|  |  |
| --- | --- |
|  | *Fairfield Ludlowe High School - Fairfield Warde High School* **ADVANCED PLACEMENT physics 2** |
| Insert Teacher Name | Insert Room Number |
| Full Year | Insert Period |
| Insert Email Address |
| COURSE DESCRIPTION |
| AP Physics 2: Algebra-based is the equivalent of the second 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 2 explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. 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 2 are learners with exceptional mathematical and problem-solving ability. Students are expected to take the AP Physics 2 examination in May. |
| COURSE OBJECTIVES |
| Students will understand that:* 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
* Waves have characteristic properties that do not depend on the type of wave
* Electric and magnetic phenomena are related and have many practical applications
 |
| UNITS OF STUDY |
| * fluid statics and dynamics
* thermodynamics with kinetic theory
* PV diagrams and probability
* electrostatics
* electrical circuits with capacitors
* magnetic fields
* electromagnetism
* physical and geometric optics
* quantum, atomic, and nuclear physics
 |
| COURSE POLICIES AND REQUIREMENTS |
|  GRADING |
|  | Summative Assessments: | 100%Insert Categories/Weighting (ie. Papers – 30%) |
|  | Formative Assessments: | 0%  |
|  | Behavioral Characteristics: | 0%  |
|  | 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 |