



Prof. Xavier Ramos Olivé (as private and confidential)

MA 1024 - A05Y CALCULUS IV for 202001_A

Prof. Ramos Olivé,

As part of WPI's student course report process, the results for each course section are distributed by email.

This email contains the results for MA 1024 - A05Y CALCULUS IV.

The responses to each question are shown in a histogram, with the number and average values of responses shown to the right. Students' comments can be found at the end of the report.

If you have questions about the student course report process, please contact coursereports@wpi.edu.

The Morgan Teaching & Learning Center Canvas site offers some suggestions for interpreting student course reports (https://canvas.wpi.edu/courses/1046/pages/tips-for-obtaining-helpful-feedback-from-students-and-interpreting-it?module_item_id=224096). If you would like to discuss these results confidentially with a colleague, please contact Prof. Chrys Demetry, Director of the Morgan Center, at cdemetry@wpi.edu or x5707.

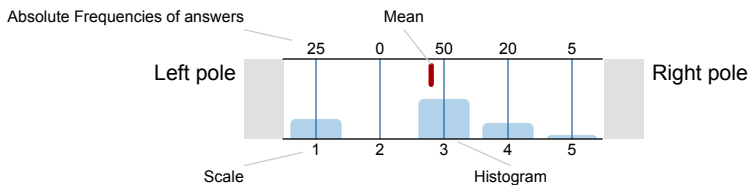
Prof. Xavier Ramos Olivé
 MA 1024 - A05Y CALCULUS IV (202001_A)
 No. of responses = 21



Survey Results

Legend

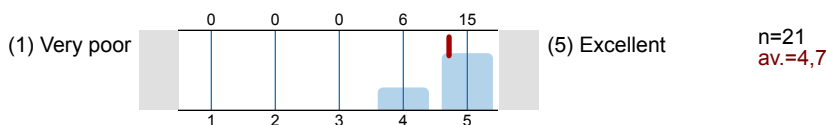
Question text



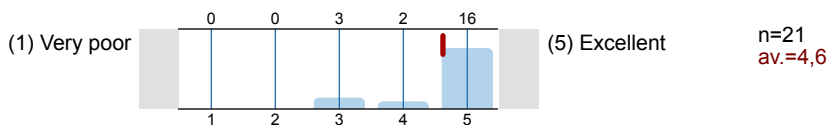
n=No. of responses
 av.=Mean
 ab.=Abstention

You can help improve the quality of teaching at WPI by providing your responses on this form. Please consider each reply thoughtfully. These reports are used by the instructor for self-improvement, by students during course selection and by members of the administration and faculty committees. Your responses are anonymous and optional. Your comments will not be returned to your instructor until after the grading deadline.

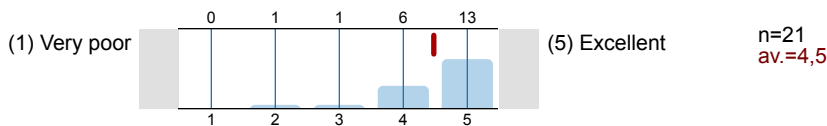
1. My overall rating of the quality of this course is



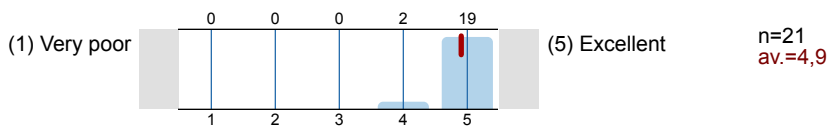
2. My overall rating of the instructor's teaching is



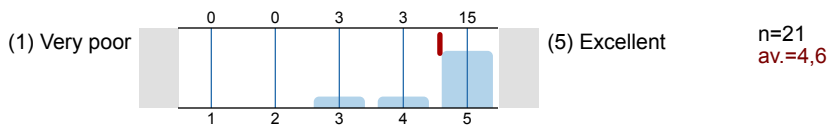
3. The educational value of the assigned work was



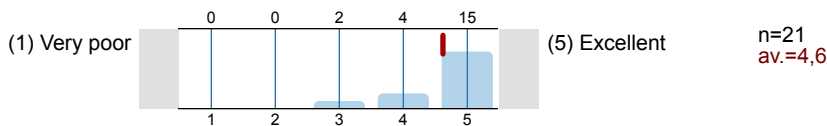
4. The instructor's organization of the course was



5. The instructor's clarity in communicating course objectives was

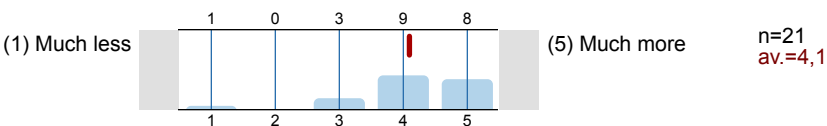


6. The instructor's skill in providing understandable explanations was

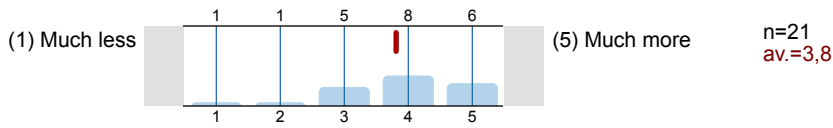


Relative to other college courses I have taken:

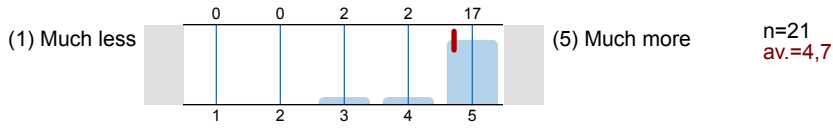
7. The amount I learned from the course was



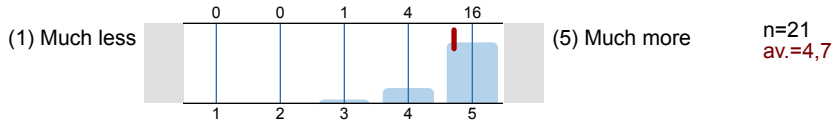
8. The intellectual challenge presented by the course was



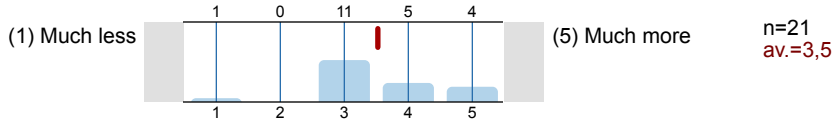
9. The instructor's personal interest in helping students learn was



10. The instructor stimulated my interest in the subject matter

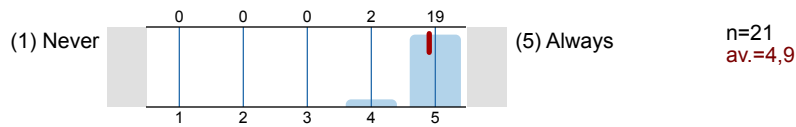


11. The amount of reading, homework, and other assigned work was

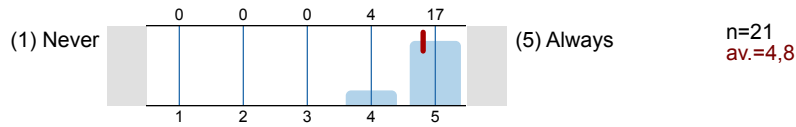


How frequently were the following statements true in this course?

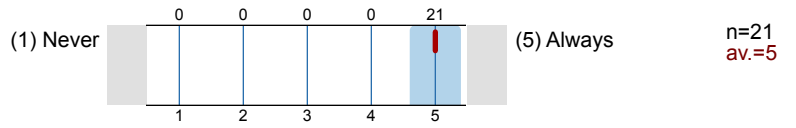
12. The instructor was well prepared to teach class.



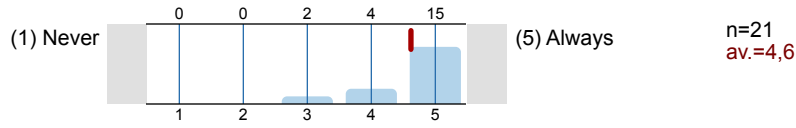
13. The instructor encouraged students to ask questions.



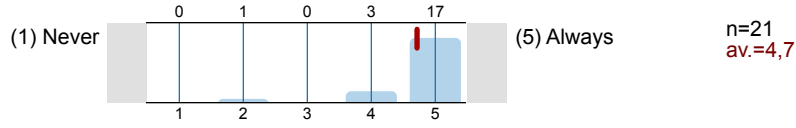
14. The instructor treated students with respect.



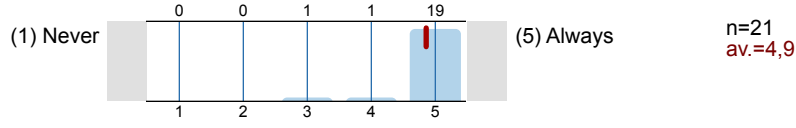
15. Instructor feedback on exams/assignments was timely and helpful.



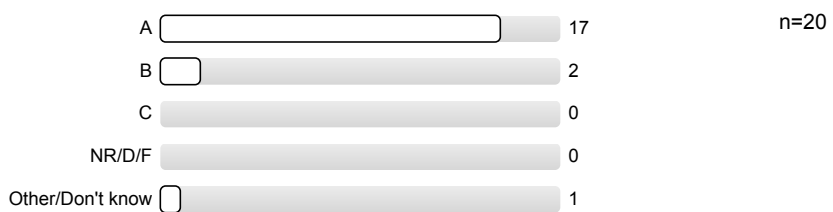
16. The exams and/or evaluations were good measures of the material covered.



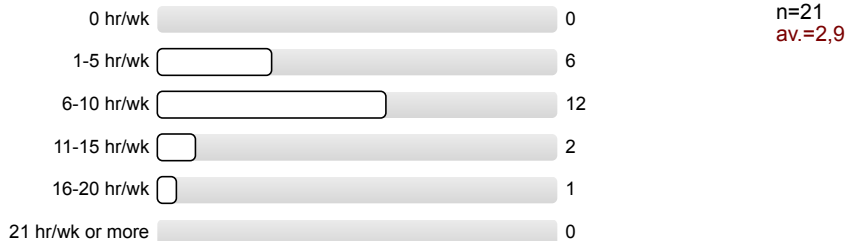
17. My grades were determined in a fair and impartial manner.



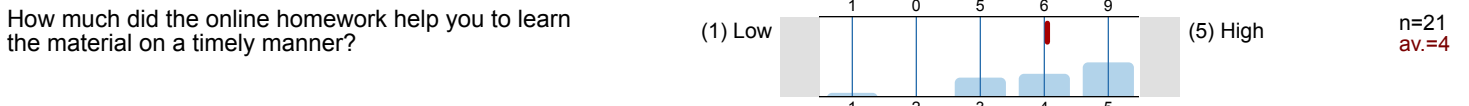
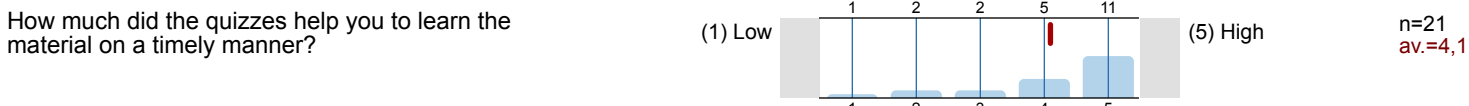
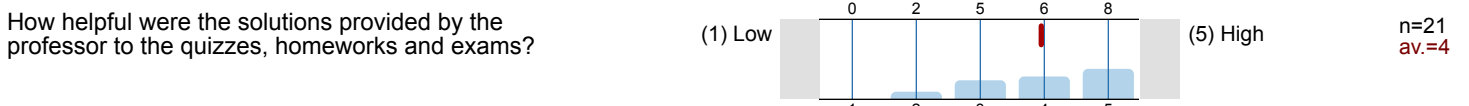
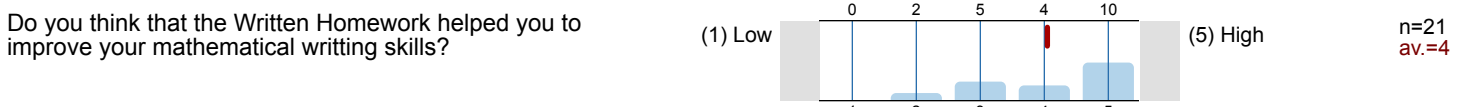
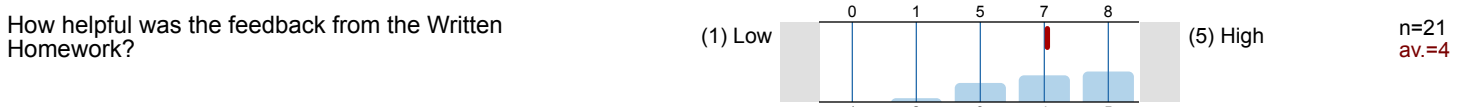
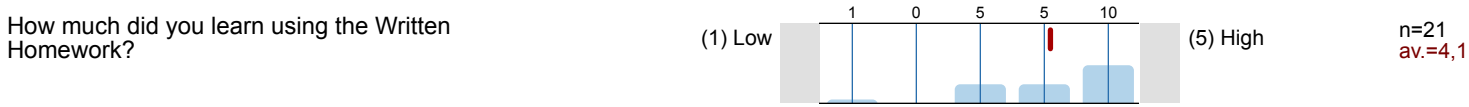
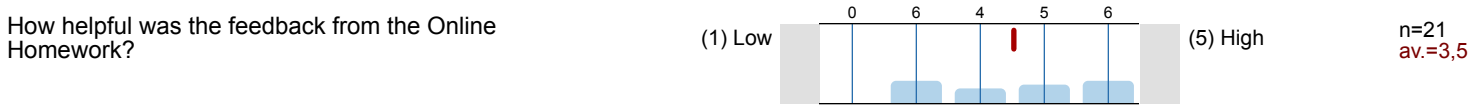
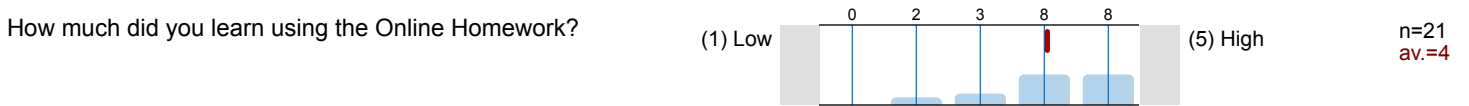
18. What grade do you think you will receive in this course?



19. On average, what were the total hours spent in each 7-day week OUTSIDE of formally scheduled class time in work related to this course (including studying, reading, writing, homework, rehearsal, etc.)?



If your instructor has added any additional questions, they will appear below



Comments Report

Your thoughtful answers to the following questions would be helpful to your instructor. (Please answer in the space provided underneath each question.)

What did you particularly LIKE about this course/lab?

- Great instructor, lecture time was used well and the material of the written homework was very interesting and enjoyable
- I enjoyed the course as a whole. The lecture kept my attention and was not hard to follow, and was at times pretty fun. The lectures also always prepared me for the week's homework and quiz, I never felt as though I was being asked to solve something that I was not properly taught. I also liked the pacing of the class itself, with all work being consistently due at the same time each week. Professor Ramos mentioned considering removal of the weekly quizzes, but I found these most helpful to monitor my progress. The online homework was usually straightforward, and the written homework was most challengeing, but the quizzes were a good medium. Furthermore if it weren't for the quizzes, I'd have been more inclined to skip the conference.
- I enjoyed the enthusiasm that he brought to the course and his passion for the subject. I appreciated the quiz and exam objectives posted on the canvas page, as well as having access to the notes online on OneNote. It is very helpful when my notes are unclear, like when the figures are hard to draw in my notes, so seeing the more accurate drawings were helpful. I thought the written homework was helpful to learn more in depth about the subject that was not explicitly covered during class. The online homework was helpful, but sometimes became very monotonous, but it aided in learning the course material. The weekly quizzes were nice to hold myself accountable for learning/understanding the subject matter taught that week in class, and they were very fair with the grading of them. The lab was also helpful to visualize the concepts we were learning about.
- I like Professor Ramos' teaching style because he goes over every detail while acknowledging assumptions and making sure every part of proofs are explained.
- I liked the quizzes, as they gave a good way to see how well we actually know the content. Even though they weren't particularly difficult, they tested you on the fundamental concepts that we needed to know.
- I liked the teacher and the teaching style.
- I particularly liked the enthusiasm of the teacher, and overall the knowledge I gained from the course.
- I really enjoyed how my professor wanted us to participate in class and asked us questions back and forth. It made me feel included in the class and that the professor was not just throwing up equation on the board.
- It was always clear what we had to do and what was expected of us. The weekly quizzes were good checkpoints of what we had to know, and the written homework helped us expand our knowlsdge more.
- Prof Ramos really helped students engage with the content by providing ample examples, always explaining concepts clearly, and through the use of humor. His use of the classroom materials at his disposal was quite good: teaching on the screen really helped me personally, because otherwise, I doubt I would have been able to clearly see what was going on.
- The course content was interesting and i learn't many new things
- The material was very focused and made simple by the lectures, examples helped to do in class
- The online homework allowed to me to practice the material being covered in this course.
- The professor has a great personality and brings a great energy to the class
- The professor was very personable. The workload was not overwhelming but required a good amount of time.
- Xavier made this class what I look forward to every day.
- Xavier was always honest with the students and made all tests/quizzes very manageable. He genuinely seemed to care about the well-being of his students and is passionate about what he teaches.
- the teacher was very intreguing to listen to and he made the class fun. the material was alo taught very well.

What did you particularly DISLIKE about this course/lab?

- I didn't like how the labs were not aligned with what we were learning in the lectures. Sometimes it seemed like we were doing stuff in the lab that we hadn't covered yet in class, so it wasn't as helpful as it could be.
- I didn't specifically dislike anything.
- I disliked the lab in general. I felt like on the lab I was simply just copying code, rather than figuring things out for myself. If somebody told

me to use Maple in order to draw a graph of a function, I doubt I would be able to do it myself without looking up almost all the commands online. Also I disliked some parts of the online homeworks. For example in the case of the triple integrals, it was often the case where a student was asked to calculate a triple integral of a polynomial. This would in my opinion be okay with someone who is just learning about integration and needs some practice, but otherwise the assigned work was pure numbers crunching without much thought or challenge other than not making simple arithmetic mistakes.

- I think the lab portion of the course should use MATLAB, as this would be more practical to learn.
- I think the two online assignments a week were a lot, especially when we got into the math that took a lot more time per question.
- I wish more partial credit was given on the midterm.
- Some of the online hw problems were time consuming and tedious
- Sometimes the online homework was too long and while it was more practice, it became tedious and it felt like I wasn't learning anything. There was also always work to be done for the class, so there was never a little break, and a ring break would have been nice.
- THE LAB, I didn't learn anything and it felt very boring.
- Test corrections would be nice.
- The lab was pointless and a waste of time. I will never need to use Maple in real life and it would have been a better use of time to just review content or learn the basics of MathLab. I think that the math written homework was a good assignment for a theoretical class. For the regular classes, most people should be ok with accepting the extreme solutions for the sake of realistic practicality rather than to prove the weird types of functions.
- The labs did not seem particularly instructive, despite being on topic and challenging.
- The lecture hall was big with a lot of people in it. Dispute this, it still feels like Xavier is explaining the course directly to you.
- some parts of the calc 4 material are dryer than others

Can you suggest anything that the instructor could do to improve the quality of teaching?

- Focus more on examples/more difficult examples of concepts rather than the theoretical background.
- Focus more on explaining this with examples and in simpler terms first. doing problems in variables first tends to add confusion to that concept to begin with and make learning with examples following harder.
- I cannot think of anything significant. I heard rumors of other Calc IV classes being ahead of us, but I have no complaints about the pace of the class.
- I felt like the course could have been significantly faster. Often times I got really bored of the class after you introduced the concept of the class
- I felt that at some times there was a disconnect between the professor and TA as far as communication and preparing practice problems, although this improved for me towards the end of the term.
- I really liked the teaching style, and I can't think of anything that I would suggest you to change.
- Maybe use echo360 so we can look back at the lectures, since sometimes hearing the lecture again can help because of the explanations given during the class.
- More review. It feels like we are learning things so fast that we don't have time to cement them into our understanding.
- No, the teacher was excellent in explaining everything well.
- Show more examples that are similar to the written homework.
- Sometimes a little bit more explanation on the basics of the topic would be helpful
- Test corrections would be nice.
- The only suggestion I have is to get a more reliable computer setup so less class time is wasted with that.
- nothing

Would you encourage a friend to take a course from this instructor? Why or why not?

- 100% It was a very enjoyable course

- 100% yes. Not only do you learn the course material very well, Xavier does it in a way that is fun. The lectures are informative yet funny at times. The written homework guided you through problems in a way that lets you have the final "aha" moment. I did some complicated things on the written homework that I didn't expect to be able to do.
- Absolutely. Dr. Ramos Olive was a fantastic instructor. He was always fair and accommodating, and encouraged the students to challenge themselves while still being successful in the class. His passion encourages the students to learn and enjoy the class, and sparks interest in the subject with students. His lectures are engaging and fun, and he is a generally nice person. His class is easy to understand and the expectations are very clear throughout the course.
- I don't really know enough about the alternatives to this instructor to make an accurate answer but I would encourage a friend to take a course from this instructor simply because I learnt the course content well
- I most definitely would.
- I would encourage a friend to take this course. It is challenging at some points, but Professor Ramos is always understanding and available to help, before, during and after class.
- Yes I would encourage it, teaching was easy to follow and assessments were fair.
- Yes, I think multivariable is a really fun course that everyone has to take and I think that if my friend wanted a class that wasn't just all based on exam grades (more homework intensive) this would be a great class.
- Yes, I would encourage a friend to take a course from this instructor because he's very nice and approachable, in addition to having a good style of teaching.
- Yes, Xavier makes the concepts easy to understand and the homework gives a lot of opportunity to practice concepts. All tests and quizzes are more than fair and Xavier is very helpful during office hours.
- Yes, as long as you go to office hours, the workload will be relatively low and you'll learn everything that is needed to know.
- Yes, because while the topics were hard topics, the way the class was taught, it became easier
- Yes, for the reasons listed above.
- Yes, professor is entertaining and teaches well.
- Yes, the class is great.
- Yes. He is a very very good teacher and person. He is always open to help and he works with you when you are stuck rather than just saying "you should know that" or a similar blow off.
- Yes. The quality of teaching was excellent.
- yes the teacher was interesting and engaging while being very educational

If your instructor has added any additional questions, they will appear below

Do you think that the problems in the Written Homework would be better if done as a worksheet during the Conference section?

- I do not think the written homework should be done during conference. I found conference helpful as is, by solving practice problems and student questions before the quiz. Additionally, I felt that the written homework was sometimes the most challenging assignment of the course, and would take up too much time in conference. The written work was helpful to me as-is because it helped me to collaborate with my classmates. Also, needing to write out explanations helped me think about what I was doing, and I don't think there would be time for this in conference.
- I think so, that way, people can ask questions about hard problems on the test and don't have to spend so much time on homework over the weekend
- I think there's a good idea there, if you make people work in groups on the worksheets in the conference, however it was nice to be able to ask the TA specific questions we had about homework or just the content overall, and I'm not sure if that would be as possible if we had to finish a worksheet during the conference section.
- I would say yes, simply because I do tend to have no free time simply because of the amount of work I get assigned from math and my other courses. Otherwise I really do not have a strong opinion in favor of either option.
- NO because people wouldn't take it seriously. They would just want to finish it and be done as fast as possible so they could go home.
- No
- No I enjoyed the time alone to think about the problems given. The questions on the homework were enough to guide me through it.
- No because then it would not give enough of the students' knowledge but rather that sections knowledge.

- No, I think it encourages critical thinking and is best done as homework so the students can think about the subject for a longer time and come to the answer themselves. I think the written homework is very helpful to gaining a better understanding of the subjects covered in class and applications of the subject matter. I strongly believe it should remain as homework and not as a worksheet during the conference. I think it should be an individual effort, and when help is needed then the students can collaborate with their peers.
- No, because I've used more than 50 mins to do the written hw. I can often finish it within that time but there have been times where I've gone over 50 mins. I found that the written hws were generally very manageable especially when working in groups, however there have been questions that I needed time to think about or walk away from then come back to.
- No, but maybe an extra worksheet instead of the quizzes could be better
- No, by giving them as homework, I actually had to go through my notes, so it helped me review
- No, the written homework is best done at home individually so everyone gets a chance to think about the concepts on their own rather than piggybacking off of other students who know the material in the conference.
- No, the written homework was extremely difficult and many of them would not be able to be completed during the 50 minutes of the conference section.
- No. The conference section was an excellent resource for reinforcing class material. I would not want the written homework to take the place of that resource because doing the written homework on my own, at my own pace helped me a great deal. Also, if the written homework was done in a class setting, I think the quality of writing would decrease.
- Yes and no. going through the problems would help make sure everyone understands the material, but keeps students from trying to figure it out on their own.
- Yes, because the written homework is harder than other problems done in class and I struggled a lot with some of them at times.
- Yes, the quizzes were rather easy and the conference review was not very helpful.
- no it is better to force myself to try to understand

Do you think that using OneNote in class instead of using a whiteboard/blackboard is beneficial to your learning?

- As above, I really do not have a strong opinion towards either: whatever makes the teacher more comfortable would be the better option.
- I can't tell the difference. I don't really have a preference.
- I don't think it made a big difference to me one way or another.
- I think that the use of OneNote was beneficial to my learning because it meant that I could always go back and look at the notes from lecture if I was missing something in my notes. I feel like it also kept everything more organized and understandable.
- It is certainly easier to see and having notes access at home is essential to studying.
- It was ok. It is hard when he uses colers rather than subscripts because there is no way to denote that with a pencil. A one-note screen is wider than a piece of paper is so it was hard to translate what he was drawing onto paper sometimes. It was useful to look at his notes online however.
- Using OneNote was absolutely beneficial to my learning. I found myself consulting OneNote multiple times during the term. When I missed class, catching up on notes was easy, and I didn't have to worry about whether or not my peers' notes were sufficient. I also used OneNote to study before quizzes and the midterm, since everything was organized neatly into sections. Lastly, the color-coding was helpful to understand - especially when it came to graphs.
- Yes
- Yes because it allows me to go back to the notes outside of class in case I missed something
- Yes! I love knowing that I can have the notes sometime later if I need to.
- Yes, I used OneNote a lot in high school so I liked this format. It made it easy to look back at the notes if I happened to miss anything.
- Yes, absolutely! I doubt I would be able to see the content on the board without it. Also, the colors are better. Also I would think it harder to draw beautiful peanut shaped regions on the regular white board.
- Yes, because I am able to look at the notes online just in case I missed anything, and the different colors are helpful in making the pictures/formulas more clear.
- Yes, because we can actually see what's being written and you don't have to erase anything
- Yes, i really liked the one note system. It was easier to see/follow along with

- Yes, it was easy to access
- it was very helpful so i coulfl see notes later
- yes because it was easy to access later
- yes, because I know if I need to look back, I can.

Would you like to see a project as part of the grade in this course? If so, which kind of project?

- A project could be a good addition to this course, however I'm not really sure what that project could be/involve.
- I can't think of any projects for this course.
- I don't think a project is needed in this course. It is already a lot of content and understanding for the time period given.
- I don't think there is much room for a project in the course - both time-wise and material-wise. Maybe a small "design-your-own-solid" project? I don't know.
- I project could be beneficial if it explores topics that we are unable to delve deeper into due to time constraints. The physics applications of multivariable calculus would be an interesting way to do a project. Such as a real probability related project where the students conduct their own trials and find the probability of an event in several variables.
- I think a challenge problem that has to be worked on with a group and then presented
- I think a project would be time consuming and take focus away from the main curriculum.
- I would like to see a project only if it's open ended and not like an a homework set where there's only one answer to a problem.
- It would be interesting to have a project I am not sure what it could be about.
- Math lab can be considered a project
- No (3 Counts)
- No, a project might sound good on paper, but I doubt it would actually be beneficial to the learning of the subject matter. It would also be hard to complete while learning the course material at the same time.
- No, projects tend to be extremely long and usually require lots of writing, rather than using mathematical skills. (Please do not include a project, I've been through one already in ES and I can say it was not fun at all)
- Yes i would be interested to work on a math project early in my collegiate career. Im not really sure how such a project would work but i would be interested in something like a proof or a model through maple or matlab
- a project would be cool, but I have no idea what it could be.
- no

If you had to teach this course, what would you change to improve the learning experience of the students?

- 1) 3pm is the best time for a nap - I know this may not be something that can be changed, but still.
2) More humor! Yay!
- During class, I would probably spend a little less time on problems and more on the applications of what we are learning. We started off well with the heat example for multivariable equations, but with partial derivatives and integrals the focus on application was lost in favor of doing problems.
- I would change the amount of online homework but that is it.
- I would either try to improve the lab by making students learn commands in maple, rather than just copy/paste it. Otherwise I would remove it completely. I would also change some parts of the online homework to make them less time consuming and number crunching.
- I would give less homework because it is so long that plugging it into a online calculator is the only way to do some of the really lengthy problems. I think that simple graphing calculators should be allowed on exams as long as students show all their work written out on paper. This allows simple mistakes to be less common on tests. I would have more frequent tests, (3-4) without a final. This way a single test does not define if someone passes or fails a course.
- I would've liked to see more examples/more difficult examples being taught/gone over rather than the theoretical background. For example, when we went over the second derivative test, we went over why it works, and this explanation was interesting but I would've rather spent the time going over another application of the second derivative test. I most likely would've looked over the explanation if it had been posted on OneNote and that may be a good place for students to go if they need/want to see that explanation

- More content at a faster pace, less homework and maybe slightly harder homework. Maybe remove the labs entirely.
- Nothing
- Provide more examples and provide different types of examples in each topic.
- Require it to be taken with linear algebra
- The only thing I would change/see improved is the feedback on quizzes and homework. I understand that there are a lot of students, but having more immediate and descriptive feedback on errors would be beneficial. Overall the course was a great learning experience, and I'll miss it.
- Things would be explained in simpler terms and conferences would occur twice a week to practice problems and ask questions. The written homework would also be graded differently since one mistake would move your grade all of the way down to an 83%.
- You already give us access to the OneNote file(s) you use in class, which is great. However, I know some professors will record their screens (and microphones) for the lectures and then post those videos after the lecture. I don't think this is necessary, but it would be a nice addition so that we could go back and re-watch a whole lecture, or just part of one, since looking at the notes from the end of class doesn't tell the whole story.
- almost nothing
- encourage more group work maybe
- use Echo360 to record the lectures. Other than that, I think the class was fantastic! :)