

Florida Department of Education
COURSE DESCRIPTIONS - GRADES 9-12, ADULT

Subject Area: Science
Course Number: 2003430
Course Title: Advanced Placement Physics C
Credit: 1.0
Will meet graduation requirement for Science

- A. Major concepts/content.** The purpose of this course is to provide study in mechanics, classical electricity, and magnetism.

The content should include, but not be limited to, the following:

- the content specified by the Advanced Placement Program

- B. Special note.** Laboratory investigations of selected topics in the content, which also include the use of scientific method, measurement, laboratory apparatus, and safety procedures, are an integral part of this course.

Credit in this course precludes subsequent credit in Physics I or Physics I Honors.

- C. Course Requirements.** After successfully completing this course, the student will:

1. Use the scientific method to solve problems, employ metric measurements and demonstrate safe and effective use of laboratory instruments.
2. Analyze the principles of kinematics.
3. Identify and apply Newton's laws of motion.
4. Describe quantitatively the relationships among work, energy, and power.
5. Describe systems of particles and statics.
6. Investigate and describe rotational motion.

7. Discuss oscillations and gravitation.
8. Demonstrate knowledge of electrostatics.
9. Diagram and quantitatively analyze electric currents and circuits.
10. Discuss capacitance and capacitors.
11. Demonstrate qualitative and quantitative knowledge of magnetostatics.
12. Discuss the fundamental principles of electromagnetism.
13. Analyze the interactions of physics, technology, and society.