

IB Precalculus

Class Syllabus, Requirements, and Procedures

Ms. Frisbie, 2023-24

Welcome back. This handout will give you some important facts about the course content and procedures. It is available on my web site and on Schoology.

Course Content:

Major topics are listed on the last page of this document. Some should seem familiar to you from previous classes, but this year's treatment will be deeper. In addition, an internally assessed exploration counts 20% of the IB mark for Mathematics Analysis and Approaches SL, and you will complete some work for that this year.

Materials:

Calculators: A graphing calculator is **essential** for the program. Both the IB Math A&A and AP Calculus exams require its use. Both the CAS and numerical models of the TI-nspire are appropriate choices; whatever graphing calculator model you currently have will still be fine here. IB exam regulations prohibit calculators that perform algebraic manipulation, like the TI-nspire CAS editions, but those *are* allowed on the AP Calculus exam and the SAT/PSAT. (Note that the ACT does not allow CAS calculators, either, but the online test has a calculator built in.) If you have issues or questions, ask me. Whatever calculator you own, label it clearly so that it remains yours. It is important that you learn to use your own calculator.

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 a physical copy of the textbook, an electronic version will be available to you on Schoology.

Grading:

Tests and 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 exams; those are one chance only.

Homework and Classwork: Homework and classwork are required and graded; that will be assigned most days. **All questions must be legitimately attempted.** If you cannot figure out how to do a particular problem, you must write a *detailed* explanation of what you do and do not understand about the question. This takes more than a couple of words or a big question mark. I will explain more about all of this in class. In addition to completion, I will 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. Most of your work will be turned in on paper; some assignments will be electronic. You will receive two "late assignment passes" each quarter that you may use at your discretion; using those will involve filling out an online form. These allow you to turn in a regular assignment for full credit up to one week late. They may *not* be used for IB internal assessment; there may be other assignments for which their use will be prohibited, and you will learn about those as they arise. The penalty for late work will be 60% off, and I will explain how that works when we discuss this in class. Deadlines for makeup work are addressed below.

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

Showing Work: It is essential that you communicate your thinking when working problems. To this end, the International Baccalaureate and Advanced Placement examinations will require you to show your work, and so will I. 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. I reserve the right to give little or no credit for answers without work, whether or not they're right.

Mathematical Exploration (IB Internal Assessment): This year you'll learn what the internal assessment is like and how it is scored. You'll also do a good deal of work finding a topic to write about. The exploration will be completed next fall, but you'll have multiple assignments leading up to it before then.

Notebooks: You should keep some sort of notebook, possibly electronic. It ought to contain notes you take in class, to include the vocabulary and concepts we study, and any graded assignments that I return to you that you choose to retain. You'll also want to save the work we do this year toward the exploration. Remember that you will be responsible for the material we do this year on a test in 2025. This year's notebook can be an excellent resource when it comes time to review what you have learned for that exam. You may organize your notebook any way you choose, and you may use it for multiple courses.

Makeup: You will usually find the assignment you missed on your assignment sheet and on Schoology. Polk County's policy for makeup work deadlines is two days plus the length of the absence. If you have special circumstances for a particular absence, talk to me about it. Makeup tests must be taken no later than the day before the grade recovery quiz for the unit. 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 submitted for five points each at the end of the quarter. No other extra credit assignments will be made.

Web Sites:

I have a web site for my courses. The URL is <https://PFrisbie.com/>. On the precalculus page you will be able to find the current assignment sheet and other information. There are also links for extra help on the math you're learning and to lots of math-related sites. You'll also find a mail link for me there — the address is peggy.frisbie@polk-fl.net. I will be posting class notes and other course material to Schoology.

You can find the policies for the IB program at BHS at <https://bhsib.polkschoolsfl.com/policiesprocedures/>. The academic honesty and assessment policies for our school are published there.

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 phone, tablet, and computer 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:

<i>Topic</i>	<i>Approximate time frame</i>
Algebra and function basics	three weeks
Typing mathematics, graphing in GeoGebra	one week
Functions, equations, and inequalities	two weeks
Sequences and series; the binomial theorem	three weeks
Exponential and logarithmic functions	two weeks
Trigonometric functions and equations	four weeks
First semester exam	one week
Geometry and trigonometry	three weeks
Statistics	three weeks
Probability	three weeks
Probability distributions	three weeks
Exploration	two weeks, distributed throughout the year
Second semester exam	one week

EVALUATION AND GRADING:

- I. Unit tests and quizzes, generally 50 to 100 points each as appropriate; the units are listed above
- II. Homework, most days, usually 10 points per assignment
- III. Occasional quizzes on memorized material, 10 points each
- IV. Exploration assignments, point values vary
- V. Semester exams, approximately 150 to 200 points each

I look forward to working with you this year. At school, I am often available before and after school, and I may be able to make lunchtime appointments. I will be glad to give you any extra help you think you need.

IB Precalculus student info form link: <https://forms.office.com/r/SSSKiPhHG6>

Adult contact info form link: <https://forms.office.com/r/3Ydb6ELeDi>

You can also find links to these on <https://pfrisbie.com>, at the bottom of the precalculus page.