

# AP AB Calculus

Mrs. Blackman – Room 16 [jaclynblackman@ccs.k12.nc.us](mailto:jaclynblackman@ccs.k12.nc.us) Planning is 1<sup>st</sup> bell from 8:30 -10

Welcome to AB Calculus! I am very excited for this school year. I hope you are as well. Building enduring mathematical understanding requires understanding the why and how of mathematics in addition to mastering the necessary procedures and skills. To foster this deeper level of learning, AP Calculus AB is designed to develop mathematical knowledge conceptually, guiding you to connect topics and representations throughout the course and to apply strategies and techniques to accurately solve diverse types of problems.

Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. You'll learn how to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and how to make connections amongst these representations. You will learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

**Be advised AP classes are equivalent to a college course and will be taught as a college class! This includes the amount of outside classwork, and assessments. You must treat it as such.**

## Syllabus

First Quarter	Second Quarter	Third Quarter	Fourth Quarter
-Limits	-Derivatives	-Applications of	- The Definite Integral
-Derivatives	-Applications of	Derivatives	-Differential Equations
	Derivatives	-The Definite Integral	-Mathematical
			Modeling, and
			Applications of
			Definite Integrals
			-Review Final Exam
			L'Hopital Rule

## Rules

1. Stay positive. (No horse playing, negative comments or jokes.)
2. Stay busy. (Come to class on time. Work begins when you enter the classroom not when the tardy bell rings. Work ends when I dismiss you.)
3. Stay humble. (Raise your hand to ask permission.)
4. Stay clean. (Keep the aisles clear. Do not write on desks. Put trash and recyclables in their correct container.)
5. Stay focused. (Follow directions the first times they're give. No phones unless instructed otherwise. Maintain academic integrity, no cheating.)

## Discipline Plan

My discipline plan will follow the rules of FTS. They generally consist of the following:

- 1<sup>st</sup> time...warning/conference with student.
- 2<sup>nd</sup> time...contact parent.
- 3<sup>rd</sup> time...office referral

<b>Materials Required</b>		<b>Suggested Materials</b>	
3 Ring Binder or Spiral Notebook Loose-leaf paper Pencil		Colored Pencils TI-84 Plus for use at home	
<b>Grading Policy</b>		<b>Final Grade Policy</b>	
Homework/Classwork	30%	Midterm Average	40%
Quizzes	30%	Second Term Average	40%
Tests	40%	Final Exam	20%

***Tutoring is available Thursday from 3:35 – 4:15 you must provide transportation. It is my intention to keep this tutoring time all year even though this is only a fall course. The reason for this is to keep the content fresh until May when you take your AP Exam.***

**Make-up work:** It is the student’s responsibility to get work and notes missed due to an excused absence. Excused absences include doctor’s appointments (must turn in a doctor’s note), school approved field trips, or funeral. If a student plans to be absent for any other reason, they need to arrange to get their work ahead of time so that they can turn it in the day they return. Assignments and notes will be posted on Google Classroom. Any handouts will be located in the student’s class folder. Students have 3 school days to turn in make-up work.

*Please encourage your students to be responsible for his/her learning. Attendance, class participation, completion of assignments and daily study is a must. I am here to help. Please do not hesitate to contact me at any time. Please sign below to indicate your understanding and support of the classroom system.*

Student Signature \_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_

Parent/Guardian Phone Number: \_\_\_\_\_

Parent/Guardian email: \_\_\_\_\_