



AP Physics 1

Insert Teacher Name

Insert Room Number

Insert Full Year/Semester

Insert Period

Insert Email Address

COURSE DESCRIPTION

Physics is the study of natural phenomena and interactions between matter and energy using mathematical models and laws to explain and understand them and how they impact our everyday lives. The AP Physics 1 course focuses on the big ideas typically included in the first semester (and parts of a second semester) of an algebra-based, introductory college-level physics sequence and provides students with enduring understandings to support future advanced course work in the sciences. Through inquiry-based learning, students will develop critical thinking and reasoning skills, as defined by the AP Science Practices.

COURSE OBJECTIVES

Students will understand:

- What are the properties of mass and charge? What internal structures do systems have?
- How can fields existing in space be used to explain interactions?
- What are forces? How can they describe the interactions between or among objects?
- How do interactions between systems change those systems?
- How are changes that occur as a result of interactions explained by conservation laws? What are the constraints of those changes?
- What are waves? How do they transfer energy and momentum from one location to another without the permanent transfer of mass? How can waves serve as a mathematical model for the description of other phenomena?

UNITS OF STUDY

- Forces & Interactions
- Momentum & Energy
- Circular Motion & Rotation
- Harmonic Motion
- Fluids

COURSE POLICIES AND REQUIREMENTS

GRADING (see [FPS BOE Policy 6154.1AR](#))

o Cumulative/In-Progress Grade:

10% of the grade will be based on formative assessments, homework completion, and/or behavior

90% will be based on summative assessments, of which there will be a minimum of eight for this full-year course; these may include Unit Tests, Mid-Unit Tests, Projects, Performance Tasks, Summative Quizzes, etc.

o End-of-the-Year Grade:

80% of the overall course grade will reflect the student's mastery of course content and skills during the school year through the Cumulative/In-Progress Grade

10% of the End-of-the-Year course grade will be based on the Mid-Year Assessment

10% of the End-of-the-Year course grade will be based on the Final Assessment

o Grade Reporting:

All grades will be communicated through Infinite Campus

Summative assessment results will be reported back to the student within ten school days from the date of submission or the due date

o Guidelines for Late Work:

Late work will be accepted for both summative and formative tasks within a defined timeline agreed upon between the student and the teacher

The total points may be reduced as a penalty for late work.

o Reassessments:

- Any extenuating circumstances may be discussed with administration to allow alternative reassessment opportunities with administrative approval.
- Reassessment opportunities are defined as twice per year (with a maximum of one per quarter) for assignments that students met the original required deadlines and do not violate the academic integrity policy. Reassessment does not apply to midyear assessments or final assessments.
- Gradebook impact of Reassessment: original and reassessment scores will be averaged in the gradebook.

MATERIALS:

Text: Knight et al, College Physics: A Strategic Approach, 4e edition

EXPECTATIONS OF STUDENTS:

EXTRA HELP:

Insert Course Expectations Here