

AB Calculus vs. BC Calculus

These courses use the *SAME BOOK*. They are taught to the same depth, and use many of the same homework problems. They are both good college level math classes. What's the difference?

AB: Chapters 1 - 7 in one year

BC: Chapters 1 - 10 in one year

Because the BC course covers more material in the same time, it goes *faster*, and that's the most important difference.

This year, AB is taught by Ms. Collins, Mr. Anderson, and Mr. Jennings, while BC is taught by Messrs. DeRuiter and Stark (that will change next year – no promises!).

You *CANNOT* take AB one year and BC the next at Monta Vista; you must choose one or the other and take that class only. Mid-year transfers from BC to AB are *not* approved.

AP Exams: there are two separate AP exams, one for AB and one for BC, that are given at the same time on the same day in May. If you take the BC exam, you will get a BC score, plus an “AB subscore” indicating how well you did on the AB material.

College Placement: most colleges offer advanced placement in math for either AB or BC, with many letting you skip a bit more if you've passed the BC exam (for example, skipping the first two Calculus classes with a good score on the AB exam, and skipping the first three Calculus classes with a good BC exam score). Check with the colleges to which you will be applying for the details. If you are not going to major in a technical subject, AB might be all the math you will ever need. If you intend to major in math, engineering, or science, you should expect to need more math. Of course, you always have the option of taking college math courses when you get to college.

Prerequisites: to succeed in either course, you will need a good grasp of the material in PreCalculus Honors. Unlike some other math classes, there is virtually no repeat material from prior years, and little or no review of the prerequisite topics.

How should I decide which one to take?

- 1) Consider the rest of your schedule. How loaded-up are you with other APs, Honors classes, sports, and activities?
- 2) Ask *your* PreCalculus Honors teacher. He or she knows you best, and can advise you.

Thinking about skipping PreCalculus?

In recent years, the average AB Calculus grade for those who skipped PreCalc (on a 4-point scale, 4=A, 3=B, etc.) was 1.6. The average for those who did not skip it was 3.3.

There is no need to rush to finish Calculus before your senior year. Contrary to rumors you might have heard, it will ***not*** give you an advantage in your college admissions chances to take the course earlier, but it very likely will hurt your admission chances if you take it before you are prepared and earn a lower grade. A good grade in PreCalculus Honors, followed by a good grade in Calculus, offers a much more impressive transcript than skipping to Calculus and earning a mediocre grade.

Life in Advanced Placement Calculus

This is a *college course*, taught in high school. As a result, the expectations more closely mirror those for college students, so you should be willing and prepared to adapt.

Don't expect:

- in-class reviews before tests
- to use notes during tests
- re-takes for bad scores
- extra credit to pull you through
- to get by with memorizing formulas before a quiz
- to get by without understanding concepts from the pre-requisite courses
- to be spoon-fed all the material
- to use calculators for tasks that you should be able to do without one

but expect:

- lots of homework
- messy problems that require deep thinking and perseverance, on all work and tests
- significant effort outside of class to master ideas
- rigorous standards for grading
- out-of-the-box problems requiring creativity or insight
- to explain and justify your work orally and in writing
- scrupulous attention to detail and notation
- that success will require working efficiently and wisely, not just working "hard"