AP Calculus
Mr. Lanham
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Why do we study Calculus?
- Because our world is changing and calculus is the mathematics of changing environments.
- Because Calculus is a powerful tool in solving complex problems in mathematics, science, and engineering. Calculus combines Geometry with Algebra.

What is Advance Placement?
- The AP Program is a cooperative educational endeavor between secondary schools and colleges/universities. It exposes high school students to college-level material and gives them an opportunity to show that they have mastered it by taking an AP exam. Colleges and universities can then grant credit, placement, or both to students.
- Students benefit from taking AP courses by learning a subject in greater depth, developing skills that will be critically important to successfully studying in college, and demonstrating to colleges their willingness to undertake a challenging course.

Goals
- Study calculus topics including limits, differentiation, and integration.
- Be able to apply calculus concepts to real life situations.
- Be prepared for the AP exam.
- Be able to use graphing calculators as an aid to solve calculus problems.

AP Test
- In the past, the AP Calculus exam has been given the first or second Wednesday in May.
- Cost is approximately $85. Financial help is available if needed.
- Graphing calculators are allowed on half of the test.

Attendance
- One of the most important factors for success in this class is good attendance. Only miss class when absolutely unavoidable. If you do miss class, you should always seek a classmate to copy their notes. If you have questions over the material, you need to come in before or after school as soon as possible to get caught up.

Grades
- Grades will be determined by total points earned from the following categories. These percentages will be different during the 2nd semester. All final grades will be determined by the district's grading scale.
    - Tests (50%)
    - Quizzes (30%)
    - AP Problems (20%)

Units of Study

<u>1st Semester</u>
1. Getting Warmed Up
2. Limits
3. Differentiation
4. Applications of Differentiation

<u>2nd Semester</u>
1. Integration
2. Logarithmic and Exponential Functions
3. Applications of Integration
4. Review for AP Exam
5. End of the year projects

Classroom Expectations
- Always show respect for the teacher and others in the class.
- Check the AP Calculus website and Infinite Campus daily.
- Come to class prepared! This means bring a pencil, your notebook, your textbook (you will not be allowed to go to your locker to get it), your assignment, your calculator, and your great attitude.
- Use a pencil.
- If you miss class, it is your responsibility to get the notes/assignments. You have two days for each day you are absent to complete your work (up to 6 days total).
- If you don't understand something, please ask me or someone. I can not read you mind and I can not come to your house. It is your job, as a student, to get help when needed.

Help Sessions
- I am available for extra help during the following times.
  - 7:30-8:05
  - 3:05-4:00
  - My planning period is 7th, but I can help the last 10 minutes of any period.
  - Evening reviews

Feel free to email me any time with questions and/or concerns. anthony.lanham@k12.sd.us

MAKE SURE TO USE OUR WEBSITE: al048.k12.sd.us

AND…NEVER FORGET

Weakness of attitude
becomes
weakness of character.