



Rutgers University Student Instructional Rating

Spring 2020

Half of semester taught remotely due to Covid-19

Echeverria Echeverria, Mariano - ME498

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

Survey Form: *Standard SIRS

Enrollment: 50

Responses Received: 36

The Student Instructional Ratings Surveys should be considered within the context of the global health emergency of Spring 2020. The considerable changes in instructional and pedagogical formats necessitated by the COVID-19 pandemic imply that caution should be exercised when comparing these results to other instructors or terms. The course, level, and department means reflect the current circumstance and are still provided to allow a comparative measure within the conditions of the semester.

Rutgers University has decided that instructors have flexibility in choosing how or whether to include the Spring 2020 SIRS results in promotion and rehiring materials. Details may vary by campus, rank, or position; please confer with your department chair for more information.

University-wide Questions on Move to Remote Learning Due to Covid-19 Response

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
Despite the abrupt change to remote instruction due to the Covid-19 disruption, the instructor Mariano Echeverria Echeverria offered an effective learning experience in this course.	0	0	2	6	28	36	4.72	3.87	4.20	4.20

Note: A low numerical rating for this question indicates the students do not perceive a negative impact on their learning.

	SD	D	N	A	SA	Resp	Section	Course	Level	Dept
The move to remote instruction, due to the Covid-19 response, adversely impacted my learning in this course.	2	8	7	15	4	36	3.31	3.93	3.52	3.63

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	0	6	29	35	4.83	4.08	4.34	4.33
The instructor Mariano Echeverria Echeverria responded effectively to student comments and questions.	0	0	1	1	34	36	4.92	3.99	4.30	4.29
The instructor Mariano Echeverria Echeverria generated interest in the course material.	0	0	2	8	26	36	4.67	3.81	4.09	4.11
The instructor Mariano Echeverria Echeverria had a positive attitude toward assisting all students in understanding course material.	0	0	0	0	36	36	5.00	4.13	4.40	4.39
The instructor Mariano Echeverria Echeverria assigned grades fairly.	0	0	0	7	28	36	4.80	3.94	4.26	4.22
The instructional methods of Mariano Echeverria Echeverria encouraged student learning.	0	0	0	5	31	36	4.86	3.83	4.16	4.14

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	0	6	30	36	4.83	3.80	4.18	4.17

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	1	13	22	36	4.58	3.95	4.20	4.14
I had a strong prior interest in the subject matter and wanted to take this course.	0	3	9	11	13	36	3.94	3.71	3.70	3.50

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	0	3	14	19	36	4.44	3.53	4.04	3.96

What do you like best about this course?

These comments are intended for all instructors.

Comments
This course was shaped around the student experience.
Excellent explanation of concepts, good overall speed regarding covering material, exams came at sensible times, not too long after content stopped being covered, and exam contents were made clear, so I knew what to expect.
I liked the attitude of the Professor. He seemed very interested in teaching and took great care to see if we understood our lessons. I appreciate all the effort he took.
I liked the subjects I learned in the course. This was a subject I learned a little about in high school but had always wanted to take it. I think it was taught very well by my professor and his enthusiasm really made me want to learn even more.
With consideration to the overall course, I liked how Professor Echeverria and Professor Perelman were both willing to answer any questions involved, while also proactively trying to get all of the students to understand the material.
I enjoyed the focus on the material rather than the competition for grades
It was an absolute pleasure and delight to learn from Professor Echeverria and Professor Perelman! They were wonderful!
the course was fun, there are many new techniques of calculus taught which is very useful in physics and finance.
I liked the teaching style of the professors in this course. It was organized and made the material much easier to understand.
I personally was very interested in the course material itself, but I also like the teaching style of Professor Echeverria and his passion for Multivariable Calculus. I also enjoyed doing the Maple Labs.
I liked the enthusiasm of the professor and the TA. They clearly care a lot about their students and want them to succeed.
It's very engaging
teachers were very friendly and helpful and knowledgeable

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

These comments are intended for all instructors.

Comments
I would go in depth in the material, applications, and proofs. As an honors course, I expected to go beyond what was given in the textbook. The class was a little slow, I wanted to be challenged a bit more.
I would have more review on how to use Maple.
Sometimes, I felt that the lectures spent too much time discussing conceptual ideas, while some is definitely helpful, too much can have an adverse impact.
I guess the only small thing I have to "complain" about is the homework. It wasn't too hard or anything like that. There was just some disconnect between what we were learning and what he was teaching. So for example, in a recent homework, I had to calculate flux when I wasn't taught about flux. Provided I could learn in the feedback given in the homework but maybe there could have been a more direct connection.
N/A
Nothing
N/A
The course does not do a good job at providing a mathematical education, but provides a good engineering basis. What I mean is the concepts in multivariable calculus are very important for mathematical maturity, but they are not appropriately taught. The content is way too vast for one semester of teaching, and hence the concepts are rushed over, with only an emphasis on problem solving. Students can do problems correctly, but actually understanding the derivations of the formulas of vector calculus is not emphasized upon. What I think rutgers should do is have two different classes of calc 3– one for engineers and one for mathematicians. For math majors like me, it is not satisfactory to simply solve problems by plugging in the formula(s). We need to know how the formulas are derived, and the mathematical reasoning certain concepts. For example, it is taught that the gradient vector is orthogonal to any surface of the form $f(x,y,z)=0$, however, there is no proof given. In fact, after doing some research on my own, I understood that the proof of this statement is crucial to understanding what differentiation in three variables is all about. The professor tries his best to explain, but the curriculum is designed in a way to promote only plug and chug. This is not how math should be taught. Again, I do want to emphasize that the professor does an amazing job at teaching the course materials, but the curriculum itself is not mathematically nourishing.
I would spend more time on the material after the first midterm because that material was harder to understand.
I feel like more time could have been spent on the material at the end, and less in the beginning. I think most of us already knew basic ideas about vectors from physics/linear algebra/high school
I wouldn't do much differently, but maybe I would make the online Sapling assignments due at regular intervals correlating to when the material is taught, so that it encourages students to keep pace.
I would hold the lectures live online instead of prerecording them because I personally just learn better with a live lecture. Of course, I would learn even better in an actual classroom with a big chalkboard but this semester was different and provided all of us many challenges.
I would put a little more emphasis on cylindrical/spherical coordinates

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
Extra videos showing real-life applications of the concepts we're learning, opportunities for further comprehension.
The Professor presented information in a multitude of ways. Especially in this course, visualizing helped me understand the information, and he provided multiple visual aids. Calc 3 is just a combination of salad bowls and ice cream cones.
Dr. Echeverria always showed great enthusiasm in the material and used props in his lessons.
Greatly appreciated the computational, and physical examples for explaining concepts, and ideas were always broken down into their most basic components for easy understanding.
Professor Echeverria explains the lessons very nicely. He is a great teacher.
I could tell right away that he was excited and enthusiastic about the subject matter. From the first class to even today in online lectures, one can see that he genuinely cares. That sort of attitude only serves to encourage learning in others.
With Professor Echeverria, his willingness to hold Q and A style classes felt refreshing for it offered to resolve my discrepancies with the material, while it also validated my abilities with performing Multivariable Calculus.
Always made sure to throw in little outside applications for the stuff we were learning which was eye opening and very insightful, especially with physics stuff. Very kind and helpful at office hours and gave quick responses to questions. Really stepped up when COVID started.
He presents information very well. He is also very patient, and he explains the content nicely and clearly, so we have a complete understanding of the material.
the professor answers and encourages out of the box questions, and has the knowledge to answer these questions.
He is always helpful and will answer all questions promptly. He is also very understanding and genuinely wants his students to be successful in this course. He made the remote learning experience enjoyable and effective.
I especially appreciated his use of visual aids like arrows to represent vectors and umbrellas to represent surfaces. It helped me understand the material better.
I like how Professor Echeverria provides us with many youtube videos about interesting applications of what we are learning.
He's a phenomenal professor and gets me genuinely excited about the material. I wish him all the best

Other comments or suggestions:

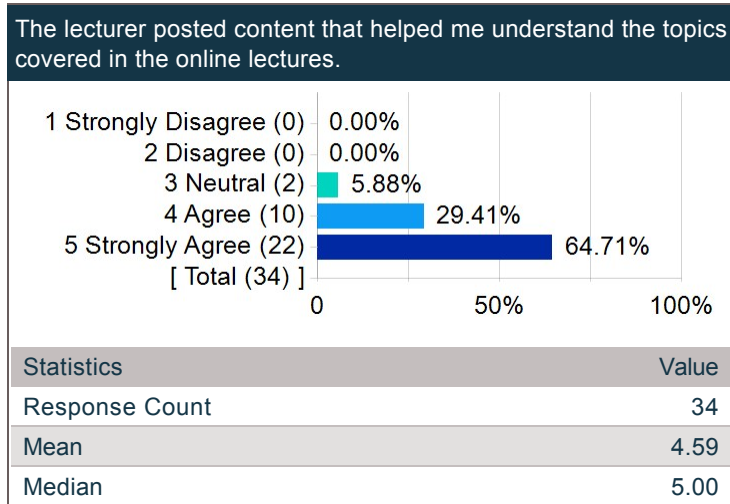
These comments are intended for all instructors.

Comments
I thought this course was effective in its teaching methods while providing the student a balanced workload.
I really liked how the homeworks had unlimited tries. Very often, the knowledge that my answer can penalize my score would discourage me from trying new approaches. But the fact that there was no penalty allowed me to try and try again.
N/A
I enjoyed the classes very much! Thank you!
The class is very inviting and allows passionate students to perform well.
Even though I feel like I started struggling a lot more in this course once we had to learn from home, I was really happy with the teaching effectiveness and attitudes of the professor and the TA.

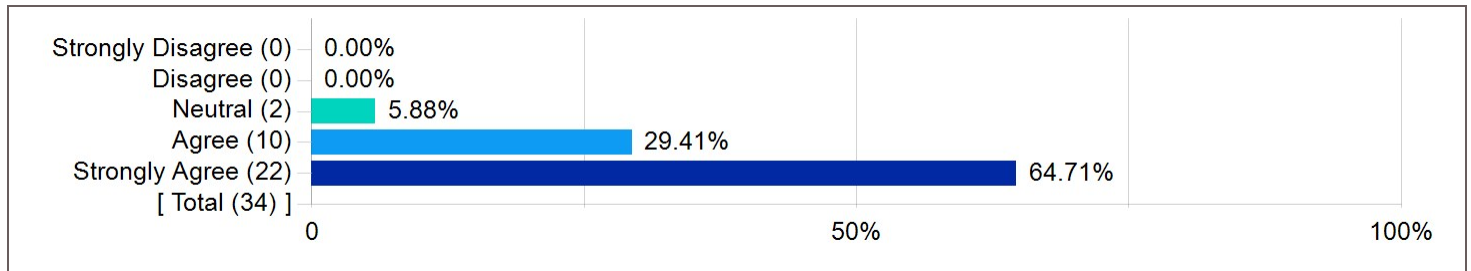
Questions added for: *Standard SIRS

Weighted Means: Section, Course, Level, Department

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

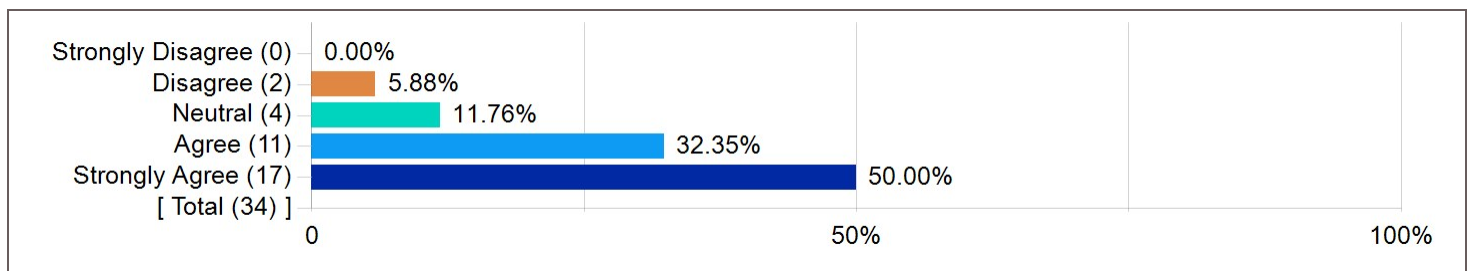


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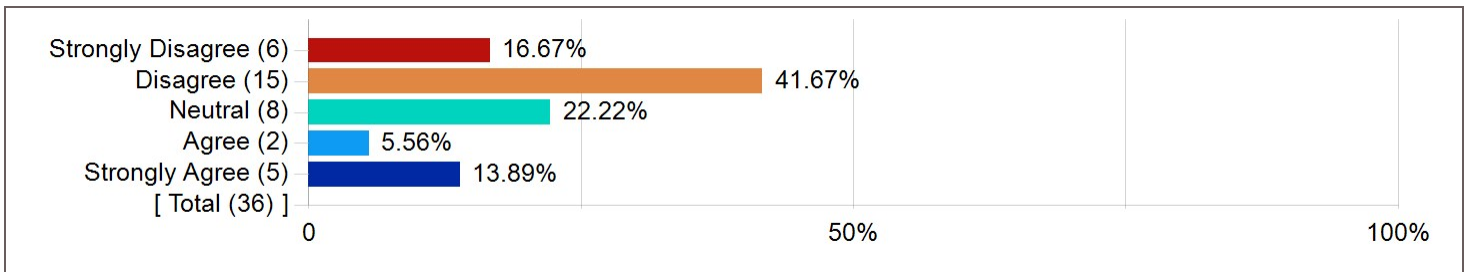
Section	Course	Level	Dept
4.59	3.78	4.16	4.19

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



Section	Course	Level	Dept
4.26	3.63	4.01	3.95

I found it easier to participate in this course once it became an online course.



Section	Course	Level	Dept
2.58	2.47	2.94	2.92