

SOUTHLAND COLLEGE PREP CHARTER HS
COURSE SYLLABUS
AP CALCULUS AB

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ROOM: 303

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I. COURSE DESCRIPTION

This is a standard course in first semester Introductory College Calculus. Students completing this course take the Calculus AB Advanced Placement examination. This course follows the program recommended by the Committees on the Undergraduate Program in Mathematics (CUKPM), the National Association of America, and The National Council of Teachers of Mathematics. The strategy for achieving the objectives outlined in these recommendations falls into four categories 1) problem solving, (2) technology, (3) communicating mathematics, and (4) real-life applications.

Prerequisite: Pre-Calculus Honors or Pass the Pre-Calculus Test Out Exam

II. COURSE GOALS

- A. Explore the skills and strategies underlying calculus
- B. Understand concepts of calculus (history background of concepts)
- C. Review all Pre-Calculus topics necessary for college Calculus
- D. Explore graphing utilities and other technology to solve calculus problems
- E. Develop proficiency in manipulative skills of differentiation and integration
- F. Develop abilities to apply principals of calculus to practical situations
- G. Pass the AP Calculus AB exam on **Monday, May 13th, 2024!**

III. INSTRUCTIONAL PHILOSOPHY

Every student can and will master all the required material for preparation for second semester college calculus (or AP Calculus BC) next year. To achieve this mastery, each student must complete all tasks, be involved in classroom discussions, and seek out assistance on all material that may be more difficult or requiring more reinforcement. Resources will be available to achieve success in this class. To achieve your goal of success in this class, be willing to be frustrated, confused, and struggle with material. Keep in mind that struggle leads to progress. If you do not struggle at new material then you are not making progress in the mastery of that material.

IV. MAJOR COURSE PROJECTS AND/OR ASSIGNMENTS

- A. Daily Homework / Class work (AP practice problems & AP Classroom Videos)
- B. Weekly Quizzes
- C. Unit Assessments / Tests
- D. Class Participation / In-Class Discussions
- E. Weekly Free Response Questions (starting in November or December)

V. ASSESSMENT PLAN

A. Point System

Points are based on size of assignment, level of assessment, and importance of assessment.

B. Grading Scale

Grade	Scale	Description
A	93-100%	Exceeds Expectations; Independent learner; superior work; all work completed on time at an exceptional level of quality and effort;
B	87-92%	Meets Expectations; Semi-independent learner; above average work; all work completed on time; did quality work with a few flaws;
C	78-86%	Passing but does not meet some standards; Dependent learner; average work; most completed on time showing average effort;
D	70-77%	Passing but only meets minimum standards; Dependent learner; average work; most completed on time showing average effort;
F	<69%	Failing, does not meet minimum standards; Failure; does not meet standards or expectations;

C. Components of the Grade

The points you accumulate versus the total points assigned for the quarter determine your quarter grade. A majority of the points will be from Tests, Quizzes, and Daily Homework.

D. Calculation of Semester Grade

1 st quarter grade	40%
2 nd quarter grade	40%
<u>Semester Exam</u>	<u>20%</u>
Final Semester Grade	100%

E. Re-Do Policy

1. Students will be given an opportunity to redo classroom assessments to meet standards if the student scored below a 70%. The student must show that effort has been made to improve. The redo opportunity will be rescinded if a student does not show effort or abused redo opportunities.
2. If a student chooses to redo an assessment, a 70% is the highest grade that will be given. Deadline will be given for redo work. If the student does not meet the redo deadline, the opportunity will be rescinded.

VI. COURSE REQUIREMENTS

A. Materials: Each student must bring the following to class daily:

1. Textbook (online text will be available on the Chromebook)
2. Pen and pencil
3. Texas Instrument Calculator (Ti-83 or Higher) ****Must Have!!!**
4. Folder (preferably a 3-ring binder) to hold sequential class notes
5. Graph Paper
6. Highlighters for notes

B. Daily Expectations

1. Keep a binder for class notes, homework, quizzes and tests, etc.
2. Use class time to learn, ask questions and work cooperatively with other students and the teacher.
3. Complete required homework assignments with diligence and promptness.
4. Present problems in class.
5. Adequately prepare for and complete all quizzes and tests.
6. Complete and attempt all Free Response questions (as well as APC Videos!)

C. General Homework Expectations

Completion of ALL homework is the most important step to succeeding in this class. If you do not do the homework consistently then you cannot expect to earn a high grade in this class, nor succeed on the national exam. There will be time to go over homework questions during class time. The purpose is to learn from your mistakes. Homework will be collected each week on Google Classroom and/or in class (pay attention to due dates) and checked for completion. Full credit will not be given unless all work is shown. If you are stuck on a problem, explain or show what work you have attempted. Late work will be accepted for half credit the day after the due date and no credit for more than one day late (with exception). The grade book closes to any late work approximately one week before the quarter ends, after that missing assignments remain at zero credit. Hard copies of some missing assignments or handouts will not be available in the classroom this year, due to social distancing and hygiene protocols. You have the same number of days to make up an assignment as the number of days you were absent (absent two days, make up work due in two days.) Turn in all make up work directly to Google Classroom or to me directly (depending on how the assignment was posted) for full credit, or partial credit for late work.

D. Extra Help

We will have built in work days to get help on content as the year goes on. If additional help is needed, please contact me to see what times might be available to get help. Please seek help as soon as you begin experiencing difficulty. I am here to help you learn!

VII. BEHAVIOR EXPECTATIONS

A. Teacher Creed

1. As your teacher I will not tolerate any student in this classroom stopping me from teaching for any reason whatsoever.
2. As your teacher I will not tolerate any student in this classroom stopping another student from learning for any reason whatsoever.
3. As your teacher I will not tolerate any student in this classroom doing anything that is not in the best interest of this class or in your best interest.

B. Classroom Rules/Consequences

1. All school rules, stated in your student handbook, will be enforced.
2. You are expected to participate in discussions and group work, to answer when called upon, and to be attentive to material being presented. Be an active member of this class.
3. Be prepared and on time for class. Tardiness will not be tolerated.
4. Be respectful to others and their property.
5. Be respectful of the opinions, input, and goals of your classmates and teacher.
6. NO food or drinks are allowed in classroom, unless provided by the teacher.
7. Electronics (i.e. None SL devices and cell phones) are not permitted in class.
If you bring an electronic device to class, it will be taken to the office and cannot be retrieved until a parent comes to school to pick it up.

8. I dismiss you from class, not the bell. Please stay in your seat until the bell rings. No lining up at the door.

VIII. PARENT COMMUNICATION

Strong parent-teacher communication is key to student success in the classroom. This syllabus (outlining course requirements and student behavior) is posted here on Google Classroom, to give a clear view of the expectations and responsibilities in class and online. Progress and grade reports are sent home and parents are also contacted by phone, email, or letter when necessary. You may reach me by phone to leave a message at 708-748-8105 or by email at bwales@scphs.org. I recommend trying to reach me by email first, it's the quickest way to get my attention on any urgent issue or concern.

Please fill out the Syllabus Acknowledgement Google Form for this syllabus by Monday, August 21, 2023 to indicate that you and your student have received and read the syllabus & rules for AP Calc AB. Also, please indicate clearly what the best parental contact method will be for you this year.