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|  | *Fairfield Ludlowe High School - Fairfield Warde High School* **ADVANCED PLACEMENT PHYSICS 1** |
| Insert Teacher Name | Insert Room Number |
| Full Year | Insert Period |
| Insert Email Address |
| COURSE DESCRIPTION |
| AP Physics 1: Algebra-based is the equivalent of the first semester of introductory, algebra-based college course. Since this course is a year- long course, teachers have time to foster deeper conceptual understanding through student-centered, inquiry-based instruction and students have time to master foundational physics principles. AP Physics 1 explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry based learning, students will develop scientific critical thinking and reasoning skills. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry based investigations that provide students with opportunities to apply the science practices. Students in AP Physics 1 are learners with demonstrated mathematical and problem-solving ability. Students are expected to take the AP Physics 1 examination in May  |
| COURSE OBJECTIVES |
| Students will understand that:* scientific numeracy includes the ability to use mathematical operations and procedures to calculate, analyze and present scientific data and ideas.
* waves have characteristic properties that do not depend on the type of wave.
* Newton’s laws predict the motion of most objects.
* the laws of conservation of energy and momentum provide a way to predict and describe the movement of objects.
* energy cannot be created or destroyed although, in many processes, energy is transferred to the environment as heat.
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| UNITS OF STUDY |
| * Kinematics
* Vectors
* 2D motion
* Dynamics
* Circular motion & Gravitation
* Conservation of Momentum
* Work & Energy
* Electrostatics
* Introduction to DC Circuits
* Torque/Angular Momentum
* Mechanical Waves/Sound
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| COURSE POLICIES AND REQUIREMENTS |
|  GRADING |
|  | Summative Assessments: | 100%Insert Categories/Weighting (ie. Papers – 30%) |
|  | Formative Assessments: | 0%Insert Categories/Weighting (ie. Quizzes – 50%) |
|  | Behavioral Characteristics: | 0%Insert Categories/Weighting (ie. Particip. - 90%) |
|  | Insert Additional Grading Information Here |
|  MATERIALS |
|  | Insert Course Materials Here (ie. Textbook, Binder, Calculator, Highlighters) |
|  EXPECTATIONS OF STUDENTS |
|  | Insert Course Expectations Here |
|  EXTRA HELP |
|  | Insert Course Expectations Here |
| Insert Additional Information Here |