

2021-2022 AP Calculus BC

Mrs. Morin

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For most of you, **AP Calculus BC** will be the hardest math class you have ever taken. By preparing you to do high-level mathematics, and previewing calculus concepts, a year in Calculus makes college (and life) much easier than it would be otherwise. But you don't have to be a math superstar—or insanely hard-working—to do well: most A's are earned by students who studied **efficiently**, not just intensely.

Main tips

- Plan ahead. Doing work at the last-minute hurts your understanding and leaves you less ready for tests.
- Not only memorize important formulas and theorems but **UNDERSTAND** the concepts.
- Whether on homework or tests get the ones you know right, quickly, first. Work as **efficiently** as possible on the problems that seem easier, then go back and think through harder problems.
- Ask questions and accept **HELP**. Don't think that doing it well requires toughing out everything on your own.

Your grade

- I know your grade is important to you and the school requires me to give them to you
- That grade is meaningless in terms of college credit. I'm here to get you to pass a test in May
- If you get a 100% in my class and a 1 or 2 on the AP exam, you just wasted a year of your time and must do it all over again in college. Possibly you were copying or not being honest with your work and that is on you.
- You will get out of the class what you put into it and I'm here to help

Notes

- Notes are a useful reference if you make them so. Keep them organized in your binder. Each night spend a few minutes (not more than that!) going over your notes and summarizing the most important ideas or skills from that day's work.
- Finally, keep a list of important theorems and identities on a separate sheet in your binder. You'd be surprised how many students never revisit their notes!
- To even further help you to be successful, try watching the AP Topic Videos **BEFORE** the lecture. You'll come to class primed and will absorb the new information more quickly.

Participation/Homework (20%)

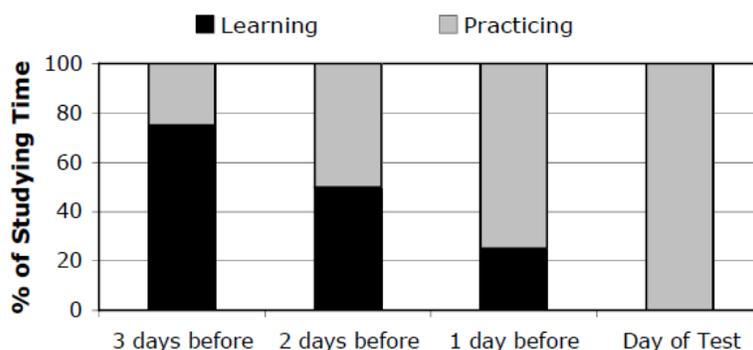
- It is based on the quality of work for ALL problems assigned, daily attendance and class participation.
- Doing homework regularly, well, and efficiently is the **key** to your success.
- Doing homework, the night it is assigned is a must! This reinforces the concepts necessary to move on. Oh, you'll discover it also alleviates stress.
- It is very important to not get behind.
- Do not copy someone else's homework or get the solutions from some online site. You will pay deeply with your test grade. If caught you both will receive a **ZERO** on that assignment.
- Be sure that after getting help, you revisit that problem or concept. Remember, ultimately, you are responsible for demonstrating the mastery on your own in a timed environment. It's OK to work the same problem more than once, twice, thrice, etc.

Assessments (80%)

- Assessments in Calculus are composed of problems on recent material, review problems, and problems requiring some creative or original thought. **Understanding** the material is key.
- There is a multiple-choice section (2 minutes/question @ 1.2 points each)
- There are usually free-response questions (15 minutes/question @ 9 points each)
- Most tests are non-calculator just like the AP test
- IF a retake is offered, the maximum score allowed in an 80%

Studying

- Spend almost all your study time doing practice problems, since that's what you'll do on the test.
- Your notes *can* be a helpful reference: to determine what kinds of problems might be asked, or to remind you how to do a problem that you've forgotten (or didn't really understand). So skim your notes at the start of your studying, and read them when you need information they contain; otherwise, put them aside while studying.
- To get a good score on a test, you need to get the problems you know how to do correct, and you need to be able to do them *quickly*. Starting a few days before the test, spend some time practicing problems that you already feel you sort of know, and gradually increase that time as the test gets closer. When working these practice problems, do not focus on specifics of that particular problem, but rather the **general methods for that type of problem dealing with that particular skill or concept**.
- Reviewing challenging homework problems is highly recommended. If you know how to do most of these problems, you can be confident about the test itself.
- That same time frame—a few days before the test—is also a good time to try and make sense of material that confused you the first time through. As the test approaches, however, spend *less* time learning “new” material, and *more* time **practicing** the material you've just learned. *Material you “learn” the day before the test is unlikely to help you*, since you're not likely to get much credit on those problems without the thorough understanding that only time and practice can bring. Spend the night before practicing, with maybe a little attention to one last problem or concept that still feels tricky.



Last words

Calculus is challenging, but it's not meant to be impossible. The entire course is cumulative!! If you fall behind, you will feel like you are drowning the entire year. Get help: from me, friends, internet videos, math tutoring. If you're really struggling, email me to discuss what strategies you're using and how to fine-tune your study habits. I may recommend you get some extra help, but usually I find that Calc students who get a little help to get back on track don't need regular meetings after that. Remember: math is supposed to be fun (really) even if part of the fun is surviving the struggle. The struggle that some of you may be facing for the 1st time in your life! Again, I'm here to help because I want you to succeed.