

COWCULUS

An Udderly Moooving Experience

Wanda Burns

Room 111

2023-24

Schedule

0 – Calculus Lab – C^3

1st – AP Calculus BC

2nd – AP Calculus BC

3rd – AP Calculus BC

4th – AP Calculus AB

5th – AP Calculus AB



The best way to get in touch with me is through e-mail, and my e-mail address is: burnsw@mtnbrook.k12.al.us. I usually don't read or answer email until the end of the school day.

Please check out my web page. It can be found by going to the school's web page at www.mtnbrook.k12.al.us/mbhs/, and find my home page. There is valuable information on my web page for both you and your child. This handout will be there in case you misplace it.

Calculus has stood the test of time and continues to be the foundation and wellspring of most modern mathematics as well as engineering and the biological and social sciences. The calculus knowledge that students today are expected to possess has greatly changed since I took calculus in college over forty years ago. Presently, students should possess an understanding of rate, accumulation, and the conceptual relationship between derivatives and integrals in a real-world setting. By allowing students the use of a graphing calculator, the College Board has made the test more relevant to today's world by drawing more attention to the ideas than the techniques.

Basically, the difference in the courses is as follows: the BC course covers approximately 40% more content than the AB course with common topics tested at the same depth. The AB course equates to one semester of college calculus; the BC course equates to two semesters of college calculus. We will complete all new content in both courses before spring break, and both courses have 4.5 weeks of review before the AP exam in May. **A list of calculators that are allowed for the AP exam and also this course is on my web page.**

The exam (both AB and BC) is divided into four sections:

30 non-calculator multiple choice questions – 60 minutes

15 calculator multiple choice questions – 45 minutes

2 calculator short answer questions – 30 minutes

4 additional non-calculator short answer questions – 60 minutes

(students have all 6 short answer questions during the last 60 minutes without calculator)

I have several expectations for your child. First of all, I expect your child to give me 50 active, participatory, enthusiastic, and motivated minutes each day during class. Secondly, I expect your child to give me approximately 30 minutes of time each night for review, reading, and homework. I do not assign a great amount of homework, but I do expect them to spend **quality** time doing their

homework and reviewing what is taught each day. Most students who miss many classes for whatever reason lag behind or cram at the last minute and are not successful in the long run or on the AP exam. All test dates are on my web page, and I keep a running list of dates on my assignment board in the classroom. My tests are cumulative, usually two days in length and worth 1000 points each. My grading procedures and class rules are described in the article "**Daily Student Responsibilities**" found on my web page.

Finally, I believe that **calculus improves a person's life**; however, some may find it more challenging than others. This is not unlike any other subject. I am an early arriver at school and am usually able to help students at that time. Realize that I also give exams, copy tests, meet with parents, etc., during that time. My room usually fills up with study groups of students in the mornings, where students both give and receive help with other students. Teaching something to someone else often reinforces what one knows. If your child needs constant help, you might consider a tutor. I make a list of students interested in tutoring in September, and Mrs. Duker keeps a list of tutors in her office. So, I strongly suggest that your child has a study partner or a study group that meets often to review AND that meets before all tests.

My complete **make-up procedures** are on my web page and briefly are as follows: all make-up **TESTS** for **excused, school-related, and pre-arranged** absences will be the 9-weeks exam (2nd 9-weeks will use the semester exam). This means that the 9-weeks test, which is cumulative like all tests, will count for itself, replace one lower grade if possible, and be the grade for any test not taken resulting from an excused, school-related, or pre-arranged absence. This allows tests to be given back and discussed the next day to bring closure to that learning experience and testing opportunity. There is an exception: any student knowing before that an absence is on a test day may choose to take the test **early** so that fewer grades will hinge on the 9-weeks test. Taking a test early does not infringe on tests being returned in a timely fashion for students in the class. **No work will be accepted or test given for an unexcused absence.**

I will have a 0 period **Calculus Calculator Collaboration (C³)** and will have students sign for when they are coming (probably Tuesdays and Wednesdays, perhaps some Fridays – BC one week, AB the next week) – a few bonus points will be offered. This is enrichment for my content and practice with a CAS graphing calculator. The other mornings are for students needing help.

Remember, there will be times when it is unavoidable and a student must miss class. I do understand the necessity of visiting colleges and universities, participating in athletic events and performing arts, etc. Missing a test day is much better than missing an instructional day. However, there is no way that the **full value** of the instruction missed can be replaced. So, if possible, do not miss any classes, especially in April during rigorous formal review.

AP students have a text/workbook compiled by me called "Big Baby". Feel free to check their Babies throughout the year to see if they are completing assignments as listed on my homework page (Daily Baby Pages). These are materials we will use the entire school year and contain excellent preparation for the AP exam. We will practice previous AP multiple choice and short answer questions using the years that have been released and also take some secure exams that cannot leave the classroom. Students will also do work, watch videos, etc., in AP Classroom.

Finally, thank you for coming tonight. Please feel free to contact me if you have questions.

