

Welcome to AP Physics C. This course covers all of the material outlined by the College Board as necessary to prepare students to pass the AP Physics C examinations in both mechanics and classical electricity and magnetism. The first semester is devoted to Newtonian mechanics including: kinematics, laws of motion, work and energy, systems of particles, momentum, circular motion, oscillations, and gravitation. The second semester covers the topics of electricity and magnetism. Throughout the course, problem solving involving calculus is utilized and emphasized.

Upon completion of this course you will:

- understand the basic principles pertaining to Newtonian mechanics and classical electricity and magnetism.
- apply these principles to solve practical problems in these areas of study..

1. Join my Google Classroom with my code: zznrdm

2. You must get the textbook *Fundamentals of Physics* by Halliday, Resnick, and Walker from me. If you sign up for the course over the summer, get a copy from Guidance.

3. Review the following:

[Chapter 1 notes](#)

[Chapter 2 notes](#)

[Chapter 3 notes](#)

4. Complete the following problems:

[Chapter 1 problems](#)

Chapter 2 Problems (textbook, page 32-39):

---4, 13, 17, 22, 23, 36, 61, 64, 80, 90, 101

Chapter 3 Problems (textbook, page 57-61):

---11, 15, 32, 38, 45, 62, 69

Chapter 4 Problems (textbook, page 84-93):

--- 11, 22, 38, 79, 91, 96, 122, 127, 131

***The summer assignment is due on the first day of school, September 5, 2019.***

Grading Rubric:

Five problems will be chosen at random to grade. Each problem graded will be worth 5 points

5 - Complete solution - all correct

4 - Solution has simple calculation error

3 - Solution has significant physics error.

0 - Problem not attempted