AP Calculus BC Expectations 2020-21

Mr. Rivera

Email is the best way to contact me with questions or concerns: Jose_Rivera@chino.k12.ca.us

Welcome to AP Calculus BC! Calculus BC will cover the topics from AB in more detail and include series, vectors and polar coordinates. We will study these topics utilizing Algebraic, graphical, verbal and numerical methods. Concrete knowledge of all prior math subjects is critical for your success in this class.

Grading Policy

1. Grades are based on the following percentages:

Tests/Final Exam 50%
Quizzes/Pop Quizzes 25%
Home/Classwork Online 13%
Topics/Projects 12%

2. All students EARN their grades in my class. I do not round or curve progress report or semester grades. The scale is as follows:

90.0-100 A 80.0-89.9 B 70-79.9 C 60.0-69.9 D 59.9 and less F

- 3. Tests will be given in the middle and/or at the end of each unit of study. Tests will always be announced in advance of the date given and will not be delayed due to an absence the day before or the day after the announced test date. Calculators will not always be allowed on tests and or problems. The only extra credit available in my class is in the form of occasional challenge questions at the end of tests. <u>I do not give extra credit to improve grades.</u>
- 4. Quizzes will be given often and may or may not be announced. Calculators will not always be allowed on quizzes. Quizzes missed due to an absence must be made up upon return and before they are passed back.
- *****During Virtual Learning, students will take quizzes and tests in various formats including but not limited to Google Forms, proctored, Delta Math, Google Slides, Google Docs etc. Assessments will be due by the stated due date/time or will be counted as a zero in your grade.
- 5. Homework/Classwork is an important part of your grade and will be given regularly. I accept late work due to an excused absence if we are back in the classroom. You will have one day for every day of excused absence to make up the missed work. I expect all students to give maximum effort in all work. During virtual learning homework not turned in by the due date/time will not be accepted. Homework is out of 4 points. You will earn points based on how much work is completed and the level of effort that was given. Answers to most homework will be given, so your work is required.
- 6. Notes are an important tool for learning the required material and will be given on a daily basis. You are encouraged to take notes to use as a reference as you work on assignments.
- 7. Final Exams will be given each semester. Arrangements must be made in advance if you are going to be absent on the day of the final exam.
- 8. Online topics will be assigned from various websites (Delta Math, Khan Academy, College Board, etc) to reinforce what we are learning in class. You will be required to complete topics as they are assigned.
- ****Please Note: Truant, unexcused or unverified absences will result in a zero being averaged into your grade for missed homework, guizzes, tests and/or the final exam.

Grades

I use the Aeries program and update grades weekly after the third week of each semester. I encourage all parents to get access to this valuable tool. I plan to email student grades to parents every three weeks this year.

Absences

Attendance will be taken every day. Consistent attendance in this class is strongly advised. It is your responsibility to get and complete any missed notes, homework, classwork, quizzes, and/or tests in the time allotted. You will have one day for every day of an excused absence to make up work. If an absence is truant, unexcused or unverified, then all missed work will be averaged into your grade as a zero. Being absent on a day of the test review will not delay taking the test and you will be required to take the test on the scheduled test day since I announce test dates well in advance. If you are absent on the day of the test, then you will be required to take the exam on the day that you return.

PLEASE NOTE: I expect you to remain current on any work that you miss while participating in on campus activities. You will not get extra time for these situations. Please make arrangements to take quizzes that are missed due to on campus activities on that day.

Calculator Recommendation

Several parts of the AP Calculus Test are calculator active. I will use a Texas Instruments TI84 Plus graphing calculator regularly in class and strongly recommend that you have one as well since you will be will need to be familiar with how it works and what it and you are capable of. Some graphing calculators are available to be checked out in the library with teacher approval. Students must understand that they will be charged the replacement cost for calculators that are not returned, or are lost, stolen or damaged. Calculator aps on your phone are not allowed and can't be used on the AP Test

In Classroom Rules

- 1. Follow all school rules. This includes the district dress code, academic honesty policy and phone policy.
- 2. **Be respectful to everyone.** This rule covers it all. Disrupting my teaching or the learning of others will not be tolerated.
- 3. **Be on time.** My tardy policy follows that of the student handbook and tardies are accumulated throughout the semester.
- 4. **Be prepared.** Recommended: paper, textbook, spiral or composition notebook just for this class, pencil, different colored pens, and a graphing calculator (you may NOT use your phone as a calculator).
- 5. **Be honest.** Cheating of any type will result in a zero on the assignment, quiz or test for both parties involved. Please see the student handbook for a definition of academic dishonesty.
- 6. No eating, drinking (except water) or gum chewing is allowed in my class. I HATE GUM!

Virtual Classroom Rules

- 1. Students should not share their login information, meeting links, or passwords with others.
- 2. To the extent possible, students should participate in virtual instruction from a quiet and neutral area that is free of distractions.
- 3. School and classroom rules apply to the virtual instruction environment.
- 4. It is recommended that students review the District Technology Acceptable/Responsible Use Policy regarding expectations for behavior while conducting themselves online and on District devices.
- 5. Students should dress appropriately for virtual instruction sessions.
- 6. Students who use inappropriate language, share inappropriate images, or in any way behave inappropriately on a video conference will be subject to appropriate discipline.
- 7. Students should not conduct audio or video recordings or take screen shots of virtual class meetings or activities unless they have received prior permission to do so from a teacher or authorized District official.
- 8. To the extent possible, parents should allow the student to work with the instructor or provider in a quiet, private

- space. However, to the extent a student requires adult support to participate in virtual instruction/services, a parent or guardian may be specifically asked by the instructor or service provider to provide such support.
- 9. Once the virtual instruction session or meeting is over, students should be sure to close out of the meeting platform entirely. Students should also ensure that cameras are covered and that microphones are turned off to avoid inadvertent transmission following the meeting.

Consequences for Infractions of the Rules

Breaking classroom rules will result in one or more of the following: a warning, a detention, a phone call home, or a referral to the counselor or assistant principal. Consequences will be determined according to the severity of the infraction and your prior history of behavior in my classroom.

Platforms for Distance Learning

<u>Google Classroom</u> will be used for announcements, assignments, quizzes and tests. Please be respectful with all correspondence in this platform.

Remind will be used for last minute notifications since most students have phones with them at all times.

<u>College Board</u> will be used for AP practice as the year goes on. A class code will be provided as soon as it becomes available to me

<u>Delta Math</u> will be used for assignments and or assessments. You did your summer assignment on Delta Math and are already logged in.

<u>Google Meets</u> will be used for live instruction. The link for our meetings can be found in the top left hand corner of our google classroom. Once you click on the link, you will join our meeting. Please mute yourself upon entry and activate your camera. You should stay muted and visible unless instructed to do otherwise. Please be on time and take notes as we progress through each lesson. I will be making use of breakout rooms during our lessons for student interaction.

AP Calculus Classroom and Remind

Log in to <u>www.collegeboard.com</u> and join your class.	Join REMIND: Text to 81010
Period 3 Calculus Code: 6WJYRG	Period 3 AP Calculus BC Code: @cfbha

AP Calculus BC 2020-21

According to the College Board's Calculus Curriculum Framework - "Before studying calculus, all students should complete the equivalent of four years of secondary mathematics designed for college-bound students: courses which should prepare them with a strong foundation in reasoning with algebraic symbols and working with algebraic structures. Prospective calculus students should take courses in which they study algebra, geometry, trigonometry, analytic geometry, and elementary functions. These functions include linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and piecewise defined functions. In particular before studying calculus, students must be familiar with the properties of functions, the composition of functions, the algebra of functions, and the graphs of functions. Students must also understand the language of functions (domain and range, odd and even, periodic, symmetry, zeroes, intercepts, and descriptors such as increasing and decreasing). Students should also know how the sine and cosine functions are defined from the unit circle and know the values of the trigonometric functions on the first quadrant of the unit circle and their multipliers."

"Education Code Section 49011 (a) states: 'A pupil enrolled in a public school shall not be required to pay a pupil fee for participation in an educational activity.'"

AP Calculus BC Pacing Guide 2020-21

1st Semester (17 weeks + 1 Finals week):	2nd Semester (19 weeks + 1 Finals week):
Unit 1: Limits and Their Properties	Unit 8: Infinite Series
 Speed, Limits, Sandwich Theorem, Continuity, 	 Sequences, Convergence and Divergence Tests,
Rates of Chang	Taylor Polynomials, Power Series, Taylor and
Unit 2: Differentiation	Maclaurin Series
 Differentiability, Intermediate Value Theorem, 	Unit 9: Parametric Equations, Polar Coordinates and
Rules for Differentiation, Applications of the	Vectors
Derivative, Velocity, Implicit Differentiation,	 Conics, Plane Curves, Parametric Equations, Polar
Related Rates	Coordinates and Polar Graphs, Area and Arc
Unit 3: Applications of Differentiation	Length, Vectors
 Extreme Values, Mean Value Theorem, Graphs for 	Unit 10: Review/AP Exam Preparation
f' & f", concavity & inflection points, Optimization	Semester 2 Final Exam will be taken prior to the AP Test
Unit 4: Integration	
 Riemann Sums, Definite and Indefinite Integrals, 	AP TESTING
Properties of Integrals, the Fundamental Theorem	
of Calculus, Techniques of Integration	
Unit 5: Differential Equations	Topics for after the AP Test to be determined
 Anti-derivatives, Slope Fields, Growth and Decay, 	
Logistic Equations	
Unit 6: Applications of Integration	
 Net change, Area, Volume, Arc Length 	
Unit 7: Integration Techniques, L'Hopital's Rule and	
Improper Integrals {4 weeks}	
 Integrations Rules, Techniques of Integration 	
Review and Final Exam	

The intention of this course is to prepare you to take the AP Calculus Test in May, however students are not required to take nationally administered Advanced Placement exams or pay AP exam fees.

<u>Please print this page only or copy it by your o</u>	<u>wn hand on a separate sheet of paper, sign it, and then submit a picture</u>	
in google classroom under Expectations Assignment to Mr. Rivera by Friday, August 14, 2020 or sooner. I have read		
and understand the procedures and rules in Mr	r. Rivera's class. I will email or speak with him if I have any questions. Print	
Student Name	Period	
Student Signature	Date	
Parent Signature	Date	
Print Parents Names and Email		