**AP Calculus**

**Coach Washington**

**Course Syllabus 2024-2025**

**Course Description**

AP Calculus AB focus on students’ understanding of calculus concepts and provide experience with methods and applications. Through the use of big ideas of calculus (e.g., modeling change, approximation and limits, and analysis of functions), the course becomes a cohesive whole, rather than a collection of unrelated topics. Both courses require 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. College Course Equivalent AP Calculus AB is designed to be the equivalent of a first semester college calculus course devoted to topics in differential and integral calculus.

**Unit/Concept Names**

Unit 1: Limits and Continuity

Unit 2: Differentiation: Definition and Fundamental Properties

Unit 3: Differentiation: Composite, Implicit, and Inverse Functions

Unit 4: Contextual Applications of Differentiation

Unit 5: Analytical Applications of Differentiation

Unit 6: Integration and Accumulation of Change

Unit 7: Differential Equations

Unit 8: Applications of Integration

**Major Course Projects and Instructional Activities**

At least one project will be assigned each grading period. This will be an extension or enrichment of the concepts discussed. Students will have 1 to 3 weeks to complete each project depending on the complexity of the task. Some tasks and/or projects will be completed in class (specifically the unit culminating tasks – these MUST be completed in class only).

**Course work/Classwork**

Students will receive a variety of assignments designed to enhance their learning. If a student is absent, the student is responsible for the missed assignment.

Students are expected to submit work on time. Doing so exhibits pride in producing quality work and fulfilling student responsibility. This work habit is a behavior that supports academic achievement and demonstrates characteristics from our Richmond County School System Profile of a Graduate. Late work can negatively impact learning and your ability to demonstrate mastery of the standards.

When the assignment calls for students to produce original work, students will not use Artificial Intelligence (AI) to generate the assignment for them. Assignments are given to help students learn and demonstrate what they know. While there may be appropriate times for students to use AI during the learning process, using AI to generate original work in place of the student completing the work, is considered

Academic Dishonesty and can be punished according to the rules outlined in the Code of Conduct.

*See RCBOE IHA-R Grading Practices*

**Late Work (Grading Policy- See RCBOE IHA-R Grading Practices)**

Students may have their scores reduced by 5% per school day for a 25% maximum reduction (five school days). ***Late work submitted after the fifth school day will only be accepted at the teacher’s discretion.***

**Make-Up Work (Grading Policy)**

Students are expected to make-up assignments and assessments that were missed due to absence from

school. Students are responsible for asking teachers for the make-up work upon returning to class.

Make-up work should be completed by the student within the time specified by the teacher **[5 days].**

**Evaluation (Grading Policy)**

* Minor Grades (Class work, Graded Writing Assignments, Group Work, etc.)
* Major Grades (Unit & Chapter Test, Quizzes, Projects, Tasks)

**Relearn and Reassess Plan**

For any major assessments, students will have the opportunity to submit a relearning plan for parent and teacher approval. Upon satisfactory completion of the plan, as determined by the teacher, students will be given a minimum of **ONE** opportunity to be reassessed. Only students scoring below 70 on a major assessment can complete a relearning plan unless exempted with parent approval.

Reassessments may be different from the original.

The reassessment score will replace the original score (the scores will not be averaged).

Reassessments should be completed **within 7 school days** of receiving the original grade. Teachers should have discretion to extend the timeline to address extenuating circumstances.

*See teacher class page for Relearn/Reassess*

**Classroom Procedures & Expectations**

The overarching expectation in this class is to represent WAR (W, Accountable, Respectful)

Below are the expectations for how to W.A.R. in class!

|  |  |
| --- | --- |
| **Wholehearted** | * **Actively Participate**
* **Encourage each other**
 |
| **Accountable** | * **Turn assignments on time**
* **Be to class on time**
 |
| **Respectful** | * **Treat others the way you want to be treated.**
* **Show courtesy of others personal space.**
 |

**Course Materials**

\* Pencils (mechanical pencils preferred)

\* Handheld pencil sharpener \* Highlighters

\* (6) two pocket plastic folders w/ 3 holes

\* Coloring Utensils (crayons, coloring pencil, or markers)

**My contact information:**

Email: washida1@boe.richmond.k12.ga.us

Remind messages:

**Resources:**

www. Mathia.com

iReady.com

AP Classroom

Delta Math

Math IXL

**To sign up for class reminders, please visit:**
Send a text to: 81010

Text this message: @2425apca

**Student Contract:** I understand that all work should be completed on time. I understand that my teacher may deduct five points per day and communicate this in my Infinite Campus gradebook. I also understand that work turned in after the learning has occurred may not be graded (no more than 5 school days from the due date). I understand that using Artificial Intelligence to complete assignments where I am asked to produce original work will be considered Academic Dishonesty.

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_

**Parent Contract:** I understand that my child is expected to complete assignments on time. I will

remain in communication with my child’s teacher and monitor missing and late work as noted in Infinite Campus Parent Portal. If my child continues to submit work late, I understand that a parent-teacher conference will be needed to co-develop a plan of action. I understand that my child should not use Artificial Intelligence to complete assignments where students are asked to produce original work.

Parent Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_