



McLean High School Course Description and Expectations for
AP Physics C/Senior Science Investigations

Prerequisite: Physics 1

Corequisites: Senior Science Investigations and Calculus

Short Course Description: AP Physics C is a calculus-based course in classical physics; the syllabus includes both mechanics and electromagnetism. The course is a double-block; students attend a 90-minute class each day.

Summer Assignment: None

Work Load during the School Year: Textbook reading is assigned for most classes; homework problems are assigned approximately every other class and are graded. The course workload is approximately one hour for each class day. A major test is scheduled at the completion of each of the 12 units, which amounts to one unit test every 10 to 12 class days.

Special Course Information: Classes meet each day for 90 minutes. Successful AP Physics students generally exhibit a genuine interest in the subject itself and superior performance in mathematics, the language of physics. The key to success in classical physics is being able to visualize and understand the physical world in mathematical terms.

Historically, students who have completed first-year calculus and are taking multivariable calculus concurrently with Physics have been the most successful contingent in AP Physics at McLean, followed then by the students taking BC Calculus, and then by students taking AB Calculus. There are, of course, always exceptions to this general rule. The issue is not which math course a student is in; rather, it is how capable the in math the physics student is. The particular math course a student is taking as a senior serves merely as a proxy for establishing relative math capability.

The course is designed for students intending to pursue studies either in engineering or in a science major requiring calculus-based physics. AP Physics C is a somewhat exclusive club; approximately one of every 500 graduating seniors nationwide will take the two AP Physics C examinations (mechanics and electromagnetism) next May. Successful AP Physics students generally found Physics 1 to be interesting, if not particularly challenging; the majority of AP Physics students find the course to be challenging.

Available Support: The instructor, the textbook and classmates

Student Opinion: It is suggested that interested students contact current members of the Physics 1 class directly; most should be willing to share their candid opinions concerning the course. Be sure to ask which math class the student is taking and discuss the course with students who are at the math level that you plan to take next year.

Please sign indicating that you have read and understand the nature of this AP course.

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 student signature

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 parent signature

