AP Calculus BC Syllabus 2025-2026

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Course Description

This course is intended for students who have a thorough knowledge of algebra, geometry, trigonometry and analytic geometry. Students successfully completing Calculus and Applications should take this course. This is designated as a college-level course in one variable calculus and will be treated as such. This year we will cover the content cover in college Calculus II. The Calculus and Applications course covered the material covered in a college Calculus I. The two courses put together will cover and all material required by the Advanced Placement program for both AP Calculus tests offered, including a selection of additional topics and applications commonly covered by college calculus courses that will not show up on the AP test. At the end of AP Calculus BC students will take one AP Calculus Test that will give them credit for both Calculus I and Calculus II in college.

Course Philosophy

In Calculus our vehicle for learning is mathematics, but what students are developing is their ability to logically reason, problem solve, and communicate which are skills required in many fields inside and outside of the sciences. This course is designed to challenge students' abilities. A major emphasis in this course will be the use of problem solving. The course will require students to work through struggle and gain comfort when a situation does not give an immediate answer of "what to do". This is to help students to develop critical thinking strategies, intrinsic questioning, and self-reliance in difficult areas. The limited class time is fully utilized for discussion, activities, labs, quizzes, review, and tests which makes attendance of the utmost importance. Outside of class homework is critical to students' understanding of the material. This is where students' problem-solving skills will be tested and developed. Questions regarding content and homework are always accepted both in class and outside of class. **Students are encouraged to come and seek help whenever a question arises.**

Materials

Calculus (Stewart) Book Colored Pens (For Correcting Assignments)

Notebook or Loose Leaf Paper Binder (Recommended)

Pencils (Many of them)

Colored Pens (For Correcting Assignments)

Graphing Calculator (TI Nspire CAS highly recommended)

A charger for your TI Nspire (keep your calculator charged)

Chromebook/Laptop/Device (same one as all other classes)

Grading

Semester Grade Calculation		Grading Scale	
18 Week Grade		93% or Above	Α
45%	Tests	90% or Above	A-
35%	Quizzes	87% or Above	B+
12%	Problem Sets (Lab)	83% or Above	В
8%	Homework	80% or Above	B-
Semester Grade		77% or Above	C+
18-Week Grade 80%		73% or Above	С
Final Exam 20%		70% or Above	C-
		67% or Above	D+
		63% or Above	D
		60% or Above	D-
		Below 60%	F

Homework

Students will be assigned homework for each section out. Problems have a wide range of difficulty levels to help students experience the breadth of the applications of Mathematics. Lists of assignments will be handed out at the beginning of each unit. Students will submit pdf scans of their homework on Canvas each morning of the due date. Due dates will be clearly outlined on the course calendar. Students are encouraged to work together and ask questions on their homework especially for the problems that they find more difficult. Every problem must be attempted with work shown. Students must then take the assignment and check answers against the posted answer key making corrections and reworking incorrect problems in a different color. There is no penalty for incorrect problems as long as corrections have been made using the answer key. Assignments are graded out of 6 points, 4 pts for attempting each problem and 2 pts for completing corrections. To receive full credit, the assigned homework must be submitted by the due date posted on Canvas. A limited amount of late-work will be accepted past the submission date with penalty.

0-1 day late
 1 point is deducted from the score earned on each assignment
 2 Points are deducted from the score earned on each assignment
 3-7 days late
 Points are deducted from the score earned on each assignment
 4 days late
 O Points can be earned for the assignment

When multiple assignments are due on a specific date, students are encouraged to submit any assignment that they have completed. They can then resubmit an assignment late if needed with penalty, but no penalty will be given to the assignment that was turned in on time.

Quizzes and Problems Sets

Quizzes will cover the content that has been recently covered in class. Problem Sets will be cumulative and taken from AP Free Response problems. Both will be given approximately once a week. Any missing quizzes or problem sets that are not made up will be recorded as missing. If a student has more than one missing quiz or problem set all subsequent quizzes and problem sets will count as zeros.

Assessments

You will have one test each unit. This test will reflect the material from the unit. However, it may not have exactly the same questions on it that you were asked on homework and quizzes. My tests will be designed to assess your understanding of the basic concepts and your ability to flexibly use the mathematics in different ways. There will also be a comprehensive component to each test from the previous chapters' material.

Absences

It is your responsibility to stay up on you work. My Canvas page is full of resources and links to help you navigate the course through any absences. Including digital copies of worksheets and answer keys as well as supplemental videos of lessons. Get caught up while you are out, do not wait until you return. Please sign-up to come in during resource hour to get help with missed material. If there is a day that I am absent, you will often have an on-line lesson or assignment, so make sure that your device is charged.

<u>Assessments</u> - For **Excused Absences**, assessments must be completed within 3 school days from the date per the student handbook. For **Pre-arranged Absences**, a student should make arrangements to make up assessments prior to the date if at all possible. For extended absences make arrangements with Mr. Schmid to set up a schedule for completion. For **Unexcused Absences** that prevents a student from completing an assessment on time, the student will be allowed to make up the assignment within 3 school days, but the score will be reduced by 50%. For any assessments that go beyond the specified due date and extensions, students will be asked to complete the assessment the next time they come to class.

<u>Assignments</u> - Since assignments are only collected periodically and are submitted on canvas, in the case of an absence, students are expected to follow the due dates. If an absence prevents a student from submitting an assignment they must make arrangements with Mr. Schmid for submission to be considered without penalty.

Cheating

I take cheating very seriously; if you are caught cheating in any way, shape or form your parents/guardians will be contacted and we will find an appropriate consequence for you. This usually entails a grade reduction of one letter grade for the course. If it happens a second time, your final grade will be lowered to an F and you will be reported to the office for discipline.

Some examples are as follows.

- Copying another person's Test or Project inside or outside of class.
- Using notes or a calculator on a quiz or test when they are not allowed.

Attendance

Students' attendance in class has a direct effect on their ability to do mathematics. If a student has an excused absence it is the student's responsibility to get any make-up work.

Tardy Policy

With our fast paced class periods we have a limited amount of time for each lesson, so being tardy to class is unacceptable. The following steps will be taken with regards to students being tardy to class.

1st, 2nd and 3rd Warning

4th and Beyond Referral to Office for a Saturday Detention

Help

Within this class we are all working together to learn Calculus. Learning is not always an individual endeavor, it is helped by interactions and experiences with the material. Students will be working within groups and encouraged to form study groups outside of the classroom. It is my job to help you learn and provide you opportunities to learn mathematics, but learning the material is your responsibility. Make learning and school your priority, be self-motivated, and recognize when you need extra help. Advanced mathematics classes can be difficult for students, so if you do not understand material, are having trouble with homework, or do not do well on a quiz or test come in for help. If you are having problems with homework, make sure that you come in for extra help and utilize the resource hour.

CLASSROOM CONDUCT:

<u>Respect</u> is the key word in this classroom. Respect for other students, the teacher, and school property is essential to create a positive learning environment. General school rules apply at all times. In addition the following rules apply to this class:

- 1) Students are to be in their seats when the tone sounds and remain there until the teacher dismisses the class.
- 2) Use the restroom and drinking fountain <u>before</u> coming to class. Students will be allowed to sign out to the bathroom **during work time.** <u>If you make a habit of using the restroom during my class, restrictions may apply.</u>
- 3) Students are to keep hands, feet, and objects to themselves at all times.
- 4) Students are to bring materials to class and participate in class/online activities.
- 5) Students will maintain an appropriate noise level during class time.
- 6) No profanity (spoken or otherwise) or inappropriate comments are allowed.

Digital Classroom Management Plan

Devices approved through the Arrowhead Device Guidelines are acceptable to use in the class. For more information on approved devices, see the Arrowhead website. The following technology device guidelines have been established for this classroom.

- <u>Cell phones/Smart Watches/Air Pods are NOT approved classroom devices they must remain in</u> your backpack during class.
 - o **Parents: DO NOT TEXT OR CALL YOUR SON/DAUGHTER DURING CLASS!!** If you really need to contact them, call the office and they will call your son/daughter down.
 - Students: CLAIMING YOU HAVE YOUR PHONE OUT BECAUSE YOUR PARENTS TEXTED/CALLED YOU IS NOT AN ACCEPTABLE EXCUSE.
- Devices (including your graphing calculator) are expected to be charged prior to coming to class. If needed, there are charging lockers in the library to charge your device/calculator during a study hall.
- Check the online calendar for updates and upcoming events/assignments.
- It is the teacher's discretion if devices will be used on a given day. You are expected to bring your device to class every day.
- Make sure you are appropriately, respectfully, and responsibly using your device in class.
- If you do not have your device on a given day, there are laptops available for checkout from the library.
- When using devices in the classroom, the AHS Acceptable Use Policy (signed by you and your parents) will be enforced. Please reference the <u>Acceptable Use Policy</u> on the AHS website for any questions.
- Inappropriate use of the device will result in consequences established by your classroom teacher.
- There are a lot of great resources on-line for learning mathematics and students are encouraged to
 use them as an aid in their learning. On-line resources are provided for students to check their work
 and self-assess on homework and practice. <u>However, the graded work must be their own</u>. Copying
 work from another person, online resource, or AI and submitting it as a graded assignment is strictly
 prohibited. There is a class Canvas page where students will find on-line resources and calendars for
 the class.

Most of all, I am here to help you learn. If you are having difficulties or have any issues you would like to talk about please contact me or come to see me. I am here for you.

"This classroom welcomes all, embraces each, supports everyone and hopes that you find yourself better for being here."