AP Calculus AB- Course Preview

Mr. Milazzo

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Why should I take this course?

- Calculus is a subject that has many applications- including fields related to the sciences, computers and other technology, and business.
- Our focus is on preparing students for the AP exam, which gives students the opportunity to earn credit for one semester of college Calculus.

What will we be studying?

- This course will focus on the two key concepts of Calculus, the derivative and the integral.
- We will focus on to fundamentals of these topics, as well as a variety of applications.
- While it would be wonderful to see every application that Calculus provides, the time constraints of a single school year do not provide us enough time.

What will I need in order to be successful in this course?

- A strong background in Algebra- while all math courses are connected by common content and common ideas, no connection is more important than being able to utilize skills learned in Algebra and Algebra 2 in the context of solving Calculus problems.
- Work ethic- remember, this is a college class! The material we cover cannot be reduced down to a series of rules or steps; you must focus on a thorough understanding of the content, and working hard to understand how to use it in a variety of contexts.
- A willingness to think about mathematics- while there are an endless and exciting number of applications to Calculus, you have to be prepared to talk with your classmates about what we are learning in order to be successful.
- A collaborative spirit- learning must occur through peer interaction; it is a requirement of this course to be willing to work in groups.

What materials do I need for this class?

- A notebook, used to collect ideas, take notes, and complete assignments.
- A folder/binder, for various materials that are handed out in class
- While a graphing calculator is not required, it is strongly recommended that you have your own, as it is used extensively in this course.
**Is AP Calculus AB hard?**

As stated before, this is a college mathematics course! The expectations on you to be an independent learner, as well as a collaborative learner are greatly increased. You will have to work outside of class, and you will have to persevere through different content and different problems in order to have success. The time you spend outside of class will be greater than the time you have spent in prior math classes; this is due both to the depth of the content as well as the expectations and timing of the course.

**Does this course have summer work?**

Absolutely. As this course develops the concepts you have learned over your last 6 years of math, it is important for you to make sure those skills are fresh in your mind. The summer work packet consists of review materials from your past mathematics courses, as well as an element requiring contact with your Calculus teacher during the summer. It is always best to make sure you are prepared, and the purpose of our summer work is to do just that.

**How can I be sure that I am ready?**

- Ask your math teachers! They know you and your abilities the best, so they can give you an honest answer.
- Do you have a strong interest in math, or know you want to study a field in college that requires math? If so, then the benefits of the course definitely outweigh the potential drawbacks.
- Are you willing to work hard, especially during your last year of high school? If you truly want to be prepared for college, hopefully the answer is yes. The benefits of your hard work (college credit, experience with advanced topics) can definitely be found in this course.

**Who else can I talk to if I’m still not sure?**

- Mr. Milazzo is in room 212, or can be emailed at the address at the top of this document.