



PIPER HIGH SCHOOL

Advanced Placement Calculus AB/BC

Course Description: *Calculus* is a rigorous course defined by the mathematical study of change. The first half focuses on differential calculus (rate of change), while the second half focuses on integral calculus (accumulation). Both differential and integral Calculus use the concepts learned in Algebra and Geometry and extend them using the concept of limits. Calculus is considered the gateway course into the world of mathematics, physics and engineering. Topics shall include but are not limited to: Limits & Continuity, Derivatives & their Applications, Integrals & their Applications, Transcendental Functions, and Differential Equations. Students enrolled in this class are **required** to take the appropriate Advanced Placement Calculus Exam in May 2018.

Instructor: Mrs. Pond

Course Location: Building A, Room 121

Contact Information: (754) 322-1700
allyn.pond@browardschools.com

Course Textbook: **Calculus for AP®**, 1st edition, ©2017, (Larson/ Battaglia)

Electronic Resources: <http://apcentral.collegeboard.com>, LarsonCalculusforAP.com, CalcView.com, CalcChat.com, [Khan Academy](http://KhanAcademy.com) (plus many more)

Course Expectations and Policies:

Attendance and Tardiness: Students are expected to be present and on time to class. It is difficult to learn new material if you are not here! Excessive absences and tardies will be handled according to school board policy.

Preparedness: Students must have assigned work and required materials every day! All students are expected to arrive on time and be ready to work at the sound of the tardy bell.

Academic Honesty: All students are expected to do their own assignments unless otherwise specified. If students are caught copying another's work, **all** parties will receive a zero (this includes plagiarism). If the problem persists, parents and administration will be notified.

Dress code: All students are expected to dress appropriately for school as per school board policy.

Teacher Passes: If another teacher wants you to miss MY class or any portion of it for ANY reason, do not assume that this will be fine with me. Check with me FIRST!

Class Notes: Each student is required to keep one composition book for notes and class work and another one for homework. You are expected to take class notes on each section **before** it is presented and then **annotate** your notes during class.

Cell phones: Prior to the start of class, all students must turn their cell phones and/or electronic devices off to avoid unnecessary classroom disruptions. These devices should not be seen nor heard during class time unless initiated by the instructor.

Departmental Goal: The math department is dedicated to guiding our students to become analytical thinkers that are proficient in mathematics. It is our mission to provide the tools and support our students will need to succeed at the next level, whether in high school, college or the workplace.

Homework: Homework is assigned and to be done for each class session. It will be reviewed as necessary and graded periodically via homework checks and homework quizzes. You are expected to correct and ask questions on any homework problems you do not understand. You will not be penalized for mistakes in your

homework; however, you are expected to include **corrections** for all missed problems when we review them. **It is important that you show all the work necessary to arrive at your answer.** Answers without work will not be accepted.

Late Work: Late work is *not* acceptable in this class and will only be accepted and graded at the discretion of the instructor. This does not pertain to excused absences.

Assessments: Quizzes and Tests will make up the bulk of your grade, so it is imperative that you keep up with your work. Assessments will be announced and on the board at least one class session before they are administered. The only make-ups allowed will be for *tests*; if a student misses a quiz, then the next test or quiz grade will be used to replace the missing quiz grade for that section.

The rules of the classroom are:

1. Electronic devices are NOT to be seen or heard during class unless initiated by the instructor.
YOU MAY NOT USE THE CALCULATOR ON YOUR PHONE!
As per administration, classrooms are NOT to be used as charging stations.
2. Arrive on time and be prepared to work.
3. Respect others – use appropriate language.
4. Sleeping will **not** be permitted during class.
5. Do not bring food or drinks (except water) into the classroom.
6. Stay in your seat unless you have permission to do otherwise.
7. Raise your hand to be recognized.
8. Take notes and correct your homework during class.
9. Pay attention and listen to the teacher or substitute.
10. Be respectful of school property.
11. Do NOT interrupt the class to ask for the bathroom pass unless it is an extreme emergency (statistically, that's about once per year). Wait until there is an appropriate time, if any.

COURSE CONTENT OUTLINE (*this may change at teacher's discretion*)

<p>Semester 1</p> <ul style="list-style-type: none"> • Limits and their Properties • Differentiation • Applications of Differentiation • Integration <p>BC only: new topics will be presented <u>both</u> semesters in addition to AB review. >>>>>>>>>>>>>>>→>>>>>>></p>	<p>Semester 2</p> <ul style="list-style-type: none"> • Differential Equations • Applications of Integration • Integration Techniques • BC only: L'Hopital's Rule and Improper Integrals • BC only: Infinite Series • BC only: Parametric Equations, Polar Coordinates, and Vectors
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REQUIRED MATERIALS

Organization is an integral part of being a successful student. Along with organization comes preparation. It is **imperative** that students come to class prepared every day. Students should have the following materials with them daily:

1. #2 Pencils with erasers
2. Pen (for corrections and grading)
3. Pocket Folder with prongs (College Board AP Calculus Syllabus should be downloaded, printed and kept in here)
4. 2-3 Composition Notebooks (**sewn-in pages**) with **quadrille** paper
5. Yellow Highlighter (only **YELLOW!**)
6. Scientific Calculator (if you do not have a graphing calculator)
7. *suggested: TI-84+ CE Graphing Calculator*

GRADING: The 9-week course grade will be based on various traditional and alternative assessments, including the following:

1. **Assessments:** Mini-Quizzes/Quizzes /Quests/Tests/Projects 25-100 points
2. Notes/Homework/Classwork 4-10 points

Please **print, complete,** and **return** the next two pages so that I can easily reach you if I have any questions or concerns. Thank you.

Syllabus Confirmation: AP Calculus AB/BC

I _____ have read through and discussed the

(Print student name)

course syllabus with my teacher today in class. I understand exactly what is expected of me and what my responsibilities are in this class. I know and understand what the academic policies and procedures are for this course. I am aware of and understand how I am going to be evaluated and assessed in this course and how my final grade will be calculated. I am aware of and understand that tardiness is not tolerated and can negatively affect my class grade. I know that if I need extra help or have concerns I should speak with my teacher as soon as possible.

Student Signature: _____ Date: _____

Parent/Guardian Signature: _____ Date: _____

Student Email Address: _____@_____

Parent/Guardian Email Address: _____@_____

Parents / Guardians:

Please check Pinnacle and your child's notebook on a regular basis. Pinnacle will list the assignments and the corresponding grades earned by your child.

If you have any questions, please feel free to email me anytime.

AP Calculus AB/BC

Student Name: _____

1st Parent/Guardian Name: _____

Daytime Phone Number(s): _____

Are you available Mon-Fri (2:40 pm – 3:00 pm)? _____

2nd Parent/Guardian Name: _____

Daytime Phone Number(s): _____

Are you available Mon-Fri (2:40 pm – 3:00 pm)? _____

If you are unavailable during the day, please list an alternate name of someone that can be contacted.

Contact Name: _____

Daytime Phone Number(s): _____

Please list any other information I should know (medical history, etc....)
