



AP Calculus BC

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AP Philosophy

"Calculus AB and Calculus BC are primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The courses emphasize a multirepresentational approach to calculus, with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. The connections among these representations also are important.

Both courses are intended to be equally challenging and demanding. Calculus BC is an extension of Calculus AB rather than an enhancement; common topics require a similar depth of understanding.

Broad concepts and widely applicable methods are emphasized. The focus of the courses is neither manipulation nor memorization of an extensive taxonomy of functions, curves, theorems, or problem types. Thus, although facility with manipulation and computational competence are important outcomes, they are not the core of these courses.

Technology is used regularly by students and teachers to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results.

Through the use of the unifying themes of derivatives, integrals, limits, approximation, and applications and modeling, the course becomes a cohesive whole rather than a collection of unrelated topics. These themes are developed using all the functions listed in the prerequisites." (Teacher's Guide to AP Calculus" by The College Board)

Class Expectations

1. **Attendance is critical:** If you are absent, it is expected and to your advantage to come in for help the morning you return. This will increase your readiness for the new material presented that day. Be sure and check the blog for missed work. Daily notes will be posted on my blog.
2. **Preparation:** Come prepared to class. Have materials ready and your homework complete. Bring your book, homework and calculator to class daily.
3. **Make Up Work:** Students needing to make up work or tests should see their teacher. You MUST make up all work prior to the next test date. See your teacher if there is additional information that should be considered.
4. **Homework** is to be done daily. I will always answer a few questions from the homework at the start of each class period. After questions are answered, I will frequently then give a skills check quiz on the material from that lesson or previous lessons in the unit. The problems from the skills check quiz will come from the homework. These quizzes will have 3 or 4 questions usually and be 10 points. A student who had difficulty with the homework has the option of calling their study buddy for help or coming in the next morning. I arrive each morning for extra help at around 7:30 am. All extra help must conclude at 8 am for the start of the GT class.
5. **Honor Policy:** Copying homework, talking or looking around during a test or quiz, being in possession of unauthorized "helpful" information (including calculator programs or notes on calculators), or other violations of honor principles will be considered **cheating**. Cheating will result in a zero on the assignment, a "U" in conduct, and a call to your parents.



Calculator Policy



The AP Test is **graphing calculator** dependent. You are expected to have a graphing calculator with you in class each day and to know how to use it. The instructor will use a TI-Nspire while teaching. The TI-Nspire is recommended for this class; however, all work can be done on the TI-83 or TI-84. A student may also use the TI-89. **You need to know how to use your own calculator.**

If you do not own one of the above calculators, you may check out a calculator from the bookroom. If the calculator breaks or is lost, you will be charged the replacement cost. All tests will have a calculator and a noncalculator part. You will be expected to do work with and without the aid of a calculator. **Do not become calculator dependent, but make sure you become calculator proficient!**

Keepers

Your "keeper" is a composition notebook where you will put all of the notes you take for this course.

Tips for keeping an amazing Keeper...

- Don't complete homework problems, write personal notes, or take notes for another class in your keeper.
- Designate the first 2 pages of your keeper for the table of contents. This table of contents acts just like it does in any textbook and should allow you to navigate quickly through your keeper so that you don't spend time flipping through every page. You should update your Table of Contents each time we take a keeper with the appropriate unit, keeper title, and keeper number.
- Begin each keeper with the title and keeper number. The keeper # should appear in the upper right-hand corner of every page the keeper is written on.
- Only write one keeper on each page.
- Only write on the fronts of each page.
- If you are absent, ask a friend to copy their keeper and update yours appropriately. This is your responsibility as I do not have copies of notes to give.
- Keepers should contain strategic color to highlight important information.



SLO (Student Learning Objectives Assessment)

An SLO Pre and Post-test will be administered in AP Calculus BC at the beginning and at the end of Spring semester to confirm student growth. The posttest will be counted as a test grade.

Grading

Assignments will vary in value depending on the length and depth of the material being evaluated. All tests will count 100 points. Students and parents will be able to track a student's grade through the ParentVue Gradebook Program over the Internet. Grades will be updated once a week whenever possible. Remember that Calculus tests & assignments are difficult and time consuming to grade.

Grading



Tests, quizzes and homework will comprise 85% of your grade. Assignments will be worth between 5 and 100 points depending on the length and depth of the material being evaluated. You should keep a record of all assignments and the grade you receive. You will be able to compute your grade at any time. The final exam will count 15% of your grade.

AP Test Expectations

Every student is capable of taking and passing the AP Test. The amount of work and dedication you put into this course will be the primary determination of your success in the AP Calculus Program.

AP exam material for AB and BC will be practiced in class for those students taking the BC course second semester. The BC – AP Exam provides both a BC score and an AB subscore. You only need to take one test. Depending on your AP score, you could receive college credit for both AB and BC. Taking the AP Test is expected for all students taking this class.



I am looking forward to getting to know you and sharing my excitement about mathematics with you. It should be a great year!