

# Syllabus for Advanced Placement Physics 1

Mr. Hamilton

Bonita High School

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Text: *Physics*, 6th ed. By Douglas C. Giancoli

## Course Description

AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills.

## Grading

Students will be evaluated through performance on topic/chapter exams, quizzes (announced and unannounced), participation in laboratory investigations and the production of lab reports, homework/classwork assignments and other individual and group projects. Exams will generally be given every chapter, about every three–four weeks.

- Tests/Quizzes = 65%
- Labs/Projects = 25%
- Classwork/Homework = 10%

## Recommended Class Materials

- Graph Paper (small squares)
- Protractor
- Metric ruler
- Scientific calculator (A graphing calculator is acceptable, but not necessary.)

## Assignments

All assignments will be done neatly and legibly; papers will be clean and will not be ripped or crumpled when turned in. Assignments that do not meet these criteria will not be accepted.

## Late Work\*

- Late work will only be accepted due to excused absence.
- For all *School Business* related absences, students are required to submit assignments on or before the deadline, even though the student will not be in class on that day.
- The same number of days will be allotted for turning in a homework assignment and receiving full credit as were missed due to an excused absence.
- Lab grades will be lowered 10%, one full letter grade, for each day that passes after the due-date before it is turned in. (For example: If a lab report is due Tuesday, and is turned in the next day, Wednesday, the highest grade it could earn is 90%; if it is turned in Thursday, two days after the due-date, the highest grade it could earn is 80%, and so on.)
- Missed laboratory data collection will be made up on the students own time after school, during lunch/intervention. Accommodations must be made with Mr. Hamilton ahead of time.
- If a student will be absent because of a school field trip or athletic event on a date on which a lab report is due, the lab report is to be turned in before the start of school on that same day.
- Tests missed due to excused absences will be made up within two days of the student's return to school. If a student does not make up the test by that time, the student's grade will be dropped one letter grade for every day the test is not taken after that (see above). Arrangements must be made with Mr. Hamilton ahead of time.

## Laboratory Investigations

Laboratory experiments are designed to complement the lecture/discussion portion of the course by providing opportunities to learn about physics through firsthand observations, to test concepts and principles which have been introduced in class, to explore specific issues and problems in greater depth, and to gain an awareness of the importance of variables which exist in the real world.

Students will develop and conduct experiments and think critically while observing physical systems. Labs are conceptual and quantitative in nature. Students will use mathematical and graphical techniques to analyze and interpret results from data.

Most labs require students to design their own procedure, and then carry out the lab and do their own data and graphical analyses. All labs are hands on, and students are usually given a minimum of details about how to do the lab. Students submit formal lab write-ups for a majority of lab investigations.

## Cheating Policy

See student handbook.

Do not copy anything from the internet. If I put part or all of an answer into an internet search, and part or all of that answer comes up word for word as one of the results, I will consider the answer to have been copied, the student will receive a zero grade for that assignment, and the school's disciplinary procedures may be applied.

If you are caught cheating in this or any other class, do not bother asking me for a letter of recommendation; I will not write one for you.

## AP Test Date

AP Physics 1: Algebra Based test: Thursday, May 11, 2023, during the afternoon session.

Try hard in this class, and you will be ready for it.

## Keys to Doing Well in This Class

- Pay attention; take notes; do all examples.
- Ask questions.
- Write a rough draft of your lab report within three days of its being assigned, and bring it to me for a critique. I will read and critique it as many times as is reasonable before the due date.
- Come for help during break, intervention/lunch, after school.
- Do not copy homework.
- Work hard.

## \*Schoolwide Advanced Placement Late Work Policy

### **Late Work:**

Each teacher can set the late policy for their own class. But, the maximum time given to turn in an assignment late and still receive any credit will be one week after the due date. No work will be accepted for any amount of credit in any AP course after one week has passed after the due date. Total credit will be dictated by each individual teacher, but in no case will it be the full credit for that assignment. The manner in which late assignments are completed/submitted will also be dictated by the individual teacher.

**Absences:**

For all **Non-School Business related absences**, students are given one additional day for submission of any assignments due on the date of the absence. Students are also given one additional day per day of absence to complete each assignment equaling the total amount of days missed.

For all **School Business related absences**, students are required to submit assignments on or before the deadline, even though the student will not be in class. Students are given an additional day to complete assignments given on the date of the missed class.

When a student misses an assessment, the time allotted for that student to make up the missed assessment will be dictated by the individual teacher, but in no case will a student be given more than one week to make up the missed assessment in any AP course.

**Scheduling of School Day Activities:**

When possible, school activities will be scheduled on Wednesdays and/or during 6th and 7th period. Arts teachers will take into account the activities they are scheduling during the day and try to limit superfluous events as much as possible.