



#66713897

### Questions? Contact Ms. Binkley at Heather.binkley@lcps.org

- Prerequisite: excelled in Academic Physics (A or better) or DE Physics (B or better)
- May earn college credit with an AP exam score of 4 or 5
- Course covers the equivalent of one semester of college level Calculus Based Physics (Physics for Engineers)
- A rigorous math-based course with a strong laboratory component.
- Students should have a passion for Physics
- Students should already have taken Calculus AB (Students who are concurrently enrolled will be fine by the end of the year but the 1<sup>st</sup> semester will be very stressful.)

## Big Ideas in AP Chemistry:

- 1. Vectors and Calculus Relationships
- 2. Translational Kinematics
- **3.** Translational Dynamics
- **4.** Energy Transformations
- **5.** Momentum
- **6.** Rotational Motion
- 7. Simple Harmonic Motion
- **8.** Gravity and Orbital Motion

## Labs and Homework Assignments:

- Homework every night
- Daily graded assignments including problem sets, AP style free response questions and lab reports

# Workload:

- Expect a college-level workload
- Expect 4-6 hours of homework every week in addition to review
- Expect to go home and review notes daily
- Expect a summer assignment

### Assessments:

- 2 Quizzes per unit
- AP style test per unit to include multiple choice and free response

#### AP Exam:

- Given in May
- 35 multiple choice
- 3 free response questions

## Description of AP Physics C from the College Board:

The AP Physics C courses emphasize physical intuition, experimental investigation, and creativity. We include open-ended questions in order to assess students' ability to explain their understanding of physical concepts. We structure questions that stress the use of mathematics to illuminate the physical situation rather than to show manipulative abilities.

AP Physics C courses normally form the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus, as well as continuing to develop a deep understanding of physics concepts.

For students planning to specialize in a physical science or in engineering, most colleges require an introductory physics sequence that includes courses equivalent to Physics C. Because a previous or concurrent course in calculus is often required of students taking Physics C, students who expect advanced placement or credit for either Physics C exam should attempt an AP course in calculus as well; otherwise, placement in the next-in-sequence physics course may be delayed or even denied. Either of the AP Calculus courses, Calculus AB or Calculus BC, should provide an acceptable basis for students preparing to major in the physical sciences or engineering.