

Calculus Honors (CHAB)

Course Syllabus

S.Hogan

Instructor:

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E-mail is the best way to contact me. On weekdays, I typically respond within 24 hours. On weekends, my response may take longer.

Required Materials:

- AP Approved Graphing Calculator—Check out the website at: <https://apstudent.collegeboard.org/apcourse/ap-calculus-ab/calculator-policy>
- Five-Subject Notebook—All five subjects need to be dedicated entirely to this course. I talk fast and I write a lot. Trust me, you will need a large notebook. If you are a binder person, that's fine, but you will need a large binder just for this course.
- Writing Utensils—I don't care what kind, but you need to have multiple with you in case some break.

Textbooks and Resources:

- Finney, Thomas, Demana, Waits. *Calculus : Graphical, Numerical, Algebraic.* (Purple Book)
- The Khan Academy (<http://www.khanacademy.org/>)—This free site has videos and interactive tutorials with essentially infinite practice exercises available on almost all mathematical topics.
- Course Website: <http://www.shanhogan.com/chab--calculus-honors-ab.html>
- Ma, William. *5 Steps to a 5 AP Calculus AB.* McGraw Hill, 2006, 2nd Edition.
- The Khan Academy (<http://www.khanacademy.org/>)—This free site has videos and interactive tutorials with essentially infinite practice exercises available on almost all mathematical topics.

Course Description:

This is a college-level course designed to cover one semester of single variable calculus. The study of calculus, the mathematics of motion and change, is divided into two major topics: differential and integral calculus. Differential calculus enables us to calculate rates of change, to find the slope of a curve, and to calculate velocities and accelerations of moving bodies. Integral calculus is used to find the area of an irregular region in a plane, to measure lengths of curves, and to calculate centers of mass of arbitrary solids.

Problems will be presented and solved in four distinct ways: analytically, numerically, graphically, and verbally. Students will use a graphing calculator to determine the value of a derivative at a point, to find the value of a definite integral, to graph a function in any window, and to solve an equation.

The first seven and a half months of the class will be devoted to studying the topics covered in a typical college Calculus I course. The next month will be a cumulative review of the course that will serve as preparation for the extensive cumulative exams you will be taking in this course at the end of the year.

Classroom Expectations: We are expected to be...

- Present- Attend class every day. If you are absent, you are required to bring a note explaining the absence. Unexcused absences result in a 0 for participation for the day and will thus hurt your grade significantly. However, even excused absences are a bad idea.
- Punctual-Per school policy, 7 or more unexcused latenesses in a quarter earns you a 3 in behavior. Again, even excused latenesses are a bad idea. We cover material quickly and you will be behind from the moment you enter the room.
- Prepared-Have multiple writing utensils in case one breaks. Have a graphing calculator (TI-83, 83 plus, or 84.) Be in uniform (this means you are wearing black or khaki bottoms and that the TOP LAYER of your shirts says Carver, HSES, or E&S.) Have a notebook or binder that you use specifically for this class.
- Participating-Take notes. Ask questions. Make flashcards. Work on problems with your peers. "Participating" looks different for everyone, but you will not learn anything if you are not actively using your brain during class.
- Pleasant-You do not have to like everyone in class (including me) but you do need to act in a polite, respectful manner to everyone.
- Please note that I said "WE are expected to be" ...If I am not complying with our classroom expectations, you have every right to politely call me out on it. In all honesty, sometimes I am not entirely pleasant. Just remind me :o)

Classroom Procedures:

- **Class Time:** Two full-length class periods for the duration of the year.
- **Seating Assignments:** I do not assign seats. Choose your seat at the beginning of the year and stay there. I will not change your seat unless your location in the room is a problem for you or those around you. If you wish to change seats, either relocate to an empty seat or ask someone to switch with you.
- **Hall Passes:** Please do not ask to go to the restroom. There is a designated hall pass and a sign out book by the door. Sign out, take the pass, and sign back in. The hall pass is for trips to the restroom, water fountain or locker and is **for five minutes only**. Do not use a hall pass to go to the nurse, counselor, or office. You must have a signed note to go to these locations.
 - **Nurse/Counselor/Office/Library/Etc:** Trips to locations other than the restroom require a note. You must report to class FIRST and get a note signed by Ms. Hogan to visit any of these locales. Notes from these locations WILL NOT be accepted as an excuse to be late to class. If it is an emergency, the adult responsible for the designated location may call Ms. Hogan to explain your tardiness or absence.
- **Cell Phones:** Per school policy, cell phones are not permitted during the school day with the exception of in the lunchroom during lunch. If you have a cell phone out in class, it may be confiscated and given to Dean Rivera. Repeated failure to comply with the school cell phone policy may result in a three in behavior.
- **Other Electronic Devices:** Per school policy, electronic devices and headphones are not permitted during the school day with the exception of in the lunchroom during lunch. If you have a cell phone out in class, it may be confiscated and given to Dean Rivera. Repeated failure to comply with the school electronic devices policy may result in a three in behavior.
- **Food:** Students are not permitted to have food in this classroom.
- **Beverages:** Students are not permitted to have beverages in this classroom except a sealable bottle of water.
- **Absences:** You are required to show me a note for all excused absences. If you are attending school but will be unable to attend my class (sports, assemblies, etc) you must see me prior to missing my class. If you do not see me before you miss my class, you will receive a cut. Missing my class, regardless of the reason, will make it difficult to pass.
- **Cuts and Lateness:** Per school policy, each cut will result in a deduction of five percentage points from the current marking period grade. Any cut will automatically result in a three in behavior. Seven tardies will result in a three in behavior.
- **Academic Dishonesty:** Academic dishonesty includes but is not limited to the following: copying another student's work, presenting someone else's work as your own (plagiarizing,) using unauthorized materials (text, dictionary, calculator, cheat sheet etc) during an assessment, and communicating in any way with other students during an assessment. If you are not sure whether something is academically dishonest, ask me. If you are afraid to ask then assume the behavior is academically dishonest. If you are caught being academically dishonest on an assignment or an assessment, you will receive a zero for that work. You will not be permitted to drop that grade and your parents/guardians will be notified regarding your unacceptable behavior. Cheating on an assessment will result in an automatic three in behavior. If there is a reasonable suspicion of academic dishonesty, you may be required to retake an alternate version of the assessment and your scores will be averaged to receive a final grade for that assessment.
- **E-mail Communication:** Assignments and information will be e-mailed to you. You are responsible for checking your email daily and printing necessary materials. It is imperative that you provide me with an email address that you can check often. Some items will only be e-mailed, however, most materials will also be available on the website. Email is ALWAYS the best way to contact me.
- **Late Work:** I do not accept late work. If you have been absent, work is due within a day of your return or it will not be accepted. Provisions can be made for extended absences.

Assignments:

- **Daily Assignments:** Students may use their own notes and textbooks to help with the daily assignments. Students may work together on homework and warm-ups unless otherwise specified.
 - **Warm-Up (WU):** Warm-ups will consist of a few questions on a topic that has already been covered. Students will have approximately 5 minutes from the start of the period to complete the warm-up assignment. Although you will not be graded on these daily, you will have open note quizzes based on the WU problems and other classwork on every half day.
 - **Classroom Citizenship (CC):** Students will earn a grade each day for abiding by all classroom and schoolwide rules and expectations. Each day of class is worth 2 points of classroom citizenship. You will receive 1 point

for arriving on-time and doing all required work. Any negative behaviors (late arrival, talking inappropriately, eating in class, being out of uniform, etc) will cause you to lose points. Any positive behaviors (volunteering in class, assisting other students, etc) will cause you to gain points. You will receive a zero in class participation for all unexcused absences and for sleeping in class.

- Homework (HW): Homework will be assigned daily and will generally be due on the following school day. While you do the warm-up, I will walk around to check the HW based on completion. Most assignments will be worth 5 points. If you genuinely attempt all of the HW problems, you will earn 5 points. You must show work or explain your reasoning on all problems in order to receive full credit. After the HW has been checked, will we review a few questions as needed.
- Projects: We will have a wide assortment of projects over the course of the year. Some projects will be completed in-class while others will be long-term assignments completed outside of school. We will have both group and individual projects.
- Extra Credit: There will be no extra credit assignments.
- Chapter Examinations: There will be an examination at the end of each chapter and, in the case of lengthy chapters, a second examination may be given at the midpoint. These examinations will take the entire class period. Students will not be permitted to use notes or textbooks during examinations. Exams will be worth 100 points. Exams will be announced well in advance. **There will be no make-ups for missed exams regardless of the reason for the absence.** Students may make arrangements IN ADVANCE to take an exam in the event of an excused, foreseeable absence. You will be permitted to drop one exam each marking period.
- Cumulative Examinations: Per school policy, there will be a cumulative midterm examination at the end of the second marking period and a cumulative final examination at the end of the fourth marking period. These exams will be primarily multiple-choice in format with a few free-response problems. The midterm and the final will be significant parts of your second and fourth marking period grades respectively. **There will be no make-ups on exams. You may not drop the midterm or the final.**
- Pop Quizzes: In general, you will be allowed to use your notes on pop quizzes. Take good notes and always bring them to class with you. You may be quizzed at any time without warning. Pop quizzes may be made up within a day of your return to school. You are responsible for making the arrangements to do so.

Academic and Behavior Grades on Report Cards:

- What constitutes a “3” in behavior?
 - Seven or more tardies
 - Cutting my class (even once)
 - Academic dishonestly on an assessment
 - Repeated failure to comply with the cell phone/electronic devices policy
 - Repeated, excessive behavioral issues (inappropriate language, acting out in class, abuse of the hall pass, etc)
- When are assignments “dropped?”
 - Assignments are not dropped until the end of the quarter
 - This means that interim grades often look lower than the actual grade you will receive for the quarter
 - This is intentional. Better to have a low interim grade and work harder than to have an artificially inflated interim grade and start slacking
- The grade you earn at the end of the quarter is the grade you earn. Do not ask me to “give you that extra point” or “round up.” You will receive the numerical grade you earned. Use it as motivation to do better the next quarter.

SIGN BELOW AND RETURN TO MS. HOGAN BY FRIDAY SEPTEMBER 15, 2016.

This is an assignment worth 10 points.

By signing below, I indicate that I have read and understand all information, rules, and regulations for this course. I am aware that there will be no make-up assessments in the case of absence. I understand that a missed assessment will result in a zero and that cuts and tardiness will automatically earn a three in behavior. I understand that, aside from the AP extracurricular reviews, there will be no extra credit of any kind during this course and that no assignments will be curved. I understand that, in the event of absence, I am responsible for getting missed assignments by contacting my peers or by e-mailing Ms. Hogan (smhogan@philasd.org). I further understand that I am expected to complete all work on time despite my absence and that exceptions will only be made for prolonged absences or other extenuating circumstances. I take full responsibility for complying with all rules and regulations.

Student and parent/guardian, sign below to indicate that you understand the policies outlined in this syllabus.

PARENT/GUARDIAN INFORMATION

Parent/Guardian Name (Print)	
Parent/Guardian Signature	
Parent/Guardian Phone Number(s)	
Parent/Guardian Email	

STUDENT INFORMATION

Student Name (Print)	
Student Signature	

****BACK TO SCHOOL NIGHT IS THURSDAY SEPTEMBER 14, 2016****
****PLEASE FEEL FREE TO COME ASK QUESTIONS BEFORE SIGNING THIS FORM****