

## Coventry Public Schools

### Course Proposal

#### Coventry High School Core Values and Belief Statement:

Our community believes in preparing students to become life-long learners by providing a challenging environment that supports the development and use of concepts, knowledge, skills, and ethics that meet the expectations of the global, interdependent society of the 21st century.

The Course Proposal presented here aligns with Coventry High School's Core Values and Beliefs Statement, will align with content standards if approved, is recommended by the Coventry High School Principal, the Director of Teaching and Learning, and Coventry High School's Leadership Team.

<b>Course Title</b>	AP Physics 1
<b>Course Description</b>	<p>The AP Physics 1 course will meet six times a week, which includes two labs a week. The course has been designed as a course equivalent to the first semester algebra-based college-level physics class. At the end of the course, students will take the AP Physics 1 Exam, which will test their conceptual knowledge, ability to design an experiment, as well as their problem solving skills through the use of the correct equations.</p> <p>The course focuses on six "Big Ideas" that are continuously addressed throughout each unit, which are meant to bring together all the physics units with fundamental science theories and principles. Problem-solving strategies, as well as reasoning skills, are stressed throughout the year, which will be used to develop solutions to real-world applications through the use of labs, projects, and other formative and summative assessments.</p>
<b>Rational for the Addition of the Course</b>	To provide students another opportunity to receive college credit for a science course, as well as a more rigorous and in depth physics course.
<b>Highlights of Topics of Study to be Included in the Course</b>	<ul style="list-style-type: none"><li>• This course is designed to provide personal growth opportunity to improve students' readiness for the 21<sup>st</sup> century</li><li>• This course is designed to cover the same content as would be seen in the first semester of an algebra based, introductory college level physics sequence. Topics will follow the units of the AP Physics 1 Curriculum:<ul style="list-style-type: none"><li>○ Kinematics</li><li>○ Dynamics</li><li>○ Circular Motion and Gravitation</li><li>○ Energy</li><li>○ Momentum</li><li>○ Rotational Motion</li><li>○ Simple Harmonic Motion, Waves, and Sound</li><li>○ Electrostatics and Simple Electric Circuits</li></ul></li></ul>

	<ul style="list-style-type: none"> <li>Students will spend 25% of the course on hands-on laboratory investigations. These include, guided- and open-inquiry labs, as well as engineering and design projects.</li> </ul>
<b>Semester or Year Course</b>	1.5 Credit full year (6 periods a week, 2 being labs)
<b>Open to Grade Levels</b>	Grades 11-12
<b>Course Prerequisites</b>	Strongly recommended that students received a B or better in Algebra 2, and are concurrently taking either Pre-Calculus or Calculus. Students in Grade 10 may take the class by approval of teacher(s) and administration.
<b>Impact of Course on Current Programming</b>	This course will serve as an additional advanced course for students seeking a high level of challenge and rigor.
<b>Resources Needed for Implementation of Course</b>	No budget impact. This course will be using equipment and supplies that are currently used in our physics classes.
<b>Budgetary Impact of Addition of Course</b>	No budget impact. All resources and supplies will come from existing budget and there will be no increase in FTE/staffing
<b>Other Considerations</b>	