

## Advanced Placement (AP) Calculus BC Syllabus 2023-24

**Instructor:** Mrs. Thompson

**Room:** Price Hall 108 A

**Email:** [thompsm12@gcsnc.com](mailto:thompsm12@gcsnc.com)

**Course Overview:** AP<sup>®</sup> Calculus BC is an introductory college-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions.

**Course Expectations:** Students are expected to complete all homework problems to the best of their ability. If they need additional support, they can refer to the additional resources listed below.

The Personal Progress Checks (PPC) that are assigned online for this course through the student's College Board account are to be completed on time; exceptions will not be made.

Students will take quizzes. These quizzes are short and are intended to check for understanding of concepts and skills that were recently taught. Students are required to make all corrections when the quizzes are returned to them.

**Technology Requirement:** Students should have a TI-84 graphing calculator. There is a classroom set that must remain in the room. Some problems throughout the course will require them to use their graphing calculators.

**Textbook:** Sullivan, Michael, and Kathleen Miranda. *Calculus* (for the AP Course), 2nd ed. (New York: Bedford, Freeman & Worth, 2017)

### **Additional Resources:**

- Students can watch videos posted on Canvas corresponding to the lesson covered in class.
- Students can log in to their College Board Account to watch Daily Videos and work through the Student Practice questions that come with video explanations
- Students have the option of coming to me for help before school, during lunch or on Wednesday evening after school (4:30 – 5:30 pm).

The course is designed around the three “Big Ideas” of calculus, including:

Big Idea #1: Change  
Big Idea #2: Limits  
Big Idea #3: Analysis of Functions

The College Board's CED is broken down into units, and my course follows the sequencing/pacing of these units. The three big ideas of calculus are included in the units as reflected in the CED.

UNIT 6: Integration and Accumulation of Change (~3 weeks)

UNIT 7: Differential Equations (~2 weeks)

UNIT 8: Applications of Integration (~3 weeks)

UNIT 9: Parametric Equations, Polar Coordinates, and Vector-Valued Functions (~3 weeks)

UNIT 10: Infinite Sequences and Series (3-4 weeks)

### **Grading Policy:**

50% - Major Assessments (Unit tests)

30% - Minor Assessments (Quizzes)

10% - Homework

10% - Classwork

**Assignment Policy:**

1. Tests will be given at the end of each unit and sometimes halfway through the unit if it is a big unit. When absent on a test day, the test must be made up ASAP.
2. Quizzes may be given once per week. When absent on a quiz day, the quiz must be made up ASAP!
3. Classwork may be assigned daily and must be completed before leaving.

**Tutorial Schedule:**

\*Wednesdays 4:30 – 5:30 pm

\*During lunch.

**REMIND.COM TO:**

**3<sup>rd</sup> Block:** 81010 MESSAGE: @c7kg8h

**4<sup>th</sup> Block:** 81010 MESSAGE: @6f8f29a

**AP EXAM DATE: MONDAY, MAY 13, 2024 8:00 AM**

Sign up for AP Calculus Classroom using the following code at [myap.collegeboard.org](https://myap.collegeboard.org)

3<sup>rd</sup> Block – **N97AM3**

4<sup>th</sup> Block – **JQQ4V4**