

WJ Physics Courses at a Glance

	Honors Physics (SCI2006) / On level Physics (SCI2005)	AP Physics 1 SCI2072	AP Physics C: Mechanics SCI2064	AP Physics C: Electricity & Magnetism SCI2063
Description of Course	Topics include traditional physics subjects of motion, dynamics, energy momentum, electricity and magnetism & waves. Along with related subjects in earth science (plate tectonics/ earthquakes) & astronomy.	Students explore principles of Newtonian Mechanics (including topics related to motion, dynamics, work, energy, rotational motion, power, and simple harmonic motion).	Students will learn about various Mechanics topics, such as kinematics, forces, rotation, energy, momentum, and wave motion. Introductory integral and differential calculus is used throughout this course.	Students will explore topics such as electric forces and fields, Gauss' Law, Circuits, capacitance, magnetic forces and fields, electromagnetic induction & applications of Maxwell's equations. Additional applications of integral & differential calculus covered in the AP C: Mechanics course will be applied to these topics.
Are there any prerequisites or Corequisites?	Recommended: Concurrent enrollment in Algebra II	Prerequisite: Geometry Co-requisite: Algebra II Recommended: Concurrent enrollment in Pre-calculus	Corequisite: Concurrent enrollment in, or completion of, either AP Calculus AB or BC and/or Calc with Apps course** (See footnote)	Prerequisite: Co-enrolled in AP Physics C: Mechanics OR completion of AP Physics C Mechanics Corequisite: Concurrent enrollment in (AP Calculus) or successful completion of a Calculus Course
Is this a 1st year Physics class?	Yes	Yes	Yes	No
Is this a single period, year long course?	Yes	Yes	Yes	Yes **May be taken concurrently with AP Physics C: Mechanics if student has prior Physics experience
Is Calculus Required?	No	No	Yes ** (See footnote)	Yes: AP Calculus or Multivariable
Will I do labs?	1 Lab per Unit	~ 1 Lab activity per week	~ 1 Lab activity per week	~ 1 Lab activity per week
Assessments	Unit based tests/quizzes	Cumulative tests every 3-5 weeks	Cumulative tests every 3-5 weeks	Cumulative tests every 3-5 weeks
Can I earn College Credit?	No	Potential credit with a qualifying score on AP exam. Equivalent to a general science credit for an algebra based course for non-STEM majors	Potential credit with a qualifying score on AP Exam, with possible placement out of 1st semester calculus based Physics course for STEM majors.	Potential credit with a qualifying score on the AP exam, with possible placement out of 2nd semester calculus based Physics course for STEM majors.

**If you are a strong math student enrolled in Honors Pre-calculus talk with Ms. Rooney, you may still be eligible for AP Physics C: Mechanics.

