

AP Physics 1 Course Syllabus

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Course Overview

Welcome to Advanced Placement Physics 1. This is a challenging course in thinking about and modeling the natural world. Topics emphasized include linear motion, interactions, energy, momentum, oscillations, fluids, and rotation. This course is organized around “Big Ideas” that relate to many disciplines. During this year, you will learn how to apply science practices. These science practices are about developing skills in modeling, scientific questioning and experimentation, working with data, theoretical relationships, mathematical routines, and argumentation. Proficiency in these skills will help you be a success on many career paths. A qualifying score on the AP Physics 1 exam may earn you credit for the first semester of what is called “College Physics” at many American universities.

Required Materials

- Pencils, Pens
- Binder
- Paper
- Scientific Calculator or Graphing Calculator
- Composition Book
- AP Physics Formula sheet (given to you by Mrs. Miller)

Textbook

Required Book: College Physics for the AP Physics 1 Course: 2nd Edition
By Gay Stewart, Roger Freedman, Todd Ruskell, & Philip Kesten (Provided)

Recommended Review Book: [5 Steps to a 5: AP Physics 1: Algebra-Based 2024 1st Edition by Greg Jacobs](#)

Grading Policies

Grades will be 60% summative assessments, including quizzes and tests, and 40% formative assessments including assignments, labs, projects, classwork, and homework. Labs and projects will be weighted more.

The following table explains some of the codes in Infinite Campus

Code	Meaning
Blank	Assignment has not been graded
0	Student received zero points for the assignment
M	Assignment is “missing” (has not been turned in)
X	Student is exempt from the assignment

Classroom Rules/Procedures

- Use class time only for activities related to class.
- No food or drinks please.
- Act in a way that promotes learning (both your own and other classmates)
- Accept responsibility for your own actions/behavior.
- Follow all lab safety rules and **always** act safely in the lab.
- Use your Chromebook/laptop **ONLY** when it is allowed. Failure to do so may result in a failing grade on the assignment.
- Chromebooks should be brought to class each day with a battery charge sufficient to complete all necessary class activities involving the device.
- Chromebooks/laptops are not to be opened or used unless directed to do so by the classroom teacher.
- Chromebooks are to be placed flat on the student desk. Student Chromebook screens are to be visible to the teacher at all times.
- The following electronic activities are **NOT** allowed during instruction or student work time in class, unless the teacher gives explicit permission
 - Gaming, Social Networking (Instagram, Tik Tok, SnapChat, etc), Text messaging, Email, Personal, undirected browsing or searching, listening to music, and any other new ones I don't know about yet 😊
- Students are not allowed to record or take photos of other students or staff during class.
- No cell phones/earbuds are allowed to be used in my classroom unless permission is given. Cell phones should be kept in the classroom pocket. They should not be kept in your pocket or visible to me at any time.
- ***Parents/Guardians, please know that if your student needs to get in touch with you, all they need to do is ask to use their phone and they will be allowed. My cell phone rules are set in place to minimize distractions from the constant notifications they are getting on the phones and so the students can be focused solely on learning and understanding the content.***

Classwork, Homework, What about late work??

AP Physics 1 is a very rigorous academic course and also moves at a very quick pace due to the large number of topics that we must cover. This means it is imperative for students to turn in all work on time. Due to the adequate amount of time students are given to complete work in class and at home, late work will NOT be accepted. If students are working efficiently at school and at home, they should be able to complete assignments by the due date. For extenuating circumstances, alternative due dates may be arranged at the discretion of the teacher.

Working with other students, the instructor, or both on classwork is encouraged. *However*, work that is turned in must be unique to the individual; blindly copying is prohibited, and will serve no purpose to the student and the student will earn a 0.

Cheating will not be tolerated and will automatically result in a non-replaceable grade of zero. This includes completing an assignment for a student other than yourself, copying someone's assignment and turning it in as your own, copying work from other websites and submitting it as your own, using unauthorized websites during assignments, labs, test, and quizzes.

What do I do if I am absent??

- All missing assignments due to either an excused or unexcused absence will initially be marked as “Missing.” This is done to indicate to the student that the assignment needs to be completed and turned in.
- Students will have 3 days to turn in any missing assignments due to an excused absence. It is important that you or your parents turn in all excused absent notes to the office as soon as you return to school.
- Once a missing assignment from an excused absence has been turned in, please allow up to five working days for the grade to be reflected in Infinite Campus.
- Students who are absent on the day of a quiz/test will be required to take the quiz/test on the day that you return to school.
- In case of an absence, students will need to turn in previously assigned material on the day they return to school or it will not be accepted.

Labs

In order to do the experiments in this course, each individual must follow the safety guidelines for general lab behavior, detailed in a separate sheet.

Lab exercises will be done collaboratively with partners or a group of three. Each lab member will be responsible for individually filling out their own lab worksheet and answering conclusion questions. However, group members should help each other collect data and discuss answers to questions.

AP® Physics 1 – Exam Overview/Course Outline

<u>Units</u>	<u>Topics</u>	<u>% of Exam</u>	<u>Suggested Number of Classes</u>
Kinematics	1-D Kinematics, Vectors, and Projectile Motion	10 – 15%	28 - 35
Dynamics	Newton’s Laws, Uniform Circular Motion	18 – 23%	15 – 18
Energy	Energy, Work, and Power	18 – 23%	20 – 23
Momentum	Momentum	10 – 15%	12 – 15
Rotational Motion	Torque and Rotational	15 - 23%	24 - 29
Simple Harmonic Motion	Simple Harmonic Motion	5 – 8%	7 – 10
Fluids	Fluids	10 – 15%	13 – 18

Parents and Guardians

I truly believe in a collective partnership with parents/guardians which provides students the best opportunities for academic success. Some ways parents/guardians can support their student's learning are:

- Actively check Infinite Campus for their student's grades. Grades are posted weekly.
 - Infinite Campus is a tool used to progress monitor student work until the final course grade is posted.
 - It is my goal to post at least 2 grades each week.
- Discuss missing assignments, reiterate due dates, help organize folders, materials, and review upcoming projects and assessments.
- The majority of assignments, notes, etc. will be posted in Google Classroom daily. Students can access this at home at any time. Encourage students to show you their work and talk about what we have been learning in class.

Students

It is important to remember that you are in control of your success in this class. As with all other areas of your life including sports, drama, band, color guard, a job, and anything else you choose to do, your input determines the outcome. You are expected to prepare for class each day, take responsibility for your actions, and actively participate in class discussions and labs.

As a high school student, it is strongly recommended that you communicate directly with your teacher regarding questions. The best way to do this is by emailing me at brittany.miller@carrollcountyschools.com. I will make every effort to return your email within 24 hours during the work week.

***Please scan the QR code to acknowledge that you have read and understand the syllabus **OR** sign and return this page ONLY.

Parent Syllabus Acknowledgement

Student Syllabus Acknowledgement Amazon Wishlist



Parent/Guardian Name (printed) _____

Parent/Guardian Signature _____

Student Name (printed) _____

Student Signature _____

Date _____