

AP Physics 1 and AP Physics 2.

- General description of AP Physics 1
 - AP Physics 1 is a first year course. If a student has already taken physics or honors physics, they should not register for AP Physics 1.
 - Full year course. Students have the potential to earn one semester of college credit.
 - Topics: Kinematics, Dynamics, Gravitation, Energy, Momentum, Oscillations, Rotational motion, electrostatics, DC circuits, waves and sound.
 - Lab-based and Math-intensive.
 - Not recommended to be a student's first experience in an honors-level course.
- Necessary Skills for both AP Physics 1 and AP Physics 2.
 - Excellent Math Skills required.
 - A or B in Honors Algebra II
 - Taking Pre-calculus or pre-calculus honors
 - Well-developed writing skills for formal lab reports and essay questions.
 - Strong problem-solving and critical thinking skills.
 - Strong work ethic, daily homework is to be expected.
- General description of AP Physics 2
 - A 2nd year course.
 - Student has previously taken AP Physics 1 and earned an A or B.
 - Student has previously taken Honors Physics, earned an A, and has a teacher recommendation.
 - Full year course. Students have the potential to earn one semester of college credit.
 - Topics: Thermodynamics, Fluids, Electrostatics, DC and RC circuits, Magnetism, Optics, Modern Physics.
 - Lab-based and Math-intensive.
 - Not recommended to be a student's first experience in an honors-level course.

AP Physics C

- General description AP Physics C
 - AP Physics C is a calculus based, college level physics course.
 - A 2nd year course.
 - Student has previously taken AP Physics 1 and earned an A or B.
 - Student has previously taken Honors Physics, earned an A, and has a teacher recommendation.
 - Full year course. Student will take **TWO AP Exams** in May and have the potential to earn credit for **two semesters of college credit**.
 - AP Physics C: Mechanics.
 - AP Physics C: Electricity and Magnetism.
 - Lab-based and Math-intensive.
- Necessary Skills
 - Excellent Math Skills, Calculus is **REQUIRED**.
 - Concurrently taking calculus AB or BC.
 - Or, previously taken calculus with at least a B grade.
 - Well-developed writing skills for formal lab reports and essays.
 - Strong problem-solving and critical thinking skills.
 - Strong work ethic, daily homework is to be expected.

Senior Year

It is assumed that a student will choose A.P. Physics 2, or A.P. Physics C, but taking both at the same time is an option.

Students who take A.P. Physics C will be better prepared to compete with other students when they enter a college engineering program. At the same time though, these students will have no experience with topics like thermodynamics and optics, so taking both courses will give them a well-rounded physics education.