## AP Physics 1

- Appropriate first-year Physics Course
- Focused on Concepts and Inquiry
- Students should have completed chemistry

  (A or B in honors or A in regular)
- Advanced Algebra or Pre-calculus is co-requisite for most students.

## AP Physics 1

The AP Physics 1 class covers mechanics, physical waves, some electric forces, and some circuits.

The goal of the course is to provide depth and rigor comparable to an **algebra-based** college physics class.

- AP Physics 1 is organized around six big ideas that bring together the fundamental science principles and theories of general physics. These big ideas are intended to encourage students to think about physics concepts as interconnected pieces of a puzzle. The solution to the puzzle is how the real world around them works.
- The students will participate in **inquiry-based explorations** of these topics to gain a more conceptual understanding of these physics' concepts.
- Students will spend less of their time in traditional formulabased learning and more of their effort will be directed to developing critical thinking and reasoning skills.

## **Big Ideas for AP Physics 1**

**Big Idea 1**: Objects and systems have properties such as mass and charge. Systems may have internal structure.

**Big Idea 2**: Fields existing in space can be used to explain interactions.

**Big Idea 3**: The interactions of an object with other objects can be described by forces.

**Big Idea 4**: Interactions between systems can result in changes in those systems.

**Big Idea 5:** Changes that occur as a result of interactions are constrained by conservation laws.

**Big Idea 6**: Waves can transfer energy and momentum from one location to another without the permanent transfer of mass and serve as a mathematical model for the description of other phenomena.

Some of the colleges in GA including Georgia Tech will give credit for this class for some majors as science electives.

Even nation wide the percent of students passing the examise low (39%) the CHS students perform well (~ 90% score 3,4,and 5's).

Taking AP Physics 1 class is the foundation for being successful in AP Physics C and Physics subject test.

For more information please contact me:

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