

Course Overview:

AP Calculus (AB/BC) is a year-long course in which students will study mathematical concepts as outlined in the AP Calculus Course Description (www.collegeboard.com). First semester is Calculus AB, which is equivalent to a first semester college Calculus class. The main focus is on limits, derivatives, and integration. Second semester is Calculus BC, which is equivalent to a second semester of college Calculus. The focus will be on advanced integration, sequences and series and parametric and polar functions.

Supplies:

- 3 ring binder with dividers (notes, homework, classwork, warmups &FRQ)
- Loose leaf notebook paper (for the binder)
- Pencils all work should be done in pencils.
- Graphing Calculator any TI-83 or TI-84 model.

Hybrid Classroom Expectations:

- Follow all rules in the student handbook.
- Be in your assigned seat in class or at your home and start working on the warm up.
- NO food, drink, or candy in classroom (clear water bottle is ok)
- Use positive communication skills. Be polite, courteous, and respectful of me and classmates.
- No electronic devices are allowed during class unless directed by the teacher. Any items that are visible during class time will be confiscated.
- Follow all directions given by the teacher. Any deviations from the above may result in reprimand, classroom consequence, a parent call/email, an assigned detention, a referral or any such combination.
- Please read UCPS Plan B Virtual Instruction Model that I may use.

Homework/classwork/warmup

- Show all work to receive full credit. I should be able to logically follow your work for each problem. No Credit will be given for a page with answers without work steps.
- Homework is extremely important to be successful in Calculus. The more time and effort you put into nightly homework, the easier it will be to prepare for quizzes and tests. It is very difficult to cram concepts night before assessments.
- Warm ups/Homework Quizzes will be given daily during the first 15 minutes of the class. They will be graded for accuracy.
- Homework is due next day in class from the day it is assigned unless otherwise instructed.



Test and quizzes :

- Tests and Quizzes will be announced in advance. Typically, there will be one test and multiple quizzes per unit.
- If you are only absent for a review day, you will be expected to take the test/quiz on the scheduled day.

Grading Policy:

Test : 100 points approx. (depending on test, point will change accordingly) Quiz : 30 points approx.(depending on quiz, point will change accordingly) Assignments/Classwork : 10 points Graded Assignments: 10 points

Absent and Late Work:

- Any time you are absent from class, it is your responsibility to obtain all of your make up work/assignments.
- If you are going to be absent because of a school function and you know about your absence in advance, you must arrange to get your make up work before your absence.
- If you are absent, then you have two days to submit your work.
- Late homework/classwork will only be accepted the following day for half credit. The assignment must be fully completed for half credit.
- All assignments and guided notes can be found on Canvas
- Keep up with all assignments and work or your grades will not keep up with you! No Exceptions!

<u>Office hour (Extra help)</u>: Tutoring is an excellent resource. Whether you have missed a class, struggling with a topic, or have a homework question, utilize this service! I will be available on Friday from 8:15 am to 9:45 am.

Major Topics Covered:

Unit 1- Limits, Continuity (AB only)

- Unit2 Differentiation: Definition and Fundamental Properties (AB only)
- Unit 3 Differentiation: Composite, Implicit, and Inverse Functions (AB only)
- Unit 4 Contextual Applications of Differentiation (AB only)
- Unit 5 Analytical Applications of Differentiation(AB only)
- Unit 6 Integration and Accumulation of Change (AB/BC)
- Unit 7 Differential Equations (AB/BC)
- Unit 8 Applications of Integration (AB/BC)
- Unit 9 Infinite Sequences and Series (BC only)

Unit 10 - Parametric Equations, Polar Coordinates, and Vector- Valued Functions (BC only)



The AP Exam

The AP Exam consists of two sections:

Section	Question Type	Number of Questions	Exam Weighting	Timing
I	Multiple-choice questions			
	Part A: Graphing calculator not permitted	30	33.3%	60 minutes
	Part B: Graphing calculator required	15	16.7%	45 minutes
II	Free-response questions			
	Part A: Graphing calculator required	2	16.7%	30 minutes
	Part B: Graphing calculator not permitted	4	33.3%	60 minutes

Upon completion of the exam, the test will be graded from 1 (not proficient) to 5 (equivalent to earning an A in a college course). Students taking the Calculus BC will also be given a Calculus AB sub score based on their performance of the exam devoted to Calculus AB topics.

<u>MRHS Honor Code</u>: "I will not cheat or help others cheat; will take pride in my school and how I represent it; and will be responsible for my actions. I understand that violating MRHS honor code compromises my self-respect."

AP EXAM DATE: May 4th