

Evaluation comments 2019, 2020

I was often told that Calculus BC would be easier than Pre-calculus, but after taking the course this year, I truly felt how ignorant I was. Although I disagreed with your strict rules of doing math, in the beginning of this school year, the rules benefitted me a lot, especially when I was lost in my plans. They helped me organize things.

The main piece of advice I would tell a student in next year's class is that Mr. Conlin's Calculus BC is a class that requires a lot of effort and once you fall behind, it will be extremely hard to catch up, especially due to how fast paced the class is and the fact that each following section within a chapter depends on the understanding of the previous section. Due to this, *I would encourage future students to ask questions if they are confused about anything.* (emphasis added)

Regarding tests, I feel that even though there are a lot of opinion on how they might be better designed, the tests were generally fair and gave reasonable time to assess my skill on concepts covered in class. There was certainly a bit of a time crunch.

I recognize that Calculus BC is a fast-paced, strenuous course but putting in that extra time, especially on Chapter 9, was very beneficial for not only me but for some of my friends with whom I discussed this topic. I also appreciated the Review Quizzes we had throughout the semester because for me it reinforced all the topics.

For next year's class I would say be prepared to work for a good grade, as a bad work ethic does not fit this class.

As much as I was initially against it, I think doing review quizzes/tests was an extremely effective way to make sure students retained knowledge from past units, especially as much of this class is cumulative. In fact, looking back, I wish you gave more of them.

I think that this class really challenged me, and although it was hard and frustrating at times, I am extremely glad that I pushed myself, because of how much I've learned. I also felt that you were very open to people who came in and asked for help during office hours, which made this class much more manageable.

This idea is something that worked well for me in AP Bio: Mrs. Fallon would put up the test about a week after the content was all done, which was enough time to study/tie up loose ends. In the week in between, we would start content from the next unit. This way, we got time to "marinate" in the content to be tested without slowing down.

One thing that can be improved is the delay between the last assignment in a chapter and the test for that chapter.... I think reducing the delays between the review assignments and the tests themselves can allow students to remember more efficiently while spending less time reviewing the chapter by themselves.

One factor I disliked the most about this class was the lack of test resembling review material, which is usually given out before tests in other classes. DeRuiter's practice tests were consistently given out in this class, but I believe those problems lacked resemblance to the test.

I would tell a student in next year's class that they should pay attention to details in class and the notes, and to remember the definition of an integral!

Advice that I would give to students next year would be don't be afraid to ask questions, and one bad test will not affect your grade much.

I liked how the tutorials were always open....

As soon as you need help, make sure to come in during office hours in order to clear up any misconceptions.

For next year's classes, I believe it would be helpful to have more review quizzes in first semester. Because we learn important concepts such as derivatives, integrals, and limits that serve as a foundation for second semester material, it is important to reinforce these concepts early in the year.

I really liked the flipped classroom model, where we learned the material at home and worked on homework in class. I thought that allowed me to absorb the information thoroughly before coming to class and applying it. Working with my table members on the problems was helpful.

What I found most effective for me was when you taught in a traditional classroom style with lectures and notes in the classroom. I felt like this method helped me to understand the content, methodology, and expectations of the lessons better.

I would have like a couple more in-class lectures as for me they are more engaging than watching videos. I really enjoyed anything we had to do with board work ... when we did questions on the board even when it took more time. I really felt like that helped me understand every question. It was also a good change in pace that helped me think about the question I was doing instead of mechanically grind out homework questions.

Among all my other classes this year, I'm pretty sure I put by far the most work in this class. It is a really challenging course and you really need to know your stuff to do well.

I feel like it is really important to take every test extremely seriously regardless of your grades because every chapter really builds on each other conceptually.

As for the in-class work time, I wasn't fond of going to the whiteboard for the teaching thing we did. More often than not, questions that people had were discussed at the table rather than explained at the whiteboard. Anything put on the whiteboard was usually just to maintain appearances. In general, given that most people are inclined to help each other in the first place, I feel that using the whiteboard doesn't improve on the old-fashioned paper and pencil explanations. And most grievously, standing is tiring.

I would tell next year's students to make sure they stay on top of the notes and homework, and make sure they keep everything organized. It is very easy to fall behind, but if they do then they should not be afraid to ask for extra help. Also, make sure to join the Facebook group. Everyone is there and can help you too.

For next year student: just keep up with the pacing for 1st semester and do NOT slack off because it's easy to fall behind. It gets better second semester (even though it gets more difficult) and it really helps if you actually like calculus and are interested in math. If you don't know if you want to take AB or BC, BC was not as time consuming as people say it is (provided that you are actually doing the work and enjoy it)

What I should've done is rewatch certain parts, and truly make sure I understood everything from the lecture. But sometimes after a 2 hour sports practice, you just want to get through the work, and it would result in not fully learning the material. This caused a lot of obstacles for me throughout the later chapters when my foundation was not strong. Looking back, I really wish I would've paid more attention during the first chapters because I think if you have [a] really good foundation and more than that the

understanding, you will be really prepared. Math courses for me have never really been hard, and when I didn't have a good foundation, I didn't realize that my previous math encounters would be of no avail and I think that made all the difference.

One piece of advice I would give to a student next year is to ask questions when they are unsure, because calculus can often be confusing at first. If a student is unsure of something and doesn't clear it up, they can easily fall further behind. I also suggest to future students that they stay organized and keep all of their class materials in a convenient location, since looking through old notes and homework is a good way to study for tests and quizzes.

I think that this class really challenged me, and although it was hard and frustrating at times, I am extremely glad that I pushed myself, because of how much I learned. I also felt that you were very open to people who came in and asked for help during office hours, which made this class much more manageable.

Although the average time that the homework took was well in the bounds of an AP class, there were some days that we had too much homework and it would interfere with some of my other classes. So, I feel that the HW should be spread out more evenly. ... throughout the year I became more organized (the first binder quiz was the learning experience).

I wish I had asked more questions and I would strongly encourage students in the next year to ask anything since calculus is a tough, new concept to grasp.

Note at the end of the year:

Thank you so much for everything this year and thank you for making calculus BC so much fun and challenging. That feeling when you walk out of the testing room after the AP test that I got was amazing Even though this class was hard, I learnt so much....

added in: 2020

Calculus is a strongly concept based subject. Oftentimes, in previous math classes, if you didn't fully understand why/what you were actually doing, you could simply memorize the steps of how to do certain types of problems. In calculus, many questions are asked in different ways that you will not have seen before, and you need to be able to figure out how to apply what you have learned to this specific question. Because of this, you need to truly understand what you are learning. Do not be afraid to ask questions. As much as you think everyone else already knows the answer to your question (or that it seems "dumb"), it is very likely that someone else has the same question, or that others did not even know that they had that question in the first place. Mr. Conlin truly answers every question as a valid question; don't worry about being embarrassed. Another thing! If there is a problem on homework that you do not understand at all, and have spent a considerable amount of time on it, skip it (write down the answer in red pen), and ask about it in class the next day. Don't spend your entire night trying to figure out one problem that might be explained and understood in 2 minutes the next day :)

My advice to a student in next year's class would be for them to try to participate often and form good relationships with the people in your group. You (Conlin) definitely place a lot of emphasis on participation, and while not participating might not necessarily hurt your grade, it shows your character and may hurt you with understanding concepts and doing your best.

Make sure you spend time understanding concepts rather than simply problems, because the latter will get you through homework but you need the former to get through tests.

Don't stress too much; the class is hard but not impossible and regardless of what grade you get, you learn a lot.

Calc BC is a very conceptual class, especially compared to Pre-Calc H, and as curriculum progresses, different chapters build onto previous concepts. As a result, taking time to process notes and get extra help (ESPECIALLY by asking as many clarifying questions as needed!!!) is a necessity.... Lastly, I personally found that it was inefficient to spend too much time studying before tests. After being able to do basic skills-based problems, doing extra problems with essentially the same skills is not a productive way to study. Instead, focusing on understanding concepts and knowing how to apply concepts to different and unexpected situations is much, much more important for success in this class.

You should try as hard as you can to master chapters 2, 3, 5, and 6, especially 3 and 5, because those have some of the most important ideas in them. If you don't understand those chapters you won't understand anything else. Taking an L on one of the tests is not that big of a deal but you should go back and discuss the problems to find out what you did wrong and what you did not understand.... Don't just copy down the solutions that your group puts on the board, make sure that you follow along and understand what they are doing ... otherwise class is just a waste of time.

Make sure that for each homework assignment, you complete problems thoughtfully and thoroughly because homework is actually quite a large portion of your grade.

I think it started out very tough for me, I didn't always pay close attention to the video lessons and didn't ask or answer questions but after the initial assignments I got a sort of wake up call and realized that I couldn't just go through the motions in class and I needed to be more present.... I think initially, it was tough to answer questions because of the fear of saying the wrong answer or just not understanding a concept well enough to answer it and cold-calling really forced me to be present in your class and I definitely think you should cold-call next year. Even though, most people hate it since it puts them on the spot, it makes you realize that either you can let your questions go unanswered and then things will start piling up or you can just ask and understand.

Don't just go through the motions. Every unit requires you to understand the previous unit well, and material never really goes away. Stay on top of your work and ask for help whenever necessary. Conlin is very approachable and helpful. If asking him a question will help you better understand a concept, then don't hesitate in asking. Work ethic is also very important in this class. Take notes judiciously, especially the in class notes, because the derivations and example problems are helpful and sometimes appear on tests. Also, memorizing is not always the best way to learn. If you can understand a concept and visualize it, that will help far more than brute-force memorization.

- (1) Nobody is special, so expect only work to pay off.
- (2) The school library after school hours is a great place to work on math homework.
- (3) Raise your hand. In the worst case, you won't be picked.
- (4) Math syntax is essential.
- (5) If time management is a problem, look at #2 and consider using a website blocking tool.
- (6) If you find yourself working on math HW right before it is due, it is a sign that you are falling behind (also look at #5).
- (7) It's not a hard class unless you make it one.
- (8) The teacher is a human, not an alien.
- (9) Always try to look at the use-cases of the math, but don't get carried away by them.
- (10) It's just a class!
- (11) Do a problem a day from the chapter review section of the book; it can help.
- (12) Note that people will likely exaggerate, so don't get intimidated

Participation is very important, not just for the participation grade, but also for personal improvement and understanding. The more you work with your group, working together to put answers up on the board, the more you will understand the topics you are learning. Whenever you correct your homework, keep track of the problems you have missed to review before the test.... Creating study guides with not just formulas to remember but also questions that you found hard or interesting will really help you prepare for exams. For homework, if you work efficiently during class with your group, you will not have much homework left to do at home.

Although I didn't always think this during the school year, I am now thankful for your emphasis on showing specific work on homework, quizzes, and tests, because you helped me realize that calculus isn't all about the final answer, but is moreover about how you get there.

Do not psych yourself out! I know that everyone says that Calc BC is the "second hardest" class at MV and the general rumor is that you need to be a math genius to end the class with an A. This could not be farther from the truth. As long as you put honest effort into the class (take notes, don't forward video lectures, actually do the homework even when the solutions are given, redo every problem you got wrong, etc) you will most likely get the same grade you got in precalculus honors or better. If you put in time to reach out to Mr. Conlin on your own, he will most definitely put in time to make sure you understand the concepts properly and is very willing to work with you one on one until you grasp the content. However, do not put off understanding a concept until the day before a test-- I know from experience that all this does is stress you out and result in lack of sleep. Calculus is like building blocks, so if you don't understand one night's homework, you won't be able to understand any other night's homework until you have solidified the foundations. Try hard, start studying for tests 2-3 days in advance, and have confidence in yourself!

Coming in to ask questions during tutorial or during class will save you a lot of time instead of trying to figure things out alone at home, not to mention you'll probably understand things a lot better. Plus, Mr. Conlin loves receiving questions so its a win-win situation.