AP Physics 1 2024-25 Syllabus

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Welcome! This will be my sixth year of teaching and my second year at Carnegie Vanguard High School. I hold a Bachelor of Science in Chemical Engineering from Washington University in St. Louis. After college, I worked for the ExxonMobil Chemical Company for thirteen years. My experiences with the company included manufacturing, business, and management assignments in Texas and Singapore. I am excited to work with you as you discover the wonderful world of Physics and how the skills you learn here will help you no matter what career you pursue!

The curriculum for AP Physics 1 is set by the College Board. Please see the course overview to see the full course and exam description from the College Board, as well as the outline of topics covered each grading cycle. **The AP Physics 1 exam is scheduled on the Friday, May 16th.** The exam is three hours long. There are 80 minutes to answer 40 multiple-choice questions and another 100 minutes to answer four free-response questions. Each section accounts for 50% of the overall exam score. Scientific or graphing calculators may be used on the entire exam.

Course Overview:

1st six weeks Kinematics Dynamics	*2nd six weeks* Dynamics (continued) Work & Energy	*3rd six weeks* Work & Energy (continued) Momentum & Impulse
4th six weeks Rotational Dynamics Rotational Momentum / Energy	*5th six weeks* Oscillations Fluids Mechanics	*6th six weeks* AP Review & Exam Electricity Overview

A full course and exam description from the College Board can be accessed here:
https://apcentral.collegeboard.org/pdf/ap-physics-1-course-and-exam-description.pdf

Grades:

The overall grade is a determined by the percentage breakdown shown below. Students earn a grade based on the quality and accuracy of their completed work. Students will be made aware prior to the due date if an assignment is major or minor.

- *Major Assignments 60%* – Unit exams, quizzes, labs, projects
- *Minor Assignments 40%* – Minor labs, homework, and all other uncategorized items

AP Physics 1 **Mr. Lowe**

Classroom Expectations:

1) Work hard and be kind.
2) Be prepared with all needed supplies and work.
3) Be *on time* and on task. On time is defined as seated at your desk before the tardy bell rings.
4) Keep cell phones in backpacks unless specifically given other direction by the teacher.
5) Always ask if something is not clear.
6) Leave the room cleaner than you found it.

Organization: Binders and notebooks are an important tool for organizing information and your thoughts. This can be set up digitally or it can be paper-based. All assignments, due dates, and course information is posted on Canvas and updated weekly (at minimum).

Homework: Homework in this course will be submitted on various platforms including, but not limited to, Pearson, EdPuzzle, Desmos, and AP Classroom. Many times, you will also be expected to watch online videos and/or read text to prepare for the material we will cover in class. The assignment for this pre-work may vary, and students should be prepared for a possible in-class quiz and/or discussion over the material in the reading/video.

Labs: When you are involved in a lab, you MUST act accordingly. Participating in lab is a privilege, one that can be taken away if the proper procedures are not followed. If you do not follow the rules of the lab then you will not be allowed to participate and will receive a zero for that lab. Lab work will usually be a group activity; part of science and engineering is learning how to work cooperatively with others.

Completion of Assignments: All assignments are due ON TIME. Late work will be accepted up to **one** day late and no later. An academic grade on late work will receive a maximum 70%. Late assignments must be turned into the "late" bin.

I will post all homework assignments on the Canvas course page.

Many assignments will include both a digital submission of the answers AND a submission of the paper-based work used to develop the solutions. Failure to submit unique work to explain your digital answers will result in loss of points. Utilization of study groups with peers is encouraged; however, all work turned in must be unique and completed personally.

**Note: you are on campus the day an assignment is due, then you are required to turn it in, even if you miss your class period. If at all possible, please notify me of unforeseen circumstances.

**Additional Note: If you are absent, you must either turn in the assignment or make arrangements with me within 3 days of returning to school. Assignments must be turned in directly to the teacher, not placed on my desk or in my mailbox. Do not give an assignment to another student to turn in.

**Final Note: If you are absent, it is your responsibility to find out what was assigned while you were out and complete the make-up work in a timely manner. I strongly encourage you to check Canvas for assignments as soon as you are able. If you miss class due to a school activity, such as a field trip, athletic competition, or similar activity, it is your responsibility to turn in assignments that are due that day as soon as you return to school and to obtain the notes and assignments that were given that day.

Make-Ups, Retakes, and Tutorials:

A maximum of 2 retakes per grading cycle will be permitted. A maximum retake score is 70. Students must request a retake using the form provided on Canvas. Students will complete the retakes on specific days assigned by me. A "no show" and/or failure to complete the retake assessment counts as a retake.

If you miss a test or quiz due to an absence, you must schedule a make-up with me either in writing or via email no later than the day you return to class. Make-ups must occur within three days of your return, and the format of the retest is at the teacher's discretion.

Retakes will usually occur during the week immediately following the return of a graded test or quiz. The available retake times will be announced by me in class and on Canvas. To receive a retake, you must schedule it with me using the Google Form provided on Canvas. Usually, I will assign a specific day for retakes.

I am available for tutorials, make-ups, and/or retakes during SSEP and lunch on most days. If you discover that you are having difficulty with a concept, please do not hesitate to come for assistance either during SSEP or lunch. If you wish to come during SSEP, please pick up a pass from me the day before you wish to attend tutorials. I am also available for make-ups before or after school by appointment; please schedule these with me at least 24 hours in advance.

Academic Integrity: Cheating, copying, and plagiarizing will not be tolerated in this course. Any student displaying academic dishonesty will be reported and referred to the Assistant Principal. The student will receive a grade of "0" on the assignment and there will *not* be an opportunity to make up the assignment. This includes exams and quizzes. In addition, any disruptions, intentional or unintentional, during a test or quiz will not be tolerated.

Textbook: We will use a SAVVAS / Pearson textbook entitled: **College Physics: A Strategic Approach 4th Edition, Digital Update, AP® Edition ©2023.** Homework assignments will be based on this textbook.

Contact Info: The fastest and most reliable way to contact me is through e-mail; my address is jonathan.lowe@houstonisd.org.

Anything not covered in the syllabus is subject to the rules and regulations of the Student Handbook and/or the teacher's discretion.