# **AP Calculus AB/BC**

Mr. Cook & Mr. Lanaghan 2020-2021

#### **Policies and Procedures**

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# Course Outcome and Objectives

The overall goal of this course is to help students understand and apply the three big ideas of AB Calculus: limits, derivatives, and integrals as well as the Fundamental Theorem of Calculus. Embedded throughout the big ideas are the mathematical practices for AP Calculus: reasoning with definitions and theorems, connecting concepts, implementing algebraic/computational processes, connecting multiple representations, building notational fluency, and communicating mathematics orally and in well-written sentences.

## Required Materials

It is important that students are prepared EVERY DAY by bringing the following to class in-person or virtually:

- Notebook and Folder or Binder I recommend a multi-subject spiral or at least a 2-inch binder. Engineering or graph paper will be helpful but not required.
- <u>Calculator</u> Students are required to have a graphing calculator, TI-83 or newer. (Please avoid Casio brand graphing calculators.)
- School Issued Chromebook

## Classroom Structure

## Students are expected to:

- Use electronics responsibly and for educational purposes only as directed by the teacher
- Bring only water into the classroom and save all other food or drink for the commons.
- Turn in all assignments on the due date. You may not be reminded; it is your responsibility to know when things are due and get them turned-in.
- Respectfully participate in all parts of the class and be sure that your actions do not interfere with anyone's education.

#### **Methods of Instruction**

#### Student-Centered Classroom

It is important that you are comfortable interacting with all other students in the classroom in an academically appropriate and respectful manner. The teacher will provide structure for students to work together and apply the Math Practices of AP Calculus including refining communication about math content.

## Online Learning

We will be utilizing Schoology as our main resource for learning. Students will be expected to call in for class using the *Conference Feature* on Schoology to participate in lessons. It will also be the main source of resources and assignments. We will also be using Albert.io, Khan Academy, and AP Classroom throughout the year

## **Homework Expectation**

Student success in this class and on the AP exam hinges on the amount of time they are willing to put into working on the material outside of class. There is an expectation that students will complete assignments when they are due, self-check the answers when possible in order to keep track of what they have mastered and what questions they have, and be proactive to extend their learning. Independent learning extensions can be using flashcards for theorems, additional Khan academy Calculus lessons, test prep practice books or websites, etc.

# **Grading Procedures**

Final term grades will be a combination of tests, quizzes, our digital portfolio, and classwork/homework. Our grade is weighted as such:

#### 80%: Summative/Formative Assessments and Portfolio

Throughout the semester we will have unit tests and quizzes. These will consist of a mixture of multiple-choice, short response, and free-response questions. Tests will be timed and formatted the same as the AP test given at the end of the year. These tests will not be correctable. Quizzes will be given periodically for us to check in with students on how they are doing on particular topics and will be something the students will be able to

make up points on. We will also have a digital portfolio this year which will be created and maintained on Google Sites, and we will be updating it throughout the year.

#### 20%: Classwork/Homework

Assignments will be given every day. These assignments are used to reinforce students' learning and ideas throughout the course. They will be given through Schoology, Albert.io, and Khan depending on which one is best for that current topic. These assignments will be due the Monday of each week, and any missing work will not be accepted after the test date.

# **Improving your Grade**

AP Calculus is arguably the hardest class offered to high school students and is a college-level course. We will work to support your learning the best we can but if you find yourself in a situation where you would like to improve your grade, our suggestions are to follow this action plan:

- 1. Stay on top of current and future assignments. Getting full points on assignments and being successful in upcoming graded work will improve your grade. Don't sacrifice current learning by only focusing on past work.
- 2. Get any missing assignments turned in. All assignments are uploaded or documented on the website and it is your responsibility to access them.
- 3. Be prepared for tests and quizzes. These make up the majority of your grade and tests cannot be corrected or improved upon after they are turned in, so make sure you are prepared for the tests. The portfolio will help you with our tests and is a way to help your grade.

#### **Availability**

This year will look a little different. Instead of our typical office hours and connections like years past, we will be hosting virtual office hours on Fridays during the time class is designated. Please also be sure to reach out and email us with any questions or help you might need. We will always try to send you the best resources possible for help.

Thank you,

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