

# Canyon Crest Academy: AP Physics C

| Level of Difficulty   | Estimated Homework   | Prerequisites   |
|---|--|---|
| <input type="checkbox"/> Moderate<br><input type="checkbox"/> Difficult<br><input checked="" type="checkbox"/> Very Difficult | 60 minutes per day*<br><br>*This is a general guideline for planning and scheduling purposes. A student's ability level may affect actual preparation time needed. | <b>Department</b><br>B or better in AP Physics 2<br>and<br>Successful completion or concurrent enrollment in Calculus |

## Course Description

Course will cover Classical Mechanics and Electromagnetism. This course is taught with the assumption that students have a strong background in high school physics and have completed both AP Physics 1 and AP Physics 2. Students will focus on problem solving of university-level physics problems. The pace of the course will be rapid with the assumption of knowledge of fundamental physics. Calculus will be used extensively.

Students will explore these topics through discussions, laboratory investigations, teacher demonstrations, and in-class assignments. This course follows the guidelines outlined by CollegeBoard.

This course provides students the opportunity to continue to build their physics and math application skills. Students who are highly motivated to pursue a major/career in physical science and/or engineering should enroll in AP Physics C. Please note that this is one of the most challenging applications of math and science at CCA. Per CollegeBoard, introductory differential and integral calculus is used throughout the course.

Students may be concurrently enrolled in Calculus, though many have already finished Calculus course. For those students co-enrolled in Calculus the resources below can help support students. Use of calculus will increase as the course progresses.

Materials below are to support students for in class activities:

- [Crash Course \[Derivatives\]](#)
- [Crash Course \[Integrals\]](#)
- [Dan Fullerton: Defining Motion in AP Physics C](#)
- [Integral Calculator](#)
- [Derivative Calculator](#)
- [More Calculus](#)
- [Practice Problems and Solutions](#)

## Links

CCA Science Homepage <http://teachers.sduhsd.net/ccscience>

CollegeBoard <http://www.collegeboard.com>

CollegeBoard Course Description <https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-physics-c-course-description.pdf>

**Supplemental Information**

10 unit course

Meets UC/CSU subject "d" requirements

Fulfills graduation requirement in physical science

Weighted grade