

# Fairfield Ludlowe High School - Fairfield Warde High School

# 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 & Waves
- Electricity

# COURSE POLICIES AND REQUIREMENTS

#### **GRADING**

Cumulative/In-Progress Grade:

- 10% of the grade will be based on formative assessments, homework completion, or behavior (see FPS BOE <u>Policy 6154</u>AR)
- 90% will be based on summative assessments based on a minimum of eight assessments (see FPS BOE Policy 6146AR)
  - Individual Tests, Projects, Performance Tasks, Mid-Chapter Tests, Summative Quizzes, Written Papers, Labs, etc.

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.

# 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.

## Guidelines for Late Work (see FPS BOE Policy 6146AR):

- 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

## MATERIALS:

Text: Cutnell, John and Kenneth Johnson. Physics. 6th Edition

# EXPECTATIONS OF STUDENTS:

## EXTRA HELP:

Insert Course Expectations Here