	1	0	0.00%
No Answer	NRP	0	0.00%

Statistics	Value
Mean	4.59
Standard Deviation	0.71

12. How would you rate the usefulness of the instructor's feedback on assignments, exams, and other work?

1. 12. How would you rate the usefulness of the instructor's feedback on assignments, exams, and other work?

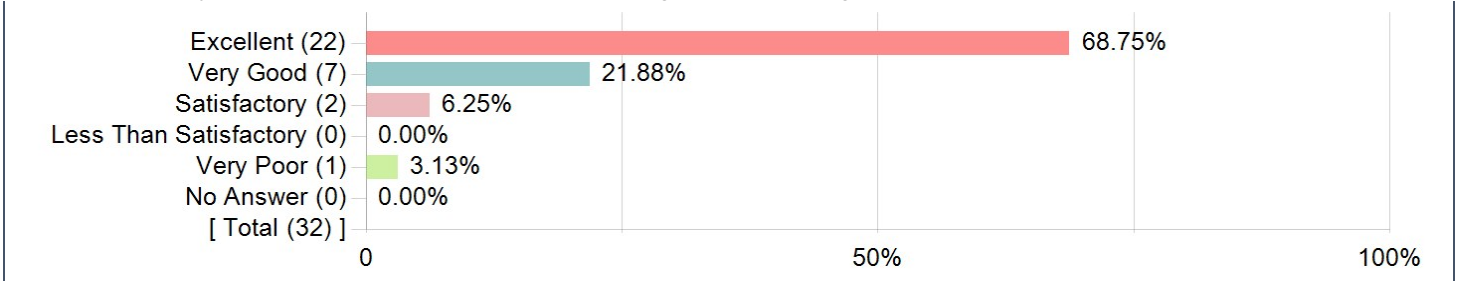


Options	Score	Count	Percentage
Excellent	5	17	53.13%
Very Good	4	8	25.00%
Satisfactory	3	6	18.75%
Less Than Satisfactory	2	1	3.13%
Very Poor	1	0	0.00%
No Answer	NRP	0	0.00%

Statistics	Value
Mean	4.28
Standard Deviation	0.89

13. How would you rate the instructor's success in creating and maintaining an inclusive class, respectful of all students?

1. 13. How would you rate the instructor's success in creating and maintaining an inclusive class, respectful of all students?

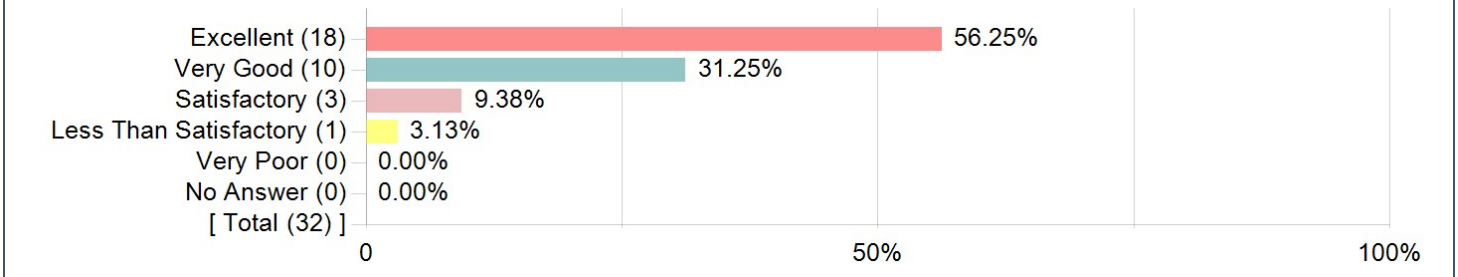


Options	Score	Count	Percentage
Excellent	5	22	68.75%
Very Good	4	7	21.88%
Satisfactory	3	2	6.25%
Less Than Satisfactory	2	0	0.00%
Very Poor	1	1	3.13%
No Answer	NRP	0	0.00%

Statistics	Value
Mean	4.53
Standard Deviation	0.88

14. How would you rate the instructor's communication with you outside of class?

1. 14. How would you rate the instructor's communication with you outside of class?

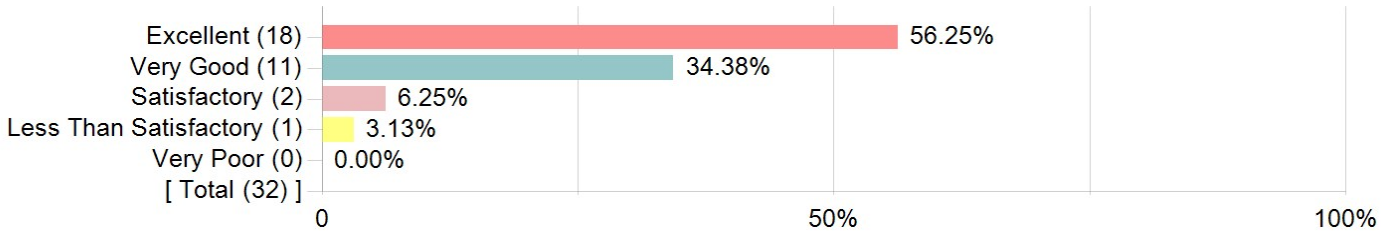


Options	Score	Count	Percentage
Excellent	5	18	56.25%
Very Good	4	10	31.25%
Satisfactory	3	3	9.38%
Less Than Satisfactory	2	1	3.13%
Very Poor	1	0	0.00%
No Answer	NRP	0	0.00%

Statistics	Value
Mean	4.41
Standard Deviation	0.80

15. Based on your answers above, and any other factors you consider important, please provide an overall evaluation of the instructor.

1. 15. Based on your answers above, and any other factors you consider important, please provide an overall evaluation of the instructor.



Options	Score	Count	Percentage
Excellent	5	18	56.25%
Very Good	4	11	34.38%
Satisfactory	3	2	6.25%
Less Than Satisfactory	2	1	3.13%
Very Poor	1	0	0.00%

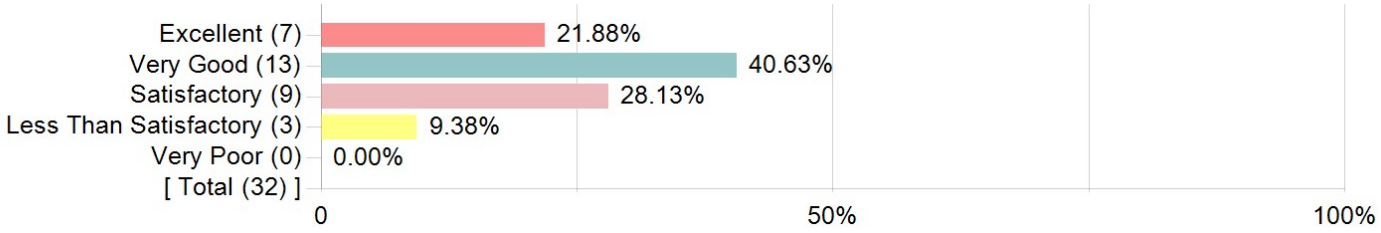
Statistics	Value
Mean	4.44
Standard Deviation	0.76

16. Please provide any additional comments regarding the instructor.

Comments
Robert is really helpful and spends time to explain concepts after class
Robert learned all of our names within the first two weeks, which is frankly, quite impressive, and makes for a more welcoming learning environment. I really appreciated this effort, his timeliness, and preparedness for class.
Professor Lemke–Oliver is probably my favorite professor this semester, and certainly my favorite in the math department! He explains things in lectures so well that there was never a moment where I felt confused. His charisma makes him incredibly approachable as well, and he always seemed very on top of everything. He clearly cares about his work and clearly wants the best for his students!
Really great at explaining difficult concepts and was very approachable for asking questions.
It is pretty shocking how many times I heard about a student going into his office asking for help because they are struggling and he suggests they drop the course, even take a W. A professor's job is to help students, identify where the gaps in their understanding are, and help the student come up with a plan on how to fill in those gaps. That is what we pay this school 70k a year for. Not to tell kids to "assess if you can grasp the rest of the material in the course, then decide if you can handle it" (and if not, quit). If I was in that position and was told those things, I would feel extremely discouraged, and it makes sense why so many people were. I tried to build a relationship with him, and felt a cold response that was not friendly or gave off an impression that he is enthusiastic about answering student's questions and making sure they understand. Basically, the vibe of the class is if you get it, you get it and good for you, and if you don't get it, tough luck guess you aren't smart. Eventually stopped going to office hours and getting a tutor on my parents' dime not affiliated with the university in order to get my questions answered and have someone actually try to explain something to me in more ways than one. He isn't a bad guy, but he just is not very nice and not helpful at all; his job ended when the lecture period was over.
Professor Lemke Oliver is an excellent teacher.
He is very knowledgeable about the topics but could maybe work on using less formal definitions when describing the concepts to help the students understand a bit better
no additional comments
Robert is the best! He is super knowledgeable and does a really good job explaining all of the concepts in class, and going over things again if students do not understand. He can tell when the class is confused even if no one directly asks a question. He structures the classes very well so 75 minutes of math does not feel overwhelming.
I know theorems can be very logical and detailed (especially linear algebra) but sometimes explanations would get very wordy and hard to understand. Maybe after each theorem, explain the main idea, conditions, exceptions, etc in a more organized and clear way

17. How would you rate the space in which instruction occurred (classrooms, laboratories, etc.)?

1. 17. How would you rate the space in which instruction occurred (classrooms, laboratories, etc.)?



Options	Score	Count	Percentage
Excellent	5	7	21.88%
Very Good	4	13	40.63%
Satisfactory	3	9	28.13%
Less Than Satisfactory	2	3	9.38%
Very Poor	1	0	0.00%

Statistics	Value
Mean	3.75
Standard Deviation	0.92