

AP CALCULUS AB - SYLLABUS

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COURSE GOALS: Calculus is the culmination of all the math courses that a student has taken up till now. Calculus AB is the first part of what we call Calculus. Calculus AB brings all the ideas that a student has learned so far and uses them as tools to explore three primary concepts in depth (Limits, Differentiation, and Integration). Students will use these three concepts in many different real life situations throughout the course. After completing this course, students will hopefully better see the beauty and power of all the mathematics they have learned throughout high school.

APEXAM: All students who take this course are expected to take the AP Calculus AB Exam the first week in May. The exam consists of 45 multiple-choice questions in 105 minutes and 6 free-response questions in 90 minutes. This course will revolve around preparing students to be successful on this exam. Students will be practicing for this exam throughout the year by doing problems from old AP Exams that have been released to the public.

GRAPHING CALCULATOR: Specified parts of the AP Exam will require a graphing calculator that has at least the following four functions:

- 1) Plot the graph of a function within an arbitrary viewing window
- 2) Find the zeros of functions (solve equations numerically)
- 3) Numerically calculate the derivative of a function
- 4) Numerically calculate the value of a definite integral

In this class we will be using the TI-83, 84, or 89 Titanium. A list of other expectable calculators for the AP Exam will be supplied on a student's request. Students will be using their graphing calculator throughout the course as a tool for exploration and to better understanding the subject as a whole.

OFFICE HOURS: During this time students can get help and/or make up tests.

Tuesdays at lunch.

Thursdays from 7:15-8:10 am.

Tuesdays from 3:16-4:15 pm.

GRADING SYSTEM: 80% - Tests, Group Tests, & Quizzes 20% - Work (Homework, Projects, etc...)

Flipped Classroom: This year you will take most of your notes at home, online via YouTube, as homework. Some days you will have quizzes in class to make sure that you have watched the video. For this to be successful, you must have consistent access to the internet. If this is not possible, then please notify Mr Robb immediately so that he can work on an alternative.

Homework: Points are subtracted for skipping problems, not showing work, or being overly messy. If a student has an excused absence the day it is due, they must turn it in at the beginning of the period the day they return to class.

Tests: Make sure you study for them, because they cannot be retaken. If a student is absent, they have a week to make it up. After a week, they lose points depending how long it takes them to finish it.

CONSEQUENCES: The following are examples of behaviors that will result in a detention with me. If they are not served within 3 days, then it will become a referral.

- 1) 3rd tardy 2) Taking over 4 minutes to use the restroom 3) Inappropriate behavior in class

CITIZENSHIP MARK: A student's citizenship mark will be assessed by their attitude and behavior in class.

PARENT/GUARDIAN: I have created a website for parents and students to access that might be worth looking at to help your student be successful (wowmath.org). On the website, I have videos of all the notes that I give my students. Your student has a solutions manual to all the problems I assign out of the book. This book will be very helpful and yet possibly harmful to your student. Please encourage them not to just write down the work without understanding it. I have found many students regretting that when it comes to tests. Just so you know, this course has a lot more homework assigned than any of your student's previous math classes. Please encourage your student to ask questions and come in for help if they are finding themselves falling behind. Some students may find this class to be very challenging, and I want to help them be successful. I have found that this course can become the first math class these type of students have ever struggled in and they are not used to asking for help. Please watch out for this and support your student the best that you can. I appreciate when parents contact me and show interest in their student's education. Please email me anytime and I will get back to you fairly soon. Do not forget that you can access your student's grades on the PowerSchool Public Portal.

Signing below acknowledges that you have read and understand this document.

Students Signature: _____ Parent Signature: _____