

2023-2024 Course Syllabus Pioneer High School

Course Title: AP Calculus AB
Instructor: Mr. Ryan Hansen
Room: C323

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Introduction: Welcome to AP Calculus AB! It is a true privilege to be serving the Pioneer community. I am excited to dig in and work collaboratively with my students this academic year. I strive to provide the opportunity and atmosphere for students to express themselves and learn everything they can. I will make myself available to answer student and parent questions in a timely fashion. I will do my best to answer any question I am asked - within reason - or seek out the appropriate information as needed. More information on my credentials and background can be found via my website: www.HansenMath.com

Course Description: AP Calculus AB at Pioneer High School investigates topics typically taught in college-level Calculus I and Analytic Geometry courses: limits, derivatives, integrals and their applications. This course also focuses on preparation for the Advanced Placement examination - for potential college credit - as one of its primary objectives. Students enrolled in this course are strongly encouraged to take the AP Exam, but it is not mandatory. Additional information regarding the 2024 AP Testing will be updated on my website as it becomes available.

Classroom Expectations: Students are expected to challenge themselves and strive to achieve maximum comprehension of Calculus concepts. This is a fast-paced course where effective and efficient use of class time is of critical importance. This classroom is designed to be a collaborative learning community where we strive to grow as individuals and as a collective unit. Respect, kindness, and encouragement is required of everyone. All Pioneer High School policies will be adhered to (for example, cell phones away during instruction, academic honesty upheld, appropriate use of language, etc.). It is highly recommended that students form “study groups” to collaborate outside of school before Tests, Exams, etc. Many students have found it difficult to master Calculus concepts in isolation.

Grading Policy:

Classwork and Homework Assignments (Formative / 10% of quarter grade) will generally be assigned daily - also posted on Schoology - and it is expected that each assignment will be completed by the next class meeting so that questions concerning the exercises may be asked and answered in a timely fashion. Students turning in chronically late work has proven to be a recipe for disaster—based on past experience. Thus, once a unit of study has concluded, missing homework will no longer be accepted for that unit. Please take careful note of this policy. Time will often be allotted in class for students to begin homework - to work together and ask questions before departure. Since solutions are frequently shared with this class, completion includes documenting the process of how to solve a given problem.

**If absent, it is the student's responsibility to consult Schoology and/or ask for missed work.*

Assessments (Summative / 90% of quarter grade) provide an opportunity for students to demonstrate mastery over several sections or an entire unit of study. Scores will be determined based on accuracy. Quizzes will generally be administered every 4-6 sections. Unit Exams will be administered whenever a unit of study has been thoroughly investigated. Students will be afforded several days' notice before an Exam is administered. Exams are quite challenging and represent our best attempt to reflect the format and rigor of the actual AP Calculus AB Exam.

A Word About Grades: This is truly a college-level course; you're just taking it within Pioneer High School. On the AP Test, students receive a score that suggests the equivalence of college credit/proficiency.

Per College Board: 5 – *Extremely Well Qualified* “A”; 4 – *Well Qualified* “A-, B+, B”; 3 – *Qualified* “B-, C+, C”; 2 – *Possibly Qualified* “n/a”; 1 – *No recommendation* “n/a”.

Scores from 3-5 are considered “passing.” The results from the 2023 AP Calculus AB Test have been released. The following represents the percent of Michigan students receiving each AP score: 5: 23%, 4: 18%, 3: 21%, 2: 23%, 1: 16%. Although Pioneer High School's scores are considerably higher than the State averages, it's still not reasonable to expect that every student – or the vast majority of students – will earn an “A” in this course. *Please note that a certain “letter grade” does not guarantee the associated AP score or vice versa. There are a lot of factors that may influence both.*

Supplies:

- Students will receive handouts / guided notes that closely follow the updated AP curriculum.
- Graphing Calculator, TI-84. Highly, highly recommend purchase. This is the sanctioned calculator for AP Testing. (The emulator version is also available on all student Chromebooks.)
- Pencil and alternate color(s) for correcting work.
- Notebook/Folder to take notes, complete assignments, organize and retain paperwork
- AAPS-issued Chromebook or equivalent computing device

Extra Help: It is likely that this class may challenge you to change or modify your expectations and habits for learning mathematics. I will be available to help you during class and at lunch - all you have to do is ask! If this does not fit into your schedule, consider forming a study group to mull over problems that appear difficult. Most often, when great minds pull together, a solution is found! Additionally, a treasure trove of resources exist on YouTube and AP Classroom. When you need supplemental instruction and practice, it's not hard to find.

I strongly believe education is a partnership between parents, teachers, students, and administration. If there is anything more I can do to make this year successful, please do not hesitate to contact me any time. I am looking forward to an amazing year!

Sincerely,



Mathematics Teacher
Pioneer High School