AP Calculus AB (BHS/SA)

Class Syllabus, Requirements, and Procedures

Ms. Frisbie, 2024-25

Welcome back to school. This handout has important facts about the course content and procedures. It is also available on my web site and on Schoology.

Course Content:

Major topics are listed on the last page of this document. We will spend significant time focusing on actual AP Calculus problems from previous examinations. Starting in March we will spend a lot of time on review for the AP Calculus AB exam. The class is challenging, and you will be most successful if you resolve now to put in the time and effort needed to learn the material. My goal is for you to learn calculus; if you also work to that goal, you *will* learn a lot of math this year.

Materials:

Calculators: The use of a graphing calculator is **essential** for this course. While you have probably used Desmos on a computer — and that's a wonderful resource — as it stands right now, you must also be able to use a graphing calculator for the AP exam. I have a class set of TI-nspires that you may use in class, and you will have access to a school-owned calculator on exam day if you need one. If you have some other model (TI-84 is the most likely), I can provide instruction on how to use that, too.

Notebook: You will need some way to keep notes, handouts, and whatever else you choose to hang on to. That does not have to be exclusively for this class.

Textbook: In addition to the standard hardcover calculus textbook, you will have access to some supplemental material to help with additional explanations and practice problems available as PDFs on Schoology. The textbook has an app that allows download of the text for offline use. You can access the online text through ClassLink. It is not necessary to bring the text back and forth to school.

Grading

Tests and Quizzes: There will be ordinary unit tests and quizzes (I think of quizzes as worth fewer points and covering fewer topics). Starting later in the year, you will also have AP exam review practice quizzes. After each regular unit test or quiz you take in this class, you will be allowed to take a grade recovery quiz if you are unhappy with your grade. I will explain more about this when I return the first test to you. There is no similar provision for the semester exam; that is one chance only.

Homework and Classwork: Homework and classwork are required and will be assigned most days. They will be graded. All problems must be legitimately attempted. If you have no idea how to do a particular problem, you must write a detailed question whose answer would help you understand it. This takes more than a couple of words or a big question mark. In addition to completion, I will again be spot-checking your work for correctness. Most days we will spend some time addressing difficulties you and your classmates have had. I will be checking your work for completeness at the very beginning of the class in which it is due. Late assignment passes will be a form that you fill out from a link on Schoology. You will get two of these each quarter; they allow you to turn in an assignment for full credit up to one week late. If I give an assignment on which they cannot be used, I will make sure to tell you at that time. The penalty for late work will be 60% off. Deadlines for makeup work are addressed below.

Assignment Sheets: At the beginning of each quarter I will publish a document listing tentative assignments and test dates. They are subject to change, but are usually accurate. Expect an assignment every day.

Showing Work: You must communicate the mathematics you know. A "bald" answer with no justification does not do that. In general, no work earns no credit and partially correct work may earn partial credit. You must show work on all of your assignments and tests. You may earn little or no credit for answers without work, whether or not they're right. This is also how the AP calculus exam works.

Notebooks: You should keep a notebook, possibly electronic. If you haven't done a good job of that before this year, start today! It should include notes you take in class, including vocabulary, formulas, and theorems, and any graded assignments that I return to you which you choose to retain. You may organize this any way you choose. Its contents should help you come review time in the spring.

Makeup: You will usually find the assignment you missed on Schoology and on your assignment sheet. Polk County's policy for makeup work deadline is two days plus the length of the absence. If you have special

circumstances for a particular absence, talk to me. Makeup tests must be taken no later than the day before the grade recovery quiz. Work that was due on a day you were absent is due the day you return. You do not have to use a late pass for makeup work, but please write the word "makeup" at the top of your submission.

Extra Credit: Unused late assignment passes may be turned in for five points each at the end of the quarter. It is your responsibility to submit those forms. On some practice exams in the spring, one may earn more than the "possible" point total. There is no other extra credit.

Websites:

I will be using Schoology to post class notes and other materials. My website at https://PFrisbie.com/ has some potentially useful links as well as the current assignment sheet. You can read advice from former student there on the Wise Words and What-Not page. My e-mail address is peggy.frisbie@polk-fl.net.

Classroom Rules:

Follow directions the right way the first time they are given. Be **prepared** for class every day. Have **respect** for yourself, the people around you, and your surroundings. Display **integrity** in all of your actions, both personal and academic. Show **dedication** to your educational goals. Use the time in this class to be **engaged** with math.

You should be aware that I enforce the school's rules. I feel strongly that everyone at Bartow High School is deserving of respect. Whether you agree with me or not, I expect you to act as if you do.

While I realize that you have a demanding course load, I do not intend to share my class time with your other classes. Please do not use the limited time that we have to do assignments for other courses. You may only use your electronic devices during class for class-related activities.

You will not be able to learn effectively if you are not prepared for class. Being prepared includes doing the assignments on time, having the appropriate materials for class, and studying. I hope we'll all have a good time this year, but my priority is to help you learn mathematics.

COURSE OUTLINE:

Topic Approximate time frame Limits and continuity three weeks Differentiation: definition and fundamental properties three weeks Differentiation: composite, implicit, and inverse functions three weeks Contextual applications of differentiation three weeks Analytical applications of differentiation four weeks First semester exam one week Integration and accumulation of change four weeks two weeks Differential equations Applications of integration two weeks Review for the AP exam eight weeks Preview of AP Calc BC for juniors only two weeks, after the AP exam

COURSE REOUIREMENTS AND EVALUATION:

- I. Unit tests and guizzes, 50-100 points each; the units are listed above
- II. Homework, most days, 10 points per assignment
- III. AP practice quizzes, not for a grade
- IV. Review quizzes during exam review unit at the end of the year, 50 points each

I look forward to working with you this year. You are welcome to come in for extra help. I may be able to meet with you during lunch if you make an appointment, and before and after school are also possible many days.

BHS/SA AP Calculus student info form link: https://forms.office.com/r/qrNQrf2nsn

Adult contact info form link: https://forms.office.com/r/8C8nY1Lk3m

You can also find links to these at https://pfrisbie.com, on the calculus page at the bottom.