



Rutgers University Student Instructional Rating
Fall 2020

Echeverria Echeverria, Mariano - ME498

Multivariable Calc - 01:640:251:H1, H2, H3

Survey Form: *Standard SIRS

Enrollment: 94

Responses Received: 68

Special University-wide Questions for Fall 2020

Due to the challenges created by the Covid-19 pandemic, three additional questions were added to the Fall 2020 survey.

Weight of responses: 1=SD (Strongly Disagree), 2=D (Disagree), 3=N (Neutral), 4=A (Agree), 5=SA (Strongly Agree), Resp=Number of Student Responses

Weighted Means: Section, Course, Level, Department

	SD	D	N	A	SA	Resp	Section	Course	Level	Dept
Given the content and level of the course, the course workload was manageable.	0	4	6	37	21	68	4.10	3.43	3.84	3.81
The course site used for this course, whether in Canvas, Sakai, or Blackboard, was well organized.	0	1	4	26	37	68	4.46	3.60	3.94	4.06
The instructions given for assignments, exams, quizzes, and other course activities were clear and easy to understand.	0	1	3	24	39	67	4.51	3.38	3.75	3.84

University-wide Instructor Questions

Weight of responses: 1=SD (Strongly Disagree), 2=D (Disagree), 3=N (Neutral), 4=A (Agree), 5=SA (Strongly Agree), Resp=Number of Student Responses

Weighted Means: Section, Course, Level, Department

	SD	D	N	A	SA	Resp	Section	Course	Level	Dept
The instructor Mariano Echeverria Echeverria was prepared for class and presented the material in an organized manner.	0	0	2	8	58	68	4.82	4.00	4.16	4.22
The instructor Mariano Echeverria Echeverria responded effectively to student comments and questions.	0	0	1	9	57	67	4.84	3.92	4.10	4.21
The instructor Mariano Echeverria Echeverria generated interest in the course material.	0	0	3	11	54	68	4.75	3.75	3.91	4.02
The instructor Mariano Echeverria Echeverria had a positive attitude toward assisting all students in understanding course material.	0	0	1	7	60	68	4.87	4.04	4.21	4.32
The instructor Mariano Echeverria Echeverria assigned grades fairly.	0	0	2	12	53	67	4.76	3.88	4.05	4.15
The instructional methods of Mariano Echeverria Echeverria encouraged student learning.	0	0	2	12	54	68	4.76	3.74	3.91	4.02

Teaching Effectiveness

Weight of responses: 1=P (Poor), 2=F (Fair), 3=A (Average), 4=G (Good), 5=E (Excellent), Resp=Number of Student Responses

Weighted Means: Section, Course, Level, Department

	P	F	A	G	E	Resp	Section	Course	Level	Dept
I rate the teaching effectiveness of the instructor Mariano Echeverria Echeverria as:	0	0	1	12	55	68	4.79	3.70	3.90	4.03

University-wide Course Questions

Weight of responses: 1=SD (Strongly Disagree), 2=D (Disagree), 3=N (Neutral), 4=A (Agree), 5=SA (Strongly Agree), Resp=Number of Student Responses

Weighted Means: Section, Course, Level, Department

	SD	D	N	A	SA	Resp	Section	Course	Level	Dept
I learned a great deal in this course.	0	0	2	18	47	67	4.67	3.68	3.95	3.88
I had a strong prior interest in the subject matter and wanted to take this course.	1	2	14	28	23	68	4.03	3.65	3.66	3.37

Course Quality

Weight of responses: 1=P (Poor), 2=F (Fair), 3=A (Average), 4=G (Good), 5=E (Excellent), Resp=Number of Student Responses

Weighted Means: Section, Course, Level, Department

	P	F	A	G	E	Resp	Section	Course	Level	Dept
I rate the overall quality of the course as:	0	1	3	24	40	68	4.51	3.11	3.62	3.66

What do you like best about this course?

These comments are intended for all instructors.

Comments
There were many new ideas and interesting visualizations.
It is challenging but at the same time, it's so simple and easy to follow. It all kinda falls into place towards the end and can often be so satisfying to do the problems.
I liked my professors (Echverria and Tsipenyuk) the best.
The material is very interesting
I liked the instructor best, followed by the subjects taught.
I liked how engages Professor Echeverria was and how enthusiastic he was to help us understand the course material.
Prof Echeverria
Manageable workout while still learning a lot, flexible due dates, fair grading, sufficient resources to help prepare for exams
I loved learning more calculus through this course.
It was very interesting!!!
It is a very interesting class
The number of resources made available were incredible.
I find math really interesting
The professor's lectures and explanations of calculus concepts.
Professor and TA were both good, and I liked MyLab for the homework because it gave you solved examples alongside the problems.
I feel like it prepared me for more complex mathematical concepts
I liked that quiz problems were from the textbook sometimes. It forced me to do practice from the textbook, which prepared me for exams. I also liked the study guides posted on the Canvas. They were easy to follow and concise.
I liked the subject matter
I liked the way the course was taught even in a remote setting, and how easy it was to learn the content.
I liked how the class had multiple smaller exams; it felt like if I messed up on one exam, I was able to make up for it on the next one.
The teachers were enthusiastic and generated maintained my interest for the material.
I liked the distribution of work and the course material was very useful.
The teacher made it interesting and fun.
It's math. I love math plain and simple
the material
I liked the lectures because they were really informative and helpful for studying.
Moved at a good pace
There were many interesting concepts, especially in the last few weeks of the course.
This course encompassed a lot of physics concepts, which is obviously very valuable for engineering students.
I like the way the material was organized and presented, it felt simpler because we were taught in a very thorough manner. Additionally, the professor was very fair.
It was easy to ask questions
Professor Echeverria made the course what it was. He was great.
The content was fun.
I like best how Echeverria handled the online coronavirus situation by posting all of his lectures and lessons online. The homework was informative and helpful on MyLab and it was straight forward as well.
Both teachers take time to answer all questions which makes everything very clear.
The lectures
Professor
The course was well taught and the professors did their best to make it fun.
It is challenging but rewarding of hardwork. Getting an A is not impossible

If you were teaching this course, what would you do differently?

These comments are intended for all instructors.

Comments
I wouldn't change much, besides reminding students to do relevant book problems a bit more often. It's great that the book problems are not mandatory (as we have lives outside of calculus) but they are indeed good practice and should be encouraged more.
Since there are 5 exams, it would be better if the final weren't cumulative
I would add more specific examples in the lectures rather than just teach the general ideas because not everyone is really able to learn and apply general information in specific scenarios.
There was often material on the homework that was not addressed in class (e.g. mass, moment, inertia)so I had to teach myself which was frustrating at times.
If I were teaching this course, I would offer more review sheets with worked out solutions and correct answers to further stimulate intellectual development.
less midterms
It becomes difficult to keep all equations and processes in mind as the course progresses. I would suggest assigning more cumulative practice problems so the student keeps all past knowledge in mind as the course progresses
I would try to streamline the live lectures a little more. We lingered on questions for a bit too long and got a bit distracted.
make recitation more interactive
Nothing really.
Slightly more focus on more complex examples of problems
please make changes to the syllabus more clear! The syllabus was changed at least 3 times unannounced. Also, for exams, please do not curve some and then not curve others, because it is a bit confusing. Exam questions should be separated into smaller pieces so that students do not lose so many points on a large piece of the exam for simple mistakes.
I would have given partial credit for the first exam (the online courses have been difficult enough). Furthermore, I would allow students to keep the extra credit they earned on their quizzes
I would try to cover more of the textbook content, some sections I felt like we did not cover some things I had to learn through the textbook.
Overall, the class needs better organization. By nature of the course material, there are a lot of different formulas that students are often confused with. For instance, there are two ways of computing the line integral, depending on whether the function in question is a scalar field or a vector field, but this difference wasn't made clearly enough.
nothing
Nothing
N/A
I would reduce the number of midterms
I would maybe change how much my lab homework is assigned.
Nothing much, maybe make HW optional
I would give a bit more time on the exams, like 5 more minutes, since I do not do as well under time pressure.
If I was teaching the course I would have a greater emphasis on example problems that are similar in difficulty to the exam.
I would change the frequency of midterms as it felt a bit overwhelming sometimes to keep up.
I would do harder problems as examples of the concepts taught
If I were the math department, I wouldn't have done the exams the way they did... FIVE exams, and the first one was a disaster. Then Proctortrack got hacked. And now I suspect people are cheating on the exams anyway so.
nothing
I would have liked more in-depth explanations of earlier material, such as linear algebra, tangent vectors, etc. Linear algebra had a big role in the class, so learning a little bit more and easing into it would have helped.
Less midterms
I would focus a bit more on more fringe examples similar to those on the exams.
Nothing

In what ways, if any, has this course or the instructor Mariano Echeverria Echeverria encouraged your intellectual growth and progress?

These comments are unique to the instructor Mariano Echeverria Echeverria.

Comments
An excellent professor and really helped me learn a lot of new information despite being in a virtual environment. Always ready to help out and explain new concepts. He even reads the subReddit so he is very in tune with the students. He is very happy to move deadlines back if the work is too much. He even gives bonuses on the quizzes and helps us by telling us which general questions will be put on the quiz so we can study them and practice them. Overall, he is an amazing person and an amazing teacher and I will miss him as my professor next semester.
Professor Echeverria was very attentive and interesting as a professor. He made sure to keep lectures interesting by bringing in props, etc. and he always made sure to respond to students questions and make sure the student understood the content.
Professor Echeverria has been a very supportive and endearing instructor this semester. He explains well in class and does sufficient examples. He is also very approachable and will explain and reexplain until the students get it. He also truly genuinely cares for his students and want them to grow and learn.
This is one of the best instructors you can possibly find. He generated interest in not only the subject but also many other subjects like general relativity, special relativity, string theory, and quantum physics.
Professor Echeverria was very quick to respond to any questions or issues I or any of the other students had. He also responded with great enthusiasm, helping us learn the material and be interested in it.
Very informative and absolutely one of the greatest professors I had.
He was so passionate about math and it was clear that he was not here to assign grades but actually have learn and I respect that a lot.
Professor Echeverria brilliantly integrated demonstrations into the lecture, sort of like Professor Walter Lewin.
He was very thorough in his explanations and answered all questions promptly
I thought that he was a really effective instructor which used examples that I could relate to to explain calculus concepts and he also gave us context for calculus concepts.
Overall course may not function so well, but he you can tell he puts a lot of effort into teaching his sections – provides lots of material for students and shows that he cares about their progress.
The professor was very approachable and was very helpful whenever questions were asked. He was also flexible about deadlines for assignments around exams.
We were able to grow intellectually because we didn't have to worry about strict deadlines or tedious assignments. Mariano was extremely relaxed with deadlines which made the environment much more comfortable.
Prof Echeverria was awesome! He was very positive, always looking for us to understand the content. Loved his videos on youtube and other resources
He brought a lot of enthusiasm to the class and gladly answered all questions.
Prof. Echeverria not only taught the material, but connected it to additional topics in physics, engineering, and everyday life. His kindness, both in the way he conducted himself during class and in his policies on homework and exams, were much appreciated, especially during the current pandemic.
Prof Echeverria had a great personality towards teaching and he made math lectures more entertaining than they should've been.
Professor Echeverria gave real life physics applications of the material to help students understand
He encouraged us to watch fun math-related Youtube videos by putting them on Canvas. I really enjoyed that!
Professor Echeverria helped me understand the material better
Responded to questions remarkably well.
He has increased my interest in mathematics by introducing many interesting concepts in calculus that I never thought of!
He was an amazing teacher. He really cared about the course material and was very approachable after class. He also was able to provide different options for students, meaning that he posted lecture information and youtube videos that corresponded with the lecture information.
Professor is very kind and willing to help all students learn the material promptly and effectively. Very understanding and thoughtful, and made me feel confident in what I was learning.
Mariano is the goat. he made me want to take a byrne seminar that he is teaching next semester though unfortunately it is closed to registration.
Professor Echeverria is a FANTASTIC professor. He really made the class great, even in such awful circumstances. You should hire him permanently, he is the best professor I have ever had.

Comments
The extra videos and activities made me want to learn more about the subject, the videos especially introduced me to interesting applications of what we were learning.
Professor Echeverria recorded all of his lectures and many lesson videos on YouTube to allow us to learn on our own during the coronavirus lockdown. This alone was an excellent choice as it gave students the freedom to learn either live on Zoom with him or on their own time.
He provided fantastic energy and explained topics in an intuitive way that made sense. Though this was not 291, he still covered basic topics of linear algebra in ways that were clear and concise. As we progressed through the Calculus lessons, those too were taught excellently.
Brought in real life examples to see the application of the math.
This Professor is amazing and really cares about the success of his students.
He provided excellent youtube videos that helped with understanding the material being taught.
Mariano's passion for math and calculus really motivated me to do well in this course.
The optional videos and reading assignments made the content more interesting! :)

Other comments or suggestions:

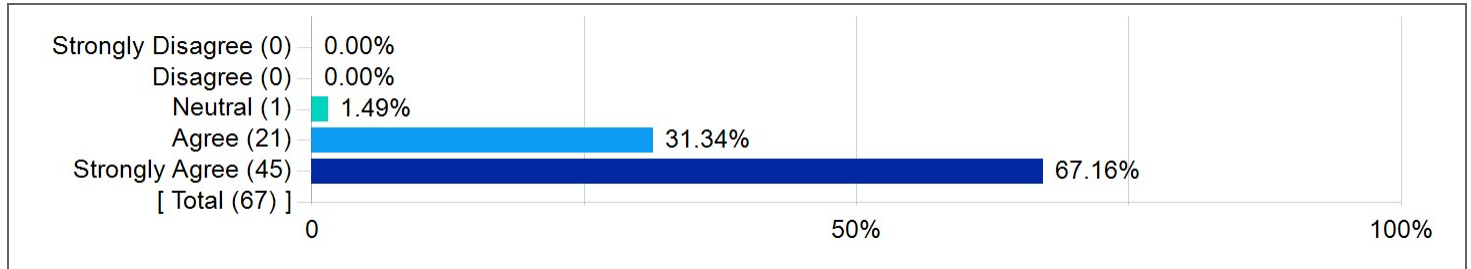
These comments are intended for all instructors.

Comments
Please continue the policy of not using ProctorTrack. Is better for the students and we are less nervous about the tests since it wasn't used. We are also happier about the course.
I am highly disappointed in the math department itself. With the failure of the first (of five!) midterms, they took an extensive amount of time to respond to students in order to cancel it. There was no official cancellation of the exam until the next day. They then decided to compensate for the lost exam by implementing a quiz EVERY WEEK, including weeks with the remaining four midterms. The communication between the department and students did improve slightly when Professor Echverria began making the announcements.
Additionally, the syllabus for this class was changed drastically at least three times after the add-drop period as well as changes to the exam formats. The syllabus varied from five exams to two then to four with grade weights of other assignments varying as well. This is not acceptable especially after the add-drop period. Students choose to sign up for classes based on the released syllabus and students rely on the syllabus to plan their schedules. Next, the initial exams graded on answers only, essentially punishing all students severely for not being perfect. To address the students concerns for this system the exams began including two sections (of four) which granted partial credit. This is much more acceptable, but why did it take student intervention for this?
From my experience this semester (Fall 2020), it feels that the math department has little to no concern for the student perspective on how the calculus III classes are executed.
No other comments except the instructors were great for the honors sections. However, I've heard some very bad things about the other instructors.
The amount of work required for problems on the exams (given the time constraints) is kind of ridiculous. Overall, the exam logistics for this course were just awful every single time.
None
Mariano's positivity and dedication to his students really kept me going through the semester, especially in this online environment.
N/A
The exams for this course started off very rough, as we had problems with proctortrack. This led to a change in the syllabus which did create a bit more stress on the students I believe. If the exams were evened out with another type of assignment that would help.
I just feel like a zoom call during the exams would've done the trick.
N/A
Grading system is quite unfair. I also think that students should not have to pay for MyLab (other professors give me a code). The exams should also start earlier in the day.
Exams were too difficult and not enough time was given.

Questions added for: *Standard SIRS

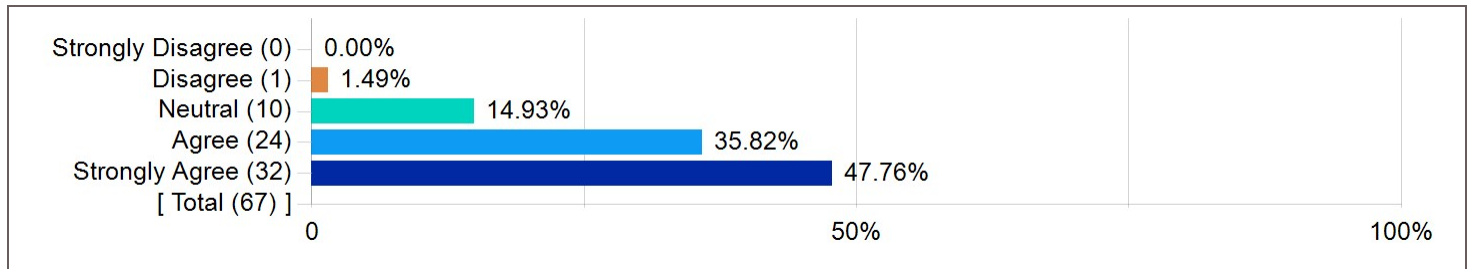
Weighted Means: Section, Course, Level, Department

The lecturer posted content that helped me understand the topics covered in the online lectures.



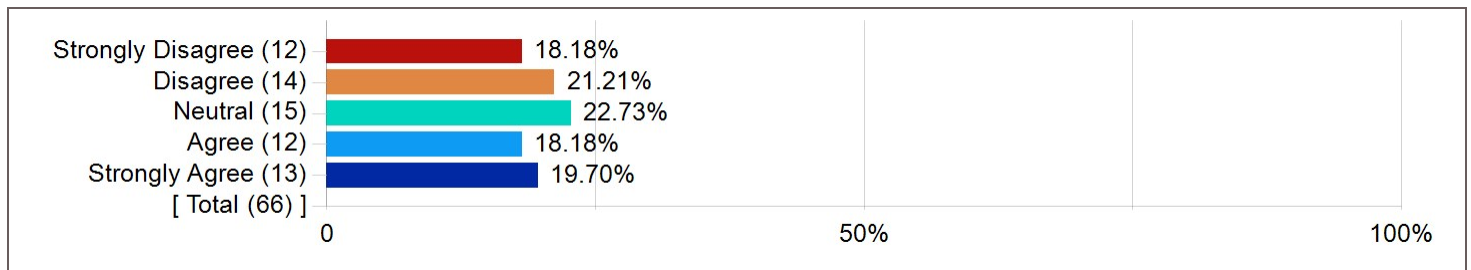
Section	Course	Level	Dept
4.66	3.68	3.91	3.97

The recitation/workshop instructor posted content that helped me understand the topics covered in the online recitations/workshops.



Section	Course	Level	Dept
4.30	3.53	3.75	3.85

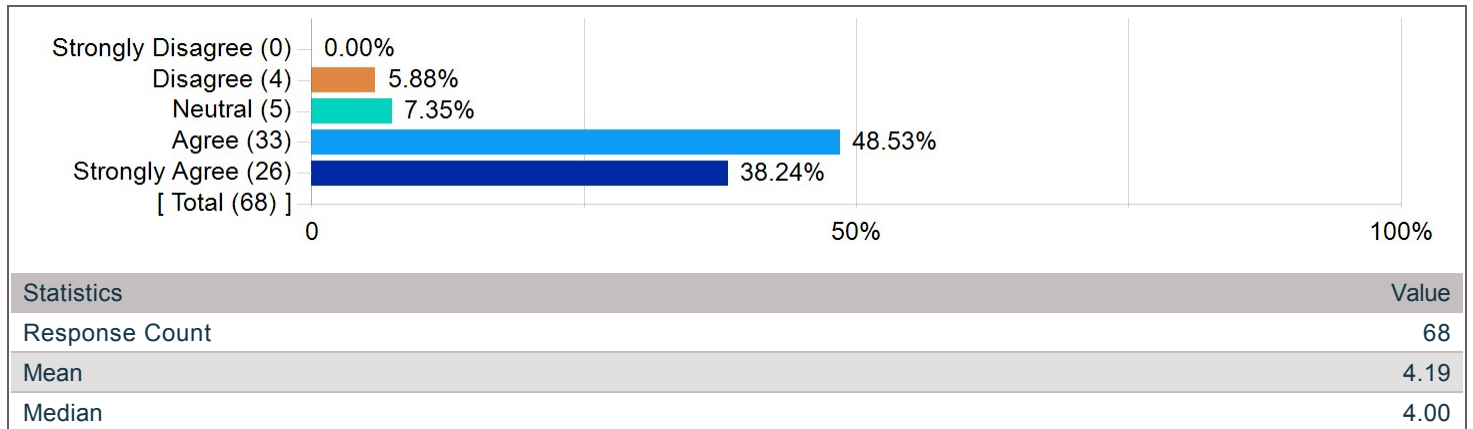
I was glad to take this course in an online format; for me it is the preferred format for this course.



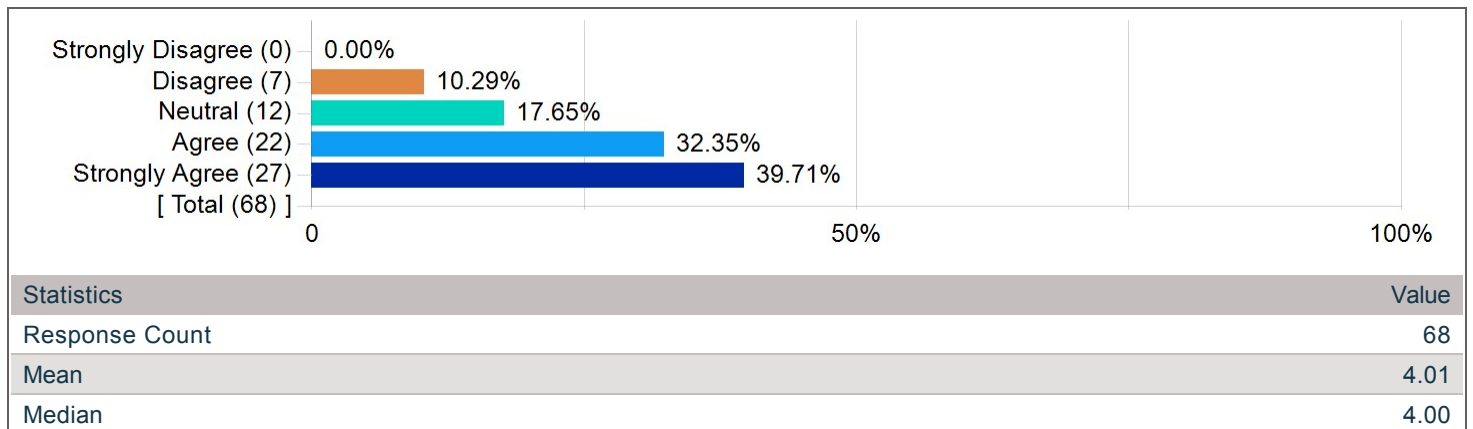
Section	Course	Level	Dept
3.00	2.43	2.75	2.78

Questions Chosen by Instructor

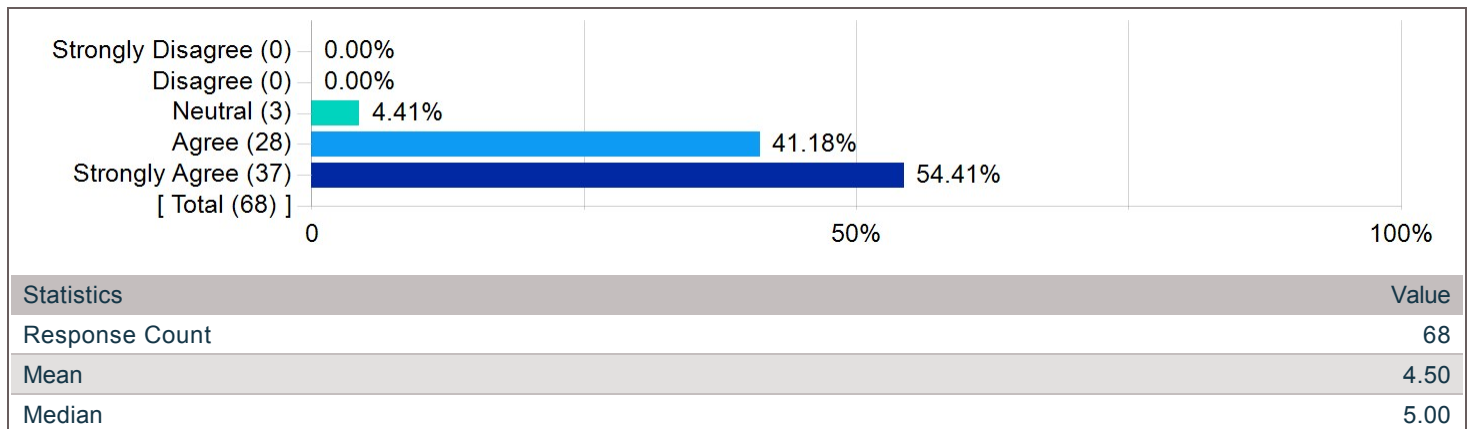
I would recommend this course to other students.



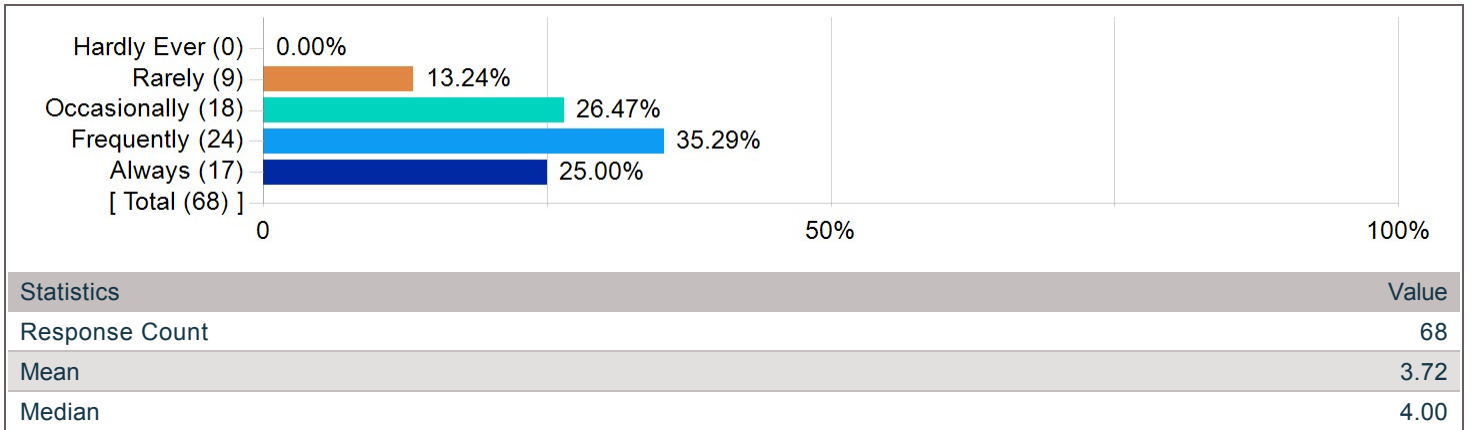
My experience in this course has encouraged me to continue taking courses in this subject.



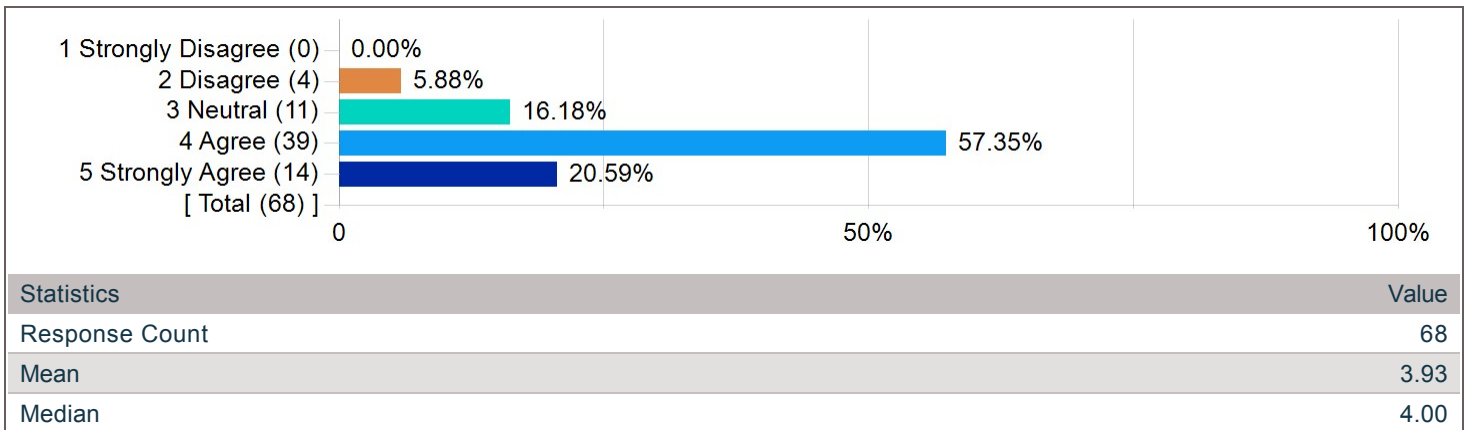
The course was intellectually stimulating.



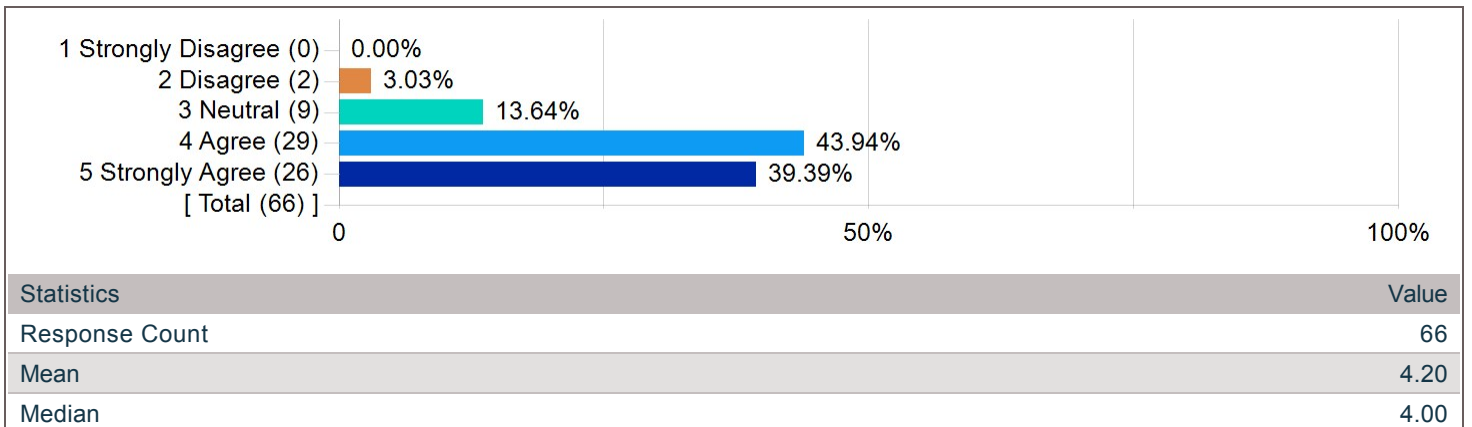
How often did you use the recommended texts?



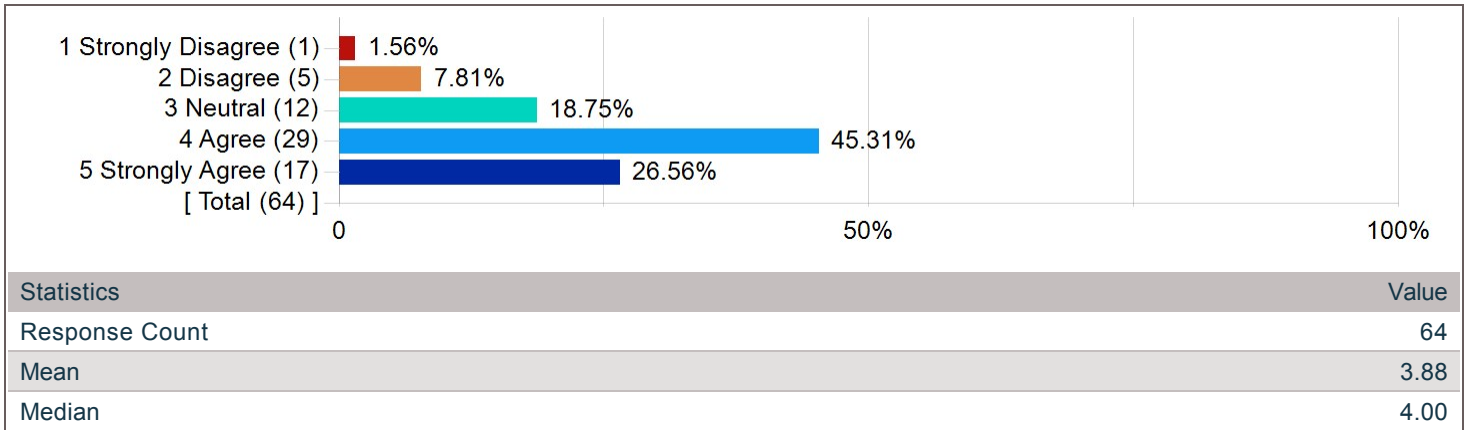
Course assignments (e.g. quizzes, tests, essay topics, or midterm exams) accurately reflected material taught.



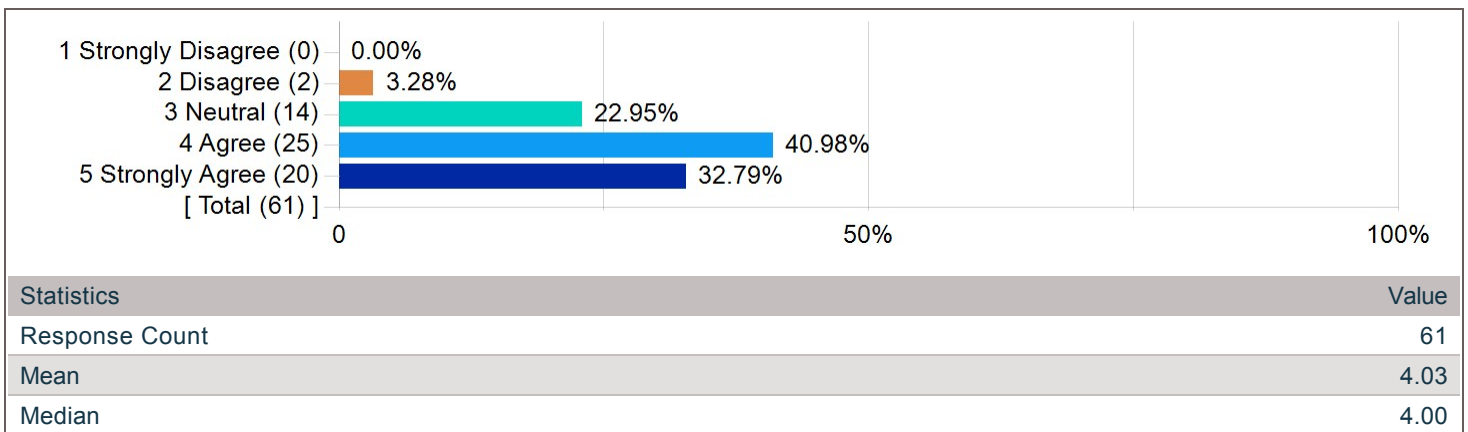
The instructional technologies were effective.



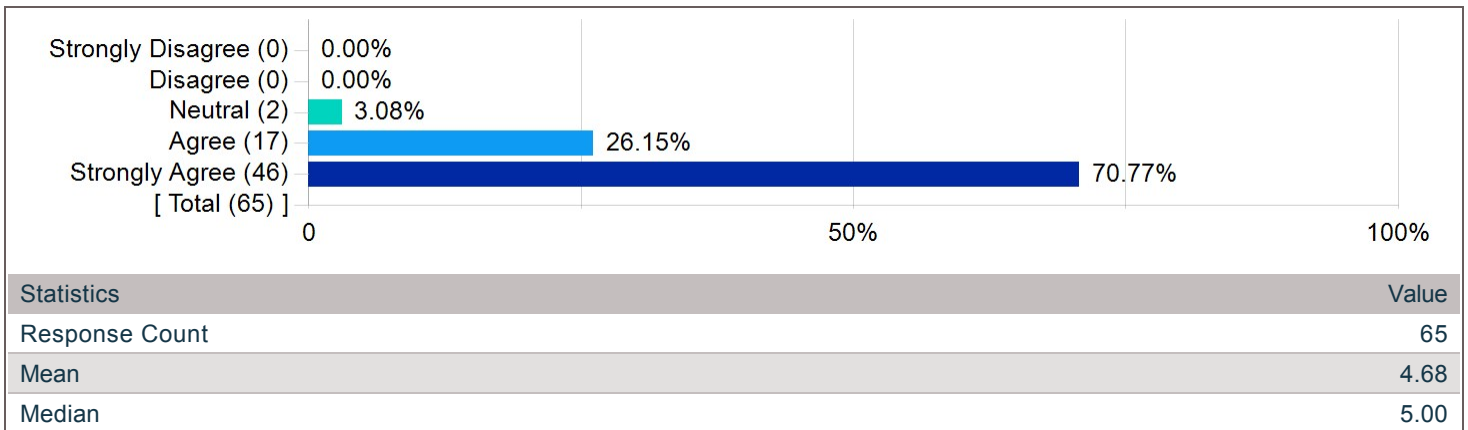
The classroom environment supported my learning.



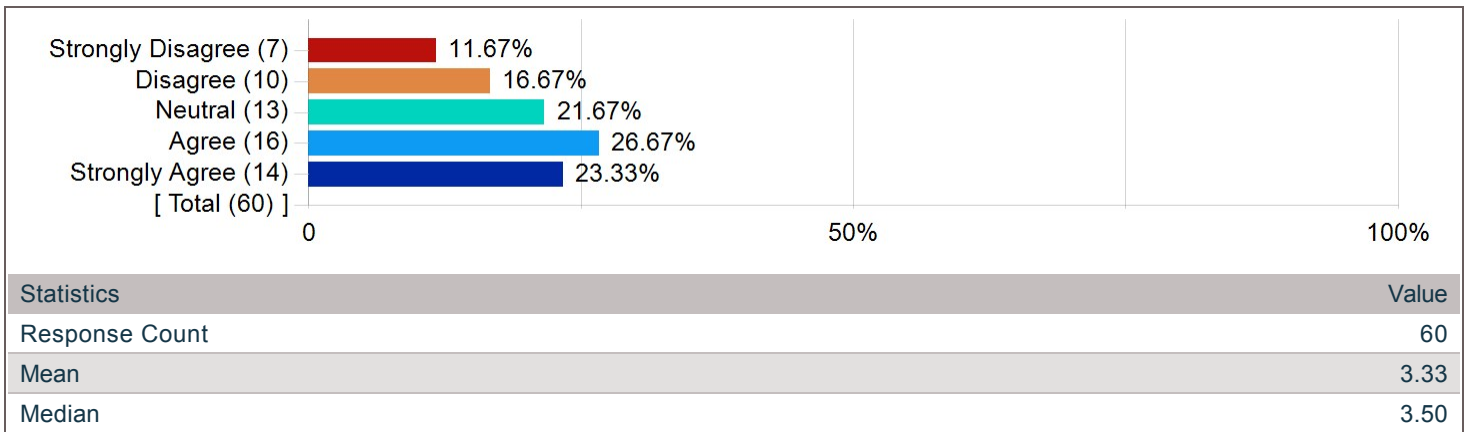
Class discussions were helpful.



The instructor Mariano Echeverria Echeverria used real world examples to explain course content.



I learned as much in the remote learning environment as in the face-to-face environment.



What were some of the positive aspects of taking this course online?

Comments
I could personally manage my time and tasks. Also travel time was almost zero (disregarding internet speed and whatnot)
More office hours
I put for the last question because remote learning suits my learning style better so I actually learned far more in a remote learning environment than I ever did face-to-face. Taking the course online meant shorter exams than usual and you were given more freedom to learn whatever way you learned best. You also aren't forced to go to lectures, so I didn't go to them because I learn better from the textbook. I don't learn better from all textbooks but the book used for the course was the gold standard of textbooks and exceptionally well created.
Taking the course online allowed me to work on my own schedule, making it easier to complete work and study for the class.
Work on our own pace, open note tests, easier to learn
The flexibility of the class since they were recorded, you could watch them any time.
I could rewatch lectures
It was easier to review course material.
It was easy to follow the notes the professor wrote down.
Taking this course online forced me to truly take an interest in the subject to perform well in the class
There were added levels of convenience.
I didn't have to stick to a tight schedule- If I wanted to miss a lecture there were videos and pdf documents I could use to make up the material
I thought it was easy to listen to lectures on my own time and pace my learning according to how easy or difficult I found certain concepts to be.
Open note exams?
Lecture material could be re-watched if desired.
-freedom to go back and watch lecture videos on my own time
It was easier to ask questions to the professor than when in a normal setting.
Since all lectures were recorded, I always knew that if I missed something that the professor said, I could re-watch the lecture afterwards.
Everything was very easy to access
Not having to travel campus to campus between sandwiched classes
Being able to rewatch lectures if happened to miss class was nice.
Live lectures
It was more accessible, in my opinion.
Tests were open notes, scheduling was easier.
I could have my questions answered much more quickly on the chat than otherwise in person.
He was able to give us options in how to view lecture material.
I think the increased amount of resources, ie recorded lectures, supplemental videos, and office hours were very helpful.
It was easy to see what Echeverria was writing on his iPad.
I don't know of any positive aspects of online courses. Professor Echeverria did a good job at making it engaging.
it took up less of my time because as I would not be dorming anyways so I would have to commute.
The positive aspects of learning online were doing it on my own time and being able to rewatch whichever lesson I needed more help with.
Testing was relatively easy.
working at this class at my own pace
gained a bit more freedom, but it wasnt enough to balance out the negatives of online learning
Easier to access lectures and course materials.
Convenience
I could skip the lecture on a day when I was not feeling too well and watch the recorded lecture the next day instead.

What were some of the negative aspects of taking this course online?

Comments
There might have been less engagement than normal simply because the class was online and not in person.
The math department's failed attempt to prevent cheating by implementing a highly invasive program which was known to fail with large groups and did fail (proctortrack).
The department's decision to have five midterms and a final rather than the regular two midterms and one final. As well as a quiz every week when the first exam failed.
The department's lack of communication/poor communication (though this may not be a result of moving online).
The department's lack of forethought to how online courses should be planned versus in-person classes.
lack of in person communication with the instructor
Taking the course online meant that technical difficulties could occur and interfere with learning or assessments, however, those are very rare or negligible.
I think that being in person could have helped in this class given that a large part of the material was based in three dimensions, which would have been easier to comprehend in person.
Harder to pay attention, examples are hard sometimes, no group feedback
Having any class online takes away from the personal and social aspects of meeting people, especially in the Honors Program and engineering majors so that was a bummer
No real class discussions, easier to get distracted
It was harder to pay attention and to make full use of office hours.
Felt a bit disconnected because it was through zoom.
It was difficult to manage my time and keep track of all assignments
No face to face interaction. Things to transmit as well over a screen. The first month was a learning process for everyone (remember that failed test?). Adds levels of difficulty and reduces any real excitement.
its so much harder to learn over zoom
I didn't think there were any negatives really.
Mavrea was at her worst.
Sometimes questions are harder to ask through a Zoom chat box
–added stress when taking exams with technical difficulties –exams being late at night –difficulty paying attention on zoom (zoom fatigue)
Sometimes my internet would cut out and I would miss part of the lecture, but that's really more of my problem.
Its very difficult to get help outside of class and office hours.
Learning was a little bit difficult but not too bad.
It was hard to learn what is more of abstract math through an online setting. Trying to conceptualize material behind a screen is quite tough, especially when the professor tries to explain it physically but its not the same
N/A
It was harder to visualize certain things.
Connection issues.
The course was a bit less engaging, but that holds true for online learning in general.
It was difficult to feel a connection with the other students, so all the questions would be with the professor only which made asking questions a little awkward.
It was a bit difficult to visualize a few of the more conceptual topics
At first it took getting used to having to use different programs for homework, notes, exams, and lectures. It was annoying having to log in to a virtual textbook and homework thing though that is a minor inconvenience
It's very isolating and hard to pay attention. There's a LOT more work. Like, a LOT more. (5 exams!!!) People cheating makes it so that nobody honest can succeed. I probably would've gotten an A in this course normally, but I might get a C because of cheaters.
Sometimes the notes he wrote went too fast because he was writing on a small iPad screen instead of a larger whiteboard.
In person classes would have been more enjoyable and let the enjoyment of the class shine through better, but understandably Rutgers did what it had to do during the pandemic.
Harder to ask questions and feel involved in the learning. Some students would dominate discussion and control pace of learning

Comments
because they were already fluent in the material.
I believe this class would have been so much better in person
Less motivation to succeed and personal connection to other students and the professor.
Lack of in person connection
None