AP Physics 1

An algebra-based, introductory college-level physics course.

Overview

- Classical Mechanics: conceptual and quantitative principles that govern the physical world, approximately equivalent to a first-semester introductory college course in algebra-based physics
- UC a-g approved course
- Aligned to CollegeBoard's **AP Physics 1** course description

Who would enjoy This class?

Students who want to ... understand how the physical world works apply theory to real-life phenomena Students who enjoy ... critical thinking & problem solving

hands-on laboratory investigations

Skills & Science Practices

Mathematics Routines & Problem Solving Designing Investigations Data Collection, Analysis, & Graphing Evidence-Driven Argumentation Using & Constructing Scientific Models

Reading assigned per class: approx. 30 min Practice assigned per class: approx. 45 min

Moreload

Units of Study

- 1. Kinematics
- 2. Dynamics
- 3. Work, Energy, Power
- 4. Linear Momentum
- 5. Torque & Rotational Dynamics
- 6. Energy & Momentum of Rotating Systems
- 7. Oscillations
- 8. Fluids *



Requirements

- \cancel{a} Teacher recommendation
- Rising juniors and seniors currently in an IS course:
 - CP A in second semester IS2 or IS3 with concurrent enrollment in AP Precalc or Math 4
- Rising seniors not currently in an IS course: 3.5 in CP science elective with concurrent enrollment in AP Precalc or Math 4

Grading

For '23-'24 school year, subject to change in future years:Unit Exams75%Laboratories & Classwork15%Unit Quizzes5%Homework5%

* new for 2024-2025 school year; added to AP Physics 1 course and exam description by CollegeBoard