

# Individual Report for MATH\_220-1\_73: Single-Variable Diff Calculus (Apurva Nakade)

Project Title: **Course and Teacher Evaluations CTEC Fall 2021**

Courses Audience: **38**

Responses Received: **24**

Response Ratio: **63.2%**

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## Report Comments

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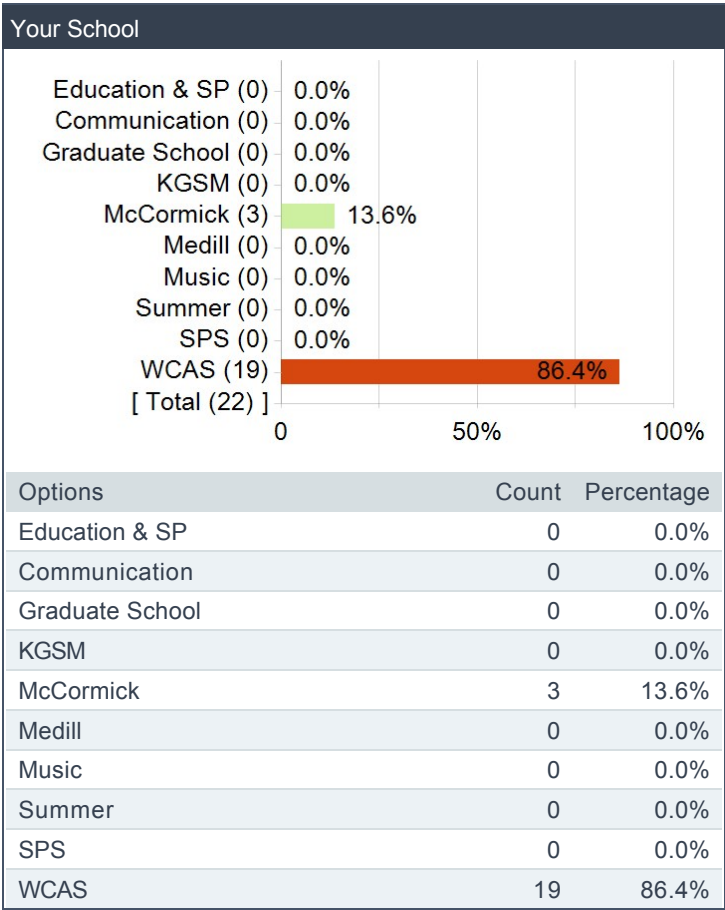
Northwestern University

Course Evaluations

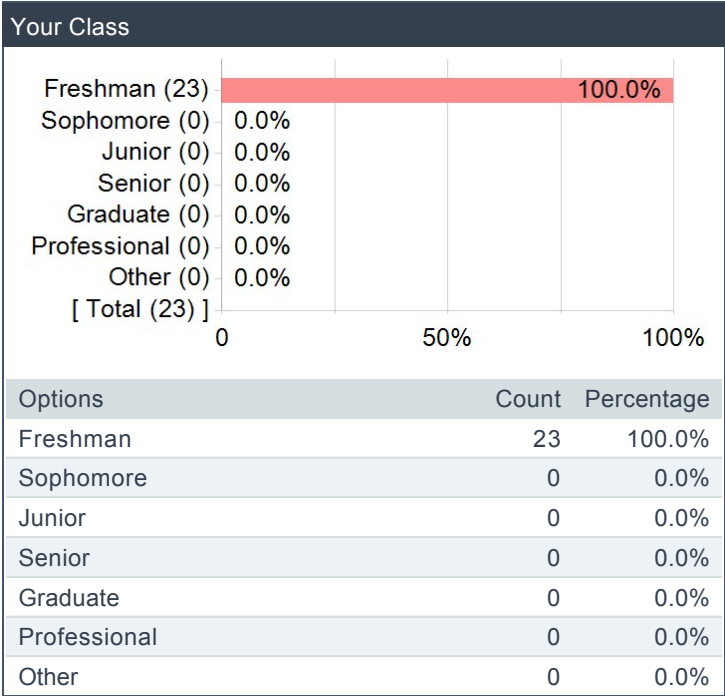
Instructor	Course
Apurva Nakade	MATH_220-1_73: Single-Variable Diff Calculus

DEMOGRAPHICS

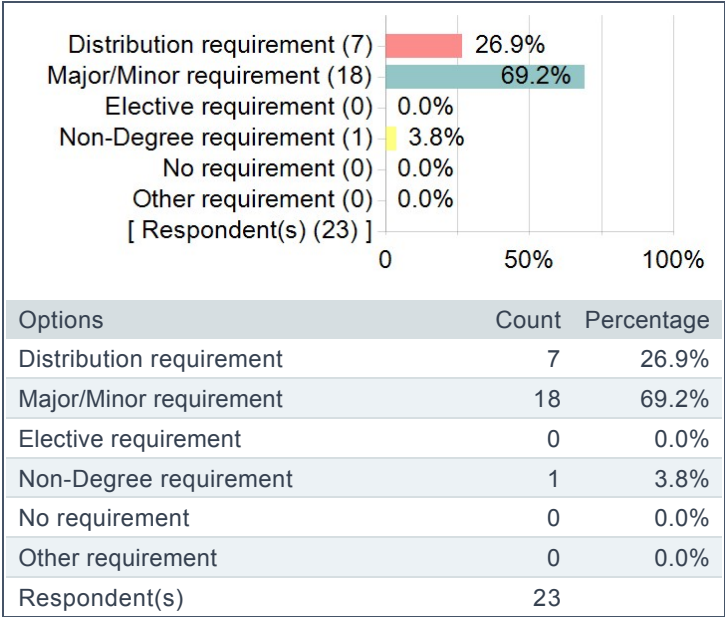
Your School



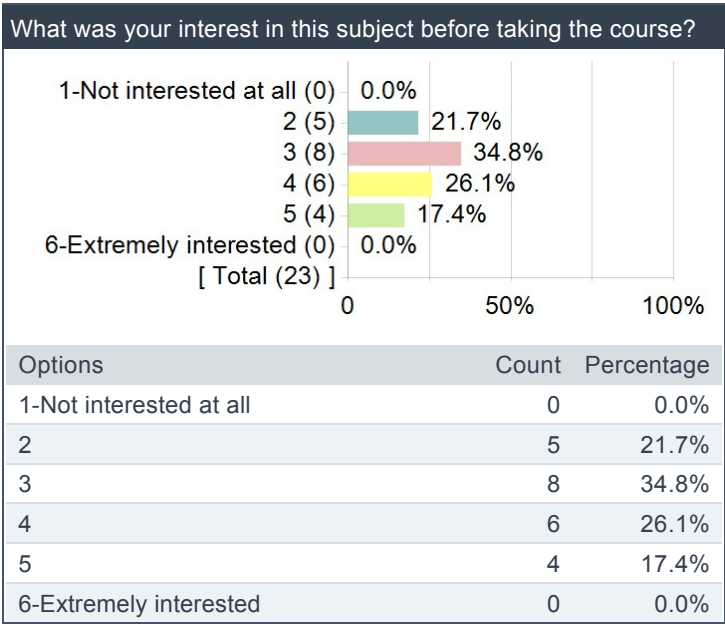
Your Class



What is your reason for taking the course? (mark all that apply)

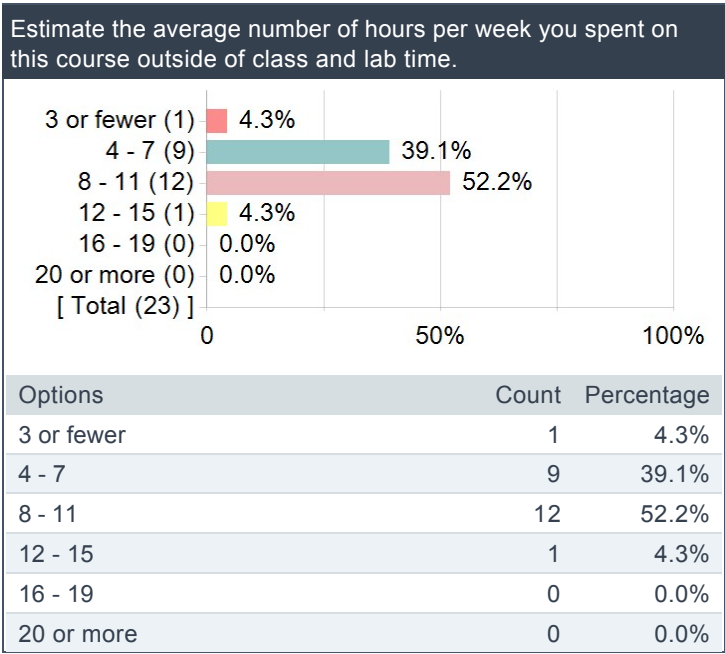


What was your Interest in this subject before taking the course?



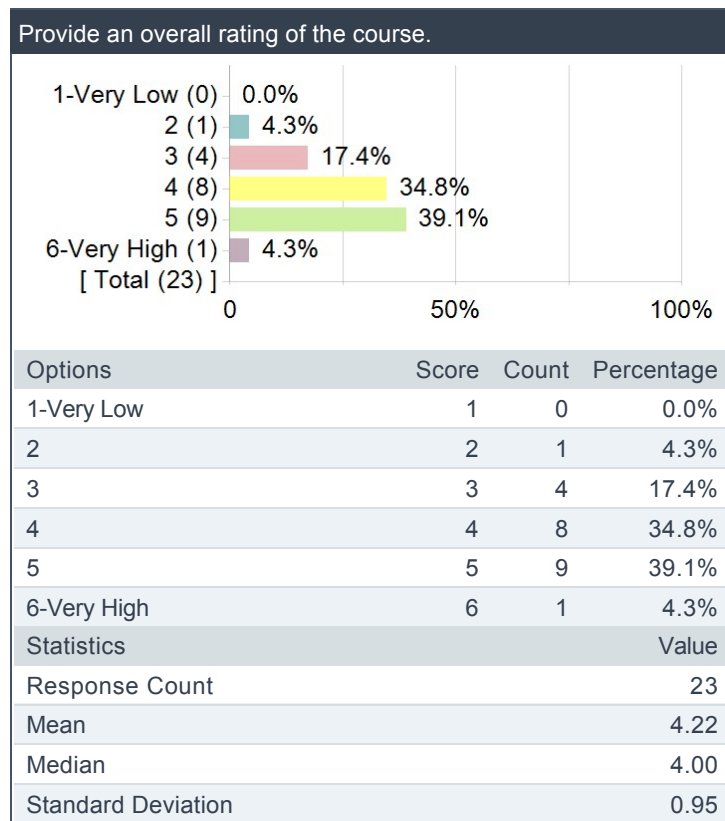
TIME-SURVEY QUESTION

Estimate the average number of hours per week you spent on this course outside of class and lab time.

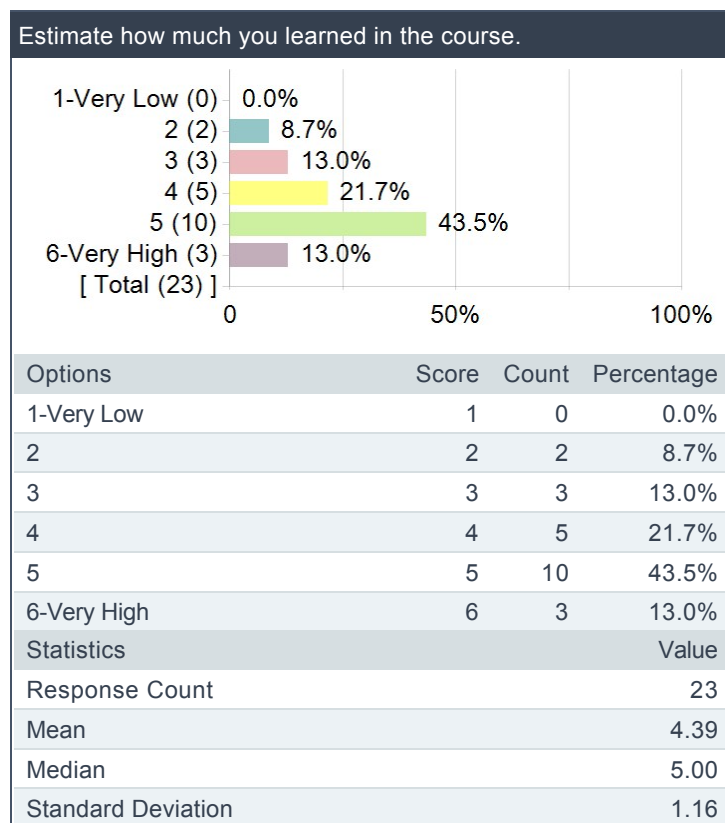


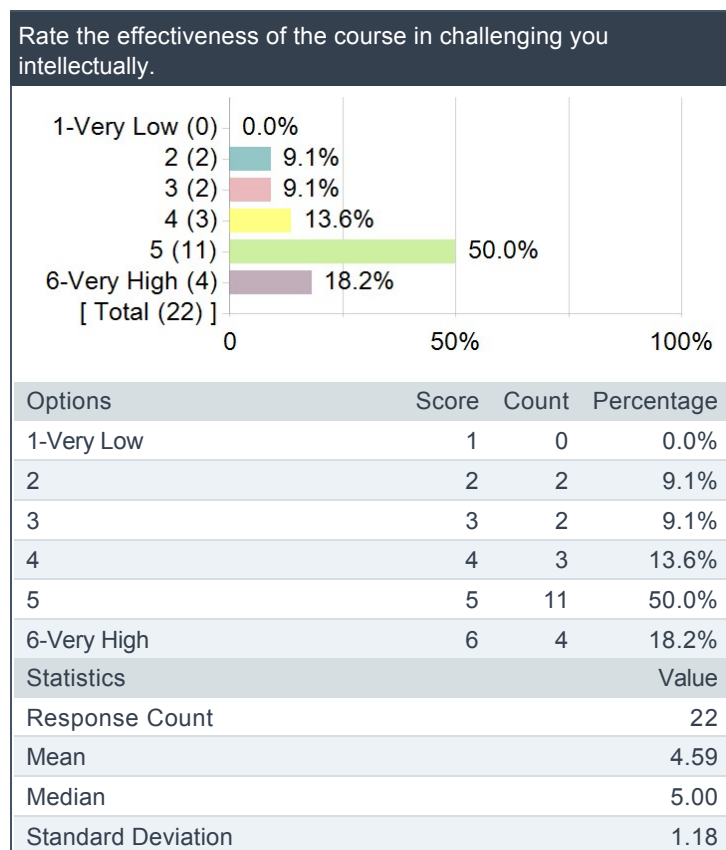
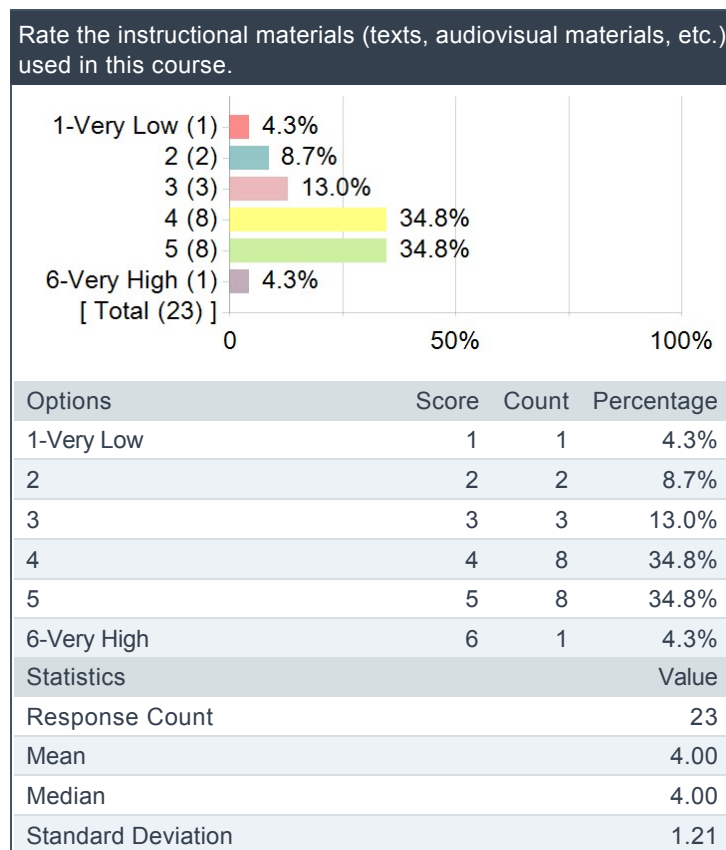
## COURSE QUESTIONS

Provide an overall rating of the course.



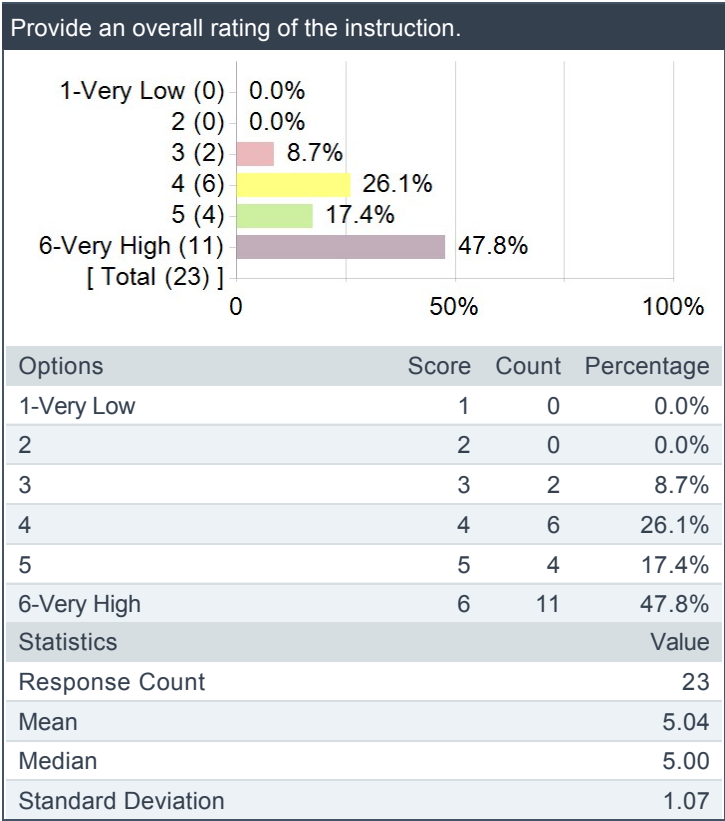
Estimate how much you learned in the course.



**Rate the effectiveness of the course in challenging you intellectually.****Rate the instructional materials (texts, audiovisual materials, etc.) used in this course.**

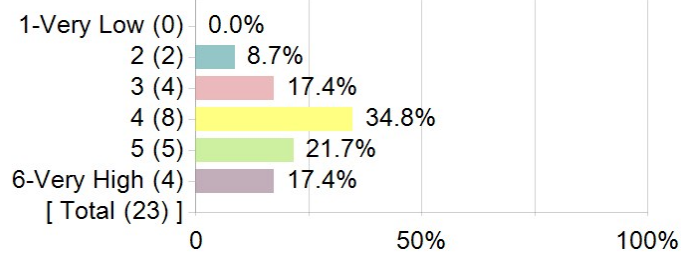
INSTRUCTOR QUESTIONS

Provide an overall rating of the instruction.



**Rate the effectiveness of the instructor in stimulating your interest in the subject.**

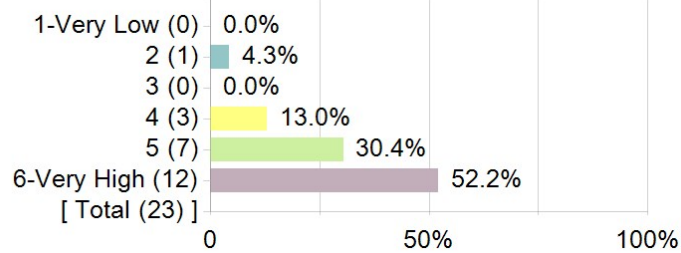
Rate the effectiveness of the instructor in stimulating your interest in the subject.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	2	8.7%
3	3	4	17.4%
4	4	8	34.8%
5	5	5	21.7%
6-Very High	6	4	17.4%
Statistics			Value
Response Count			23
Mean			4.22
Median			4.00
Standard Deviation			1.20

**Rate how well prepared the instructor was for the class.**

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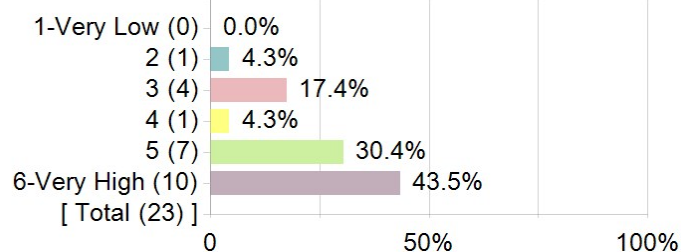


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	1	4.3%
3	3	0	0.0%
4	4	3	13.0%
5	5	7	30.4%
6-Very High	6	12	52.2%
Statistics			Value
Response Count			23
Mean			5.26
Median			6.00
Standard Deviation			1.01



**Rate the effectiveness with which the instructor communicated course content and ideas.**

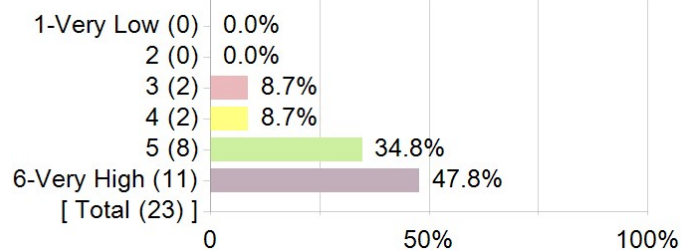
Rate the effectiveness with which the instructor communicated course content and ideas.



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1-Very Low	1	0	0.0%
2	2	1	4.3%
3	3	4	17.4%
4	4	1	4.3%
5	5	7	30.4%
6-Very High	6	10	43.5%
Statistics			Value
Response Count			23
Mean			4.91
Median			5.00
Standard Deviation			1.28

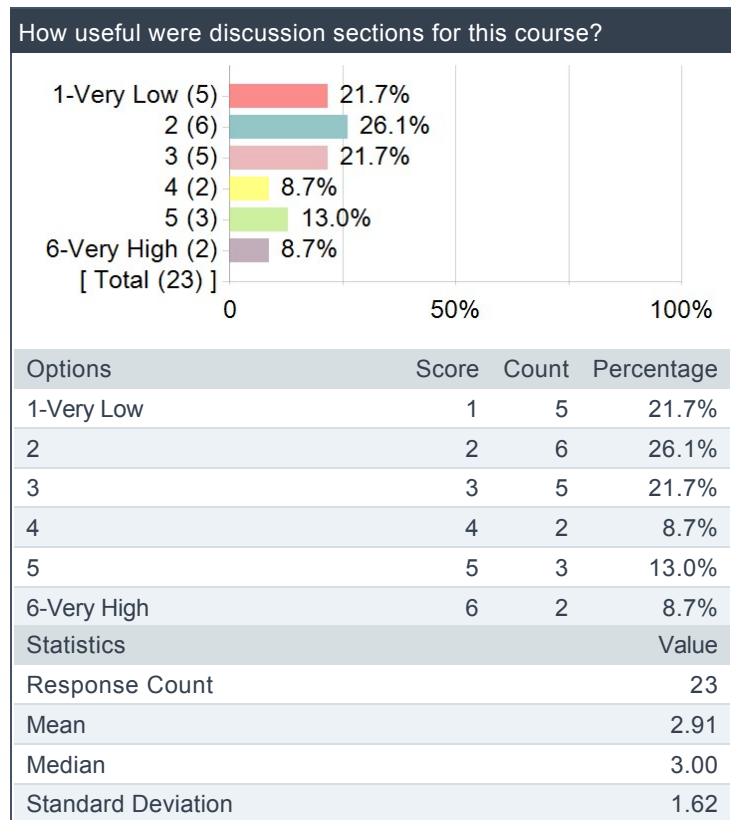
**Rate the instructor's enthusiasm in teaching this class.**

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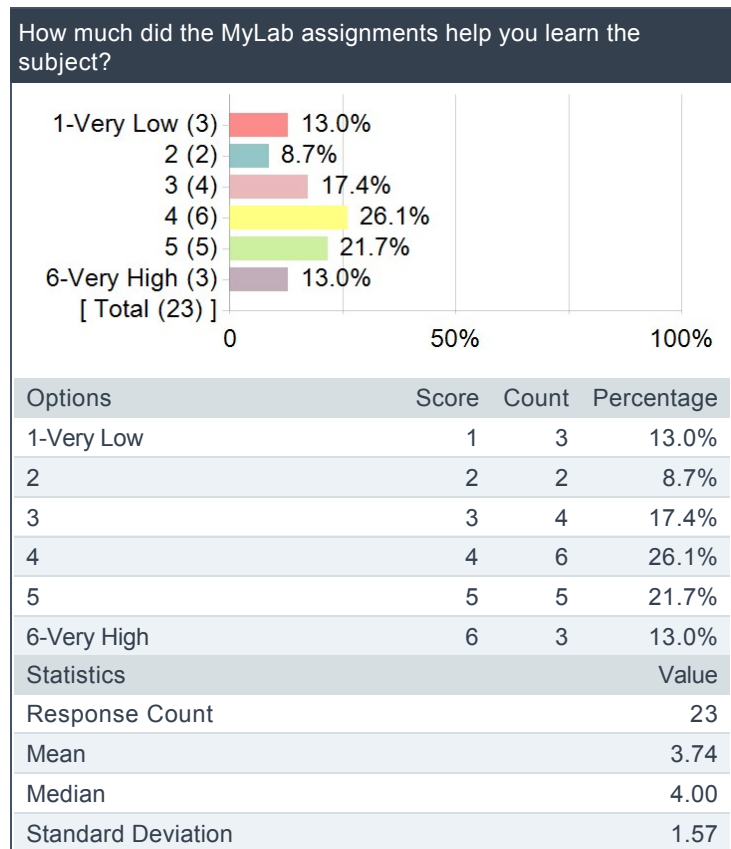


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	2	8.7%
4	4	2	8.7%
5	5	8	34.8%
6-Very High	6	11	47.8%
Statistics			Value
Response Count			23
Mean			5.22
Median			5.00
Standard Deviation			0.95

### How useful were discussion sections for this course?

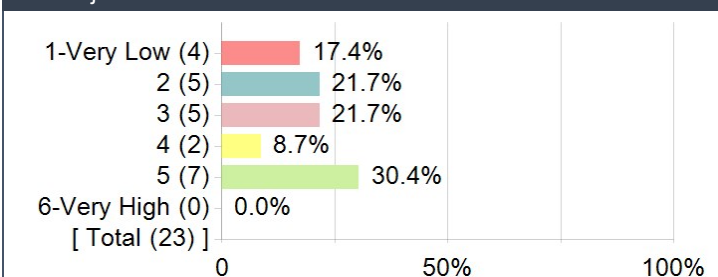


### How much did the MyLab assignments help you learn the subject?



**How much did the written homework assignments help you learn the subject?**

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Options	Score	Count	Percentage
1-Very Low	1	4	17.4%
2	2	5	21.7%
3	3	5	21.7%
4	4	2	8.7%
5	5	7	30.4%
6-Very High	6	0	0.0%
Statistics			Value
Response Count			23
Mean			3.13
Median			3.00
Standard Deviation			1.52

**OPEN-ENDED QUESTIONS****Did the course help you learn? Why or why not?**

Comments
Yes
I learned good study habits
Yes. The course instruction was very good and the lectures and lecture notes were very helpful.
I already knew most of the content of the course from high school, so the course did not help me learn so much as it gave me a helpful refresher on what I already knew.
Yes. Definitely came away feeling that I had learned a solid amount of calculus and had a firm grasp on most of the topics covered.
I helped me learn a little more about calculus but we covered topics that I had mostly seen in my high school math classes.
Sort of, but the pace was really fast and it never felt like we had a lot of support
This course did help me learn in that there was something new taught every day. However, there was a lot of self-teaching involved in order to understand how to do all of the homework problems and be prepared for the study.
Yes this course definitely helped me learn. I loved this class and it challenged me to actually understand the content.
Yes, I learned a lot and I felt like the course was structured well.
I did not learn that much because I have learned all the contents in IB courses, but the school did not give me the placement for this course.
This class helped me to get a better understanding of calculus.
Yes, I liked the resources used in this course.
This course helped me learn because it introduced me to topics hadn't seen before. Additionally, it challenged the way I tackled math problems and problem solved in timed situations.
No it was barely calculus and more focused on proofs.
Not completely. The course is very fast paced and doesn't give you much time to process what's going on.

**Please summarize your reaction to this course focusing on the aspects that were most important to you.**

Comments
My instructor did a really good job with lecture and office hours were very helpful for asking questions. Homework was NOT busy work and helped when it came to understanding the content. The class did a good job preparing me for exams and in general I had a good experience.
The my math lab homework's we're a bit long sometimes
Overall this course was good. The notes were very comprehensive and gave all the necessary information. The pearson homework was fair and somewhat useful. The written homework assignments ranged from easy to unnecessarily complicated.
I would not have taken this course if it was not a requirement for my major, but I do think that all of the professors did a good job of working with students and helping us understand the content. As long as you go to office hours and ask questions during class the content will make sense.
This course was definitely manageable. The midterms were harder than the practices ones posted, but if you understood the concepts from them, you could apply the knowledge and still do well. The MyLab homeworks after each class were sometimes arduous and the written homeworks were often very difficult and could not be completed without collaboration or attending office hours, but if you enjoy math, the course load was manageable. A lot of topics were covered in a short amount of time, but I do think they were covered thoroughly and we were given ample practice in class and in the homework assignments. Overall, this course was enjoyable, for a calculus class, and definitely challenged me intellectually but did not feel unnecessarily difficult.
I think this course does a good job of explaining the basics of calculus.
The class is rather difficult but fair. Pace is very fast and there is a weekly assignment that is pretty tough, but not too bad if you do it with friends
I had taken AP Calculus AB in high school so I expected to understand more of this course than I did. I truly believe that the only reason I did so well was because I had some background knowledge on the subject. It was very difficult to understand certain concepts and it moves very quickly.
I loved this course. If you have taken Calculus BC, or even Calculus AB, this course should not be difficult. If you do take this course, I highly recommend taking it with Professor Nakade.
I found this course super informative and much more understandable than high school. My professor was super kind and knowledgable in the content, and he was able to effectively communicate the material. It's a hard course and there's frequent homework but it's very rewarding because it helps each piece of the puzzle fit. A great intro to calculus!
I learned a lot from my Professor in this class and lectures were extremely helpful. We were for the most part, set up for success. The myLab homework is very helpful, but I felt as if the written homework for the course was a bit pointless in teaching us.
It is not hard.
Overall, this class is not terribly difficult and is taught at a decent pace. I think it is possible to do well in this class if you work on the written homework with other people and go to the professor's or a TA's office hours to get a better understanding of the material.
Although I'm not a math person, this course was very doable. There are a lot of resources available to students and the professors and TAs do a really good job at being available for students.
Nakade is good professor. He takes time at the beginning of every class to answer questions about MyLab, the written homeworks, or just the class in general. As for the class itself I would make sure to go to office hours for the written homework because they make up a good chunk of your grade and are pretty complicated.
Basically don't take the course unless you have to. The problems felt pointless and the written homework was irrelevant.
The content for the course and the MyLabs are not that difficult. Go to office hours to complete written homeworks. Midterms are ok, the final is considerably more difficult.
Overall, I felt as if the exams were a lot more challenging than what was taught in class and the practice exams given to us prior to practice with. I think in general the material is not necessarily difficult to grasp, but the way the problems on the exams were worded caused confusion.

### What are the primary teaching strengths of the instructor?

Comments
Answering questions, explaining concepts, working through example problems for concept application.
He can explain things in a way you can actually understand and learn from
Apurva was a great professor. He explained everything very clearly and gave great lecture notes. In class we did lots of practice problems which was super helpful. At the beginning of every class he would answer any questions we had on course work and that was another great resource.
He was very good about answering and explaining questions we had during class, and he did a good job of getting students to ask questions.
Well organized and gives good examples. Easy to follow for the most part
I liked that he asked us if we had any questions at the beginning of each class.
He was really nice, and cared a lot about us as students. Made time to answer all of our questions, gave us tips to complete assignments, gave us practice problems to help us get ready for exams, answered questions after class, etc.
He was very patient in answering questions and was very good at helping you work through the problem to find exactly where you were getting stuck and then working through the rest. This way he was able to teach us what to do without doing it for us.
He was great with lesson plans and communicating each topic. We had a lot of practice in class which helped on the homework.
Professor Nakade did a very good job communicating his ideas and giving examples. He also told us exactly what was expected of us which was helpful.
He explained the problem very clearly.
His slides were easy to follow along and he had a good understanding of the material.
He was well engaged in the course.
Always sets aside time for questions which I appreciate. Explains the content in way that's not to overwhelming for people who have never taken calculus.
He is very sweet and always available to help.
he really showed interest in his students, he always took questions after class which was nice.
Overall, I thought professor Nakade was very kind and really encouraged his students to ask questions during class. I felt like he was prepared with the material he was planning on teaching each day.

### What are the primary weaknesses, if any, of the instruction?

Comments
N/A
Nothing I can think of, I thought his class was great.
Sometimes didn't answer questions well
Could occasionally be disorganized and made a lot of small mistakes when going through solutions to questions, but it never made the class any worse
Sometimes his handwriting was difficult to understand as some of the 9's looked like g's, but overall this was not a teaching issue simply something that took a second to get used to.
He sometimes ran over in class but it was honestly okay because we wouldn't rush on important topics.
His lecture planning was not always set in stone which was a good thing, but also sometimes a bad thing as he would lose track of time and not finish a subject completely. However, he would always make up for that.
No.
Sometimes it was difficult to follow his work, because he did not explain it very well.
Doesn't go over some of the more complicated problems
He conveys ideas in a slightly confusing way.
He didn't go over all the examples prepared for each lesson and that made some of the homeworks more difficult to complete.
Sometimes, I felt like professor Nakade went too fast when teaching the material.

### Can you offer suggestions for improvement?

Comments
N/
Not needed.
Be more organized and ready with the tech
Not really! While I am not the biggest fan of learning math, professor Apurva was amazing and really made most of the math easier to understand.
I think he's got it down pact! No need for improvement.
Not really. He was very good.
No.
Try to make sure the class if following along with the work you are doing on the board.
I would suggest he incorporate some tougher problems in the class so that students feel more prepared for the midterms and final.
I think a way to improve would be to slow down when teaching new material and explain steps throughout instead of sometimes assuming most students would know how to do a certain step in a problem.

### Suggest improvements to discussion sections:

Comments
My TA just worked through problems on the board and did not explain the process— in general make discussion more like a structured office hours
Make the written homework easier, there's no point in making this hard because all it does is make you go to office hours for them to show you how to do it
None. They were pretty helpful by giving us time to work on written homework or go over practice questions for exams.
Focus more on making sure that we conceptually understand the questions being asked. There were a lot of times that we just sat there because we had no idea how to approach the questions and the TA gave very vague hints that did not help us understand what the question wanted us to do.
More practice
I wish the instructor would speak up when he spoke because he was at times hard to hear.
Make them more structured
Each discussion section was structured differently which was very frustrating because I never knew what to expect. I preferred the discussions where we were allowed to work through the problems ourselves and then ask questions when we got stuck. The ones where the TA would walk through all of the problems really quickly was very confusing and was more stressful then helpful.
More actual help from the TA rather than being stuck doing the work on our own.
I did not feel obligated to show up to these discussions as I felt I didn't get that much guidance on the written homework which was the sole reason anyone would go to these discussions.
Maybe do some practice problems with TAs.
TAs should spend time helping work on the written homework or going over the material rather than assigning groups for students to work on the homework.
Be more structured.
– I feel that they should be a little bit longer because 50 minutes isn't enough time for me to work through the written homework.
Help more on written homework and teach us material we don't understand
Instead of going over the written homework in groups, go over more examples and answer questions about the homeworks with the TA
I think the discussion section should encourage students to work together for an allotted period of time (ie. 30 minutes) and the rest of the time be dedicated to going through the homework and giving students the ability to potentially go through an aspect of a problem step by step and ask questions.

### Suggest improvements to MyLab assignments:

Comments
Make it shorter
None. Actually pretty helpful in giving us practice problems to work through material. Some of the MyLabs were more helpful than others, some were overly complicated because of how they expected some information to be already known or assumed.
Make the answer formats clearer.
Some of the assignments were unnecessarily difficult with the numbers used and did not further my knowledge of the material or help me practice but instead took hours to complete
It was slow and hard to use. I wish that there were more questions for each assignment because I like drilling through lots of content and questions and slowly work up to more challenging ideas.
No, but they weren't very useful
These were very helpful, especially since we were able to answer "similar questions" if we got the first wrong. This was amazing as it allowed us to learn without negatively affecting our grades.
I think they're great the way they are.
These were very helpful but maybe don't put them on holidays like Thanksgiving.
No.
– the optimization mylabs were overly complicated and actually made it more difficult to understand the topic
Make it harder so it's more similar to exams
Limit them to two per week

## Suggest improvements to written homework assignments:

Comments
Make them easier!!!
I did not find written homework assignments helpful at all. They were not useful practice for what might show up on an exam, most of the time they felt unnecessarily difficult and purposefully confusing.
Either go more into depth about the concepts needed for the homework in class or make the concepts needed to do the written homework more like the examples we were given in class. That is to say, the difficulty level of the written home was extreme compared to the level of the class examples and the MyLab homework; I felt completely unprepared for the written homework every single week.
Too difficult to be completed without attending office hours. Never really understood them
The written homework assignments were sometimes far beyond the scope of what we learned in class. The problems were not helpful when we would learn how to solve a certain type of problem and then never see it again on another assessment or assignment.
Give us more guidance on how to complete them, especially early on in the quarter
Making the questions clearer would be extremely helpful. There were several times where there was one or two questions that was so overly complicated that I did not know what to do and none of my friends knew what to do and the teachers during office hours seemed frustrated by how many times they had been asked about the same questions. I understand that they are meant to challenge us but there is a certain level of difficulty that I believe is too much to expect. Also, sometimes the numbers used created really bizzare answers. If in the future, teachers could use the same questions but with more straightforward numbers it would help us learn the concepts without getting so stressed about the answers.
I feel like these never really applied to our actual content and each TA grades them differently which is unfair. I could work with a partner (obviously writing with my own work and words), but would get very different scores. Also, the written homework was harder than both midterms.
I did not feel as if these homework assignments were detrimental to my learning. They were often too complicated that we'd never see anything like it on our tests and did not teach me as well as every other resource. I also always felt as if I was being tricked.
No.
Only include topics that we've covered for that week because sometimes topics that we hadn't covered were on there. Also make them less convoluted, because sometimes we had to go through 10 extra steps that could have been condensed into one.
Get rid of them they help no one and are a waste of time
Make them reflect actual exam exercises, they were more difficult
Have the written homework assignments actually mirror questions of the same caliber that will be asked on the tests. Sometimes I felt like the written homework was too challenging to the point where it caused further confusion.