

## 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 2<sup>nd</sup> 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 2<sup>nd</sup> 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.