

## AP Calculus AB Information

*Course Description and Policies:* AP Calculus AB focuses on students' understanding of calculus concepts, like limits, derivatives, applications of derivatives, integration, slope fields, and applications of integration. The course is **very fast paced and does not include any review time of the prerequisite skills**. Students are expected to have **very strong algebra and trigonometry skills** and have daily time to study and practice (**1-1.5 hrs. after each lesson**), as they will **learn a new lesson each day and the lessons build off each other**. The course requires students to use definitions and theorems to build arguments and justify conclusions. The course features a multi-representational approach to calculus, with concepts, results, and problems expressed graphically, numerically, analytically, and verbally. Exploring connections among these representations builds understanding of how calculus applies limits to develop important ideas, definitions, formulas, and theorems. A sustained **emphasis on clear and accurate communication of methods, use of proper notation, reasoning, justifications, and conclusions is essential**. Teachers and students will regularly use technology (a **graphing calculator is required**; the TI-84 series is highly recommended, as it is used for teaching) to reinforce relationships among functions, to confirm written work, to implement experimentation, and to assist in interpreting results.

A **summer packet HW** will be assigned, for Algebra and trigonometry review!

**Estimated homework per week: 3-4 hours.** While HW will not count for a grade, a minimum of 70% needs to be reached for each HW assignment to **qualify for a Unit Test** retake at the end of each semester.

Students are expected to be self-motivated, independent learners, who take initiative to get help from the teacher (during help sessions) and/or from a study group.

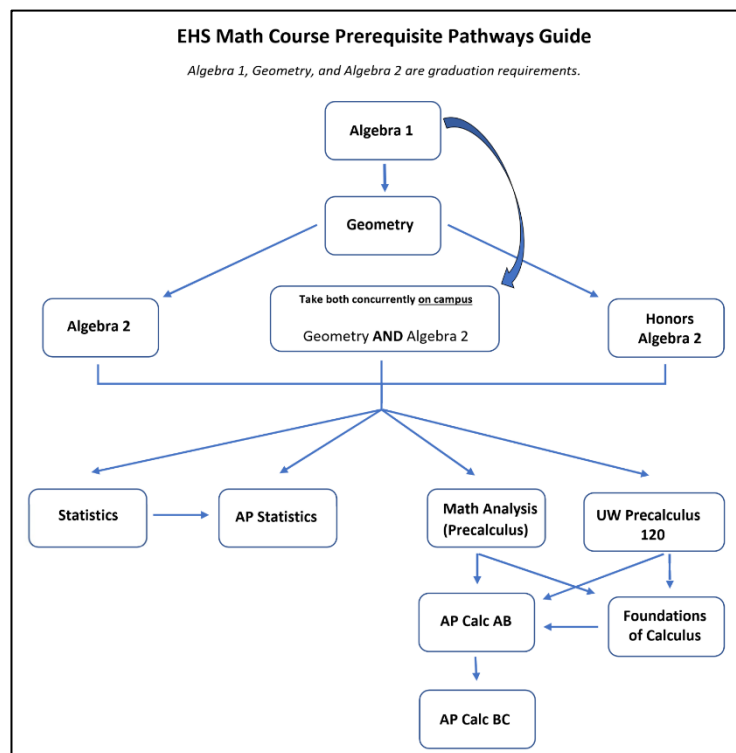
**Students must be aware that they CANNOT “drop” to the Foundations of Calculus course after the registration cycle is completed – per EHS registration policy!**

Students are not required to sign-up for the AP exam; however, the program successfully prepares the students who have strong foundational skills and keep up with the class pace for this exam (90% passing rate).

**The student score on the AP Exam will not be used to replace the semesters course grade.**

\*\*\*We highly encourage students who need a slower pace and/or need to strengthen the precalculus skills or do not have 3-4 hours per week to dedicate for this course, to consider the Foundations of Calculus option, as it might be the better fit for them.

Last year, we asked our AP Calculus Students: **“What advice would you give to a student interested in registering for AP Calculus AB?”** You can see their responses on the back of this handout!



## What advice would you give to a student interested in registering for AP Calculus AB?

You need to take good notes and use every single resource that is given to you to its fullest potential, the homework is there to help you and whether or not its graded for your own sake you should be prepared to do it. In AP Calc you have to take the initiative on your learning so make sure you have that drive.

i would say that you have to know that it is going to be a priority, like even when your taking other aps like make sure your top one or 2 if you had to make a priority list needs to be calc

It is incredibly important to be on top of the homework and classwork. It sounds like any other class's requirements, but AP Calculus AB goes at a pace that requires constant attention. Falling behind is very time consuming and difficult to manage towards the end of each unit. Being organized with notes in your journal is very helpful to look back at as well. I would recommend making a study plan at the end of each unit to study for the test.

You're going to be looking at all these recommendations saying "know your algebra and trig" and go "hah, I've never had an issue with algebra or trig". Trust me, I was one of you. But what you don't know is everything you have forgotten. Do Khan Academy, do the summer packet, DO THEM!

To actually consider foundations of calculus

Learn units over the summer, and stay ahead of the class, because then you'll be able to have a buffer if you need to spend more time on topics, since the class is unrelenting.

if you're willing to spend your own time trying to understand topics that you don't understand in class then you are probably good, because you won't understand everything right away. Also, if you don't fully understand all the stuff taught to you in your other classes then this class will be a lot harder because you really need that math foundation in order to succeed.

- You have to be on top of things and not fall behind because it will be hard to later catch up - Ask questions if you are unsure - Participate in class

I would say that we are given a lot of resources, especially the powerpoints, and using them is very important. The teachers all care a lot, and it is dare I say easy to get an A with all the resources we have.

Make sure to learn and understand the PowerPoints, it is very useful. Help sessions too

Use the powerpoints, do your homework, ask questions in class if you don't understand anything, come in during office hours or wolf time to get extra help if needed. The teachers are very good and will help you understand do not be afraid to ask a question.