SYLLABUS – AP PHYSICS 1

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Course Description

Textbook: Physics for Scientist and Engineers with Modern Physics, 3rd Edition (Giancoli)
Prerequisite: Pre-Calculus

This course is designed for students planning to continue their education in the field of applied science or engineering. It is assumed these students possess an exceptional mathematical background and logical thinking skills. Course work is similar to the first semester of a college calculus-based engineering physics course. Students are not assumed to have any prior knowledge of calculus. Laboratory experimentation with computer application is used to reinforce and verify concepts. Course content follows the Advanced Placement curriculum and is intended for those students who plan to take the Advanced Placement-C Mechanics test in Physics. It is recommended that students taking this course have at least an "A" average in the prerequisite course.

Physics I Mechanics covers the following concepts:

- Kinematics
- Newton's Laws of Motion
- Work, Energy, and Power
- Systems of Particles, Linear Momentum
- Circular Motion and Rotation
- Oscillations and Gravitation

Daily Routine

Unless we are taking a test, or doing a lab, you can expect class to flow according to the following routine:

Warm-Up (10 minutes):
- Place your homework on my desk (No Late Work will be accepted).
- Remove your journal from the box and take it back to you seat.
- Complete and Date your journal assignment located on the board.

Homework Review (10 minutes)

Introduction of New Concepts (40 minutes):
- Take good notes.

New Concept Practice (15 minutes):
- Most concepts in physics involve solving problems.

Long-Term Projects (As time allows):
- At he end of this activity, describe today's progress in your journal. Just a couple of sentences will be fine.

Summary (5 minutes):
- Answer the essential question in 2-3 sentences in your journal, record in your If the essential question can not be answered, record in your own words what you have learned today. Do not write symbols and formulas in your journal.
- Return your journals to the box. Do not take them home.
- Copy down the homework assignment in your notebook before the bell rings.

Grading Policy

Your grade will be determined by a weighting system. This system is broken down as follows:

Work	Percentages
Tests	40.0 %
Quizzes	15.0 %
Homework / Class Work / Journal	25.0 %
Labs	20.0 %

If a student is within 0.5% of the next higher grade (i.e. 92.5%), that score will be rounded up if and only if they have received absolutely no zeros for that particular marking period.

Absence from Class

In the event of your absence from class, it is **your responsibility** to contact another student in the class and check the science web site for class information.

A. Class Notes:
You are responsible for the information covered on the day(s) of your absence. Assignments may be available for download from the science web site.

B. Handouts:
I will place all handouts in the MISSED WORK bin in my room. It is your responsibility to pick them up on your day of return.

C. Homework & Class Work:
(1) If homework or class work was collected on the day you were absent, it is due on the day of your return to school. It is your responsibility to place it in the IN bin in my room.
(2) If homework or class work was assigned on the day you were absent, it must be completed within four (4) days. It is your responsibility to place it in the IN bin within this time frame.

D. Tests and Major Quizzes (Over 5 points):
Upon your return to school, you have four (4) school days to take the make-up test and/or major quiz. After four school days, a zero will assigned for that test and/or major quiz. See me to make arrangements.

E. Labs/Experiments/Demos:
Upon your return to school, the lab/experiment/demo must be completed within four school days. See me to make arrangements.