AP Physics 1 Syllabus

Instructor: Miss Fuller, room 42 **Course Title:** Advanced Placement Physics 1 **Text:** Giancoli Physics

Course Content: 1-D and 2-D Kinematics, Forces and Newton's Laws, Energy, Momentum, Circular Motion and Universal Gravitation, Rotational Motion, Simple Harmonic Motion, Mechanical Waves and Sound, Electrostatics, and DC Circuits.

Communication: Lincoln High: 408.535.6300 Class website: www.fullerphysics.weebly.com
Classroom Phone: 408.535.6300 x64342
Teacher Email: lfuller@sjusd.org or lonifuller1@gmail.com

1. **Required Materials:** Textbook
   Composition Notebook (Graph paper recommended)
   Additional binder or folder for class handouts
   Calculator (graphing calculator TI-83 or higher recommended)
   Glue Stick & Dry Erase Marker
   **All materials should be brought to class everyday unless otherwise specified.

2. **Rules and Expectations:** Students are expected to adhere to the following classroom policies.
   - Students will come to class on time and be seated when the bell rings or risk getting marked Tardy.
   - Students will have papers ready to turn in on the due date at the beginning of class.
   - Cell phones/electronics must be put away and silenced at all times. If caught using your phone during class, you risk it being taken away. If you have your phone out during a test/quiz, you get a 0 on that test/quiz.
   - Students will respect our classroom by cleaning up after themselves.
   - Students will follow lab and equipment safety protocols; failure to do so will result in a "0".
   - Cheating of any kind will not be tolerated. Cheaters will earn a grade of 0 on the Test, Quiz, or Homework assignment and a report will be placed in the Cheating File in the Discipline Office. No letter of recommendation will be given to any student who is caught cheating.
   - Students will be respectful to the teacher, to each other, to the room, and the materials in the room by using respectful language, complying with teacher requests, keeping tables and lab equipment in good condition and unmarked.

   Consequences:
   1. Verbal warning and redirection
   2. Conversation between teacher and student
   3. Phone call to parent/guardian
   4. Administrative referral
   5. Classroom suspension

   Note: All major disruptions will result in immediate administrative action.

3. **Homework:** A Homework Assignment Sheet will be given out at the beginning of each unit – refer to this list for daily and weekly assignments. Homework assignments will consist of weekly problem sets that will be typically assigned on Monday and due at the beginning of class on Friday. **NO LATE HOMEWORK WILL BE ACCEPTED**. If you know you going to be absent, please see me ahead of time to get the homework turned in before Friday. Weekly homework solution sets will be posted on class website at the end of each week. A total homework grade will be given and entered in the online grade book at the end of each unit. Each homework assignment needs to have the student's name and homework number in order to receive credit.

4. **Reading Assignments**: Reading assignments from the textbook will be assigned. Students are expected to do the reading assignments ahead of class. There may be a reading quiz in class on the day a reading assignment is due. You are allowed to use any notes you take.

5. **Testing:** There will be a comprehensive unit exam at the end of each topic covered. Scheduled absences (extracurricular activities) on testing days must be coordinated with the teacher in advance. Failure to contact the instructor for a make-up will result in a "0" grade. There will also be quizzes throughout the semester that will be communicated by the instructor ahead of time. Students will have the opportunity to **earn back up to half the points missed** by submitting exam corrections (excluding the final exam). **No test retakes** will be offered for students who dislike their score.

6. **Labs and Projects:** Projects and labs are generally group activities and will consist of a team component and individual component to be submitted for grading. Projects are long-term, and typically will involve groups of students developing a plan, collecting data and/or research, and presenting conclusions in a meaningful way. Laboratory work is student centered and inquiry based; all work will be recorded in lab notebooks that will be submitted at the end of each unit for grading. All team members must demonstrate *individual contributions* to the exercise. Missed labs due to absence need to be made up within a week of the missed lab date. All team members will be held responsible for the safe use and return of all equipment assigned to their group.

7. **Participation:** Class participation is expected every day, including volunteering to answer questions, asking questions, and working with peers to solve problems. Excessive tardies, inappropriate cell phone use, off task behavior, or lack of compliance will result in a loss of participation points.

8. **Grading:** Your grade will be calculated using the following weighting:
   Exams/Quizzes (50%), Projects/Labs (30%), Homework/Classwork (20%)
   Scale: 90% - 100% = A (excellent), 80% - 89% = B (good), 70% - 79% = C (average), 60% - 69% = D (poor), 0% - 59% = F (failing)

9. **AP Physics 1 Exam:** Students should plan on taking the exam on May 2, 2017 12:00 PM. The cost is about $105 (fee may be waived for students that qualify). Students will receive more information about registering for the exam as the date gets closer. The AP Physics 1 course has been designed by the College Board as a course equivalent to the algebra-based college-level physics class. The AP exam will consist of a multiple choice and free response section that rigorously test student's knowledge revolving around 6 big ideas:
   - **Big Idea 1** – Objects and systems have properties such as mass and charge. Systems may have internal structure.
   - **Big Idea 2** – Fields existing in space can be used to explain interactions.
   - **Big Idea 3** – The interactions of an object with other objects can be described by forces.
   - **Big Idea 4** – Interactions between systems can result in changes in those systems.
   - **Big Idea 5** – Changes that occur as a result of interactions are constrained by conservation laws.
   - **Big Idea 6** – Waves can transfer energy and momentum from one location to another without the permanent transfer of mass and serve as a mathematical model for the description of other phenomena.

Course Information Acknowledgement Form

Student Acknowledgment: I have thoroughly read the course information.

……. ……..
Signature of Student Date

……. ……..
Printed Name of Student Class Period

Is there anything you would like to share with me concerning your success in this class (i.e. concerns or accommodations)? Please use the space below (or the back of the page) for your response.

Parent/Guardian Acknowledgement: I have read the course information with my child.

……. ……..
Signature of Parent or Guardian Date

Preferred method of communication: What times are best to get ahold of you?

……. ……..
Phone Number

……. ……..
Email Address

Lab Donation: A lab donation is requested to help pay for disposable lab and project supplies specifically for physics. $25 is requested, but anything is appreciated, even if it is only $5 (or more than $25!)! All funds are deposited into the Lincoln Physics account and will be used only to fund physics labs and projects. **All checks may be made out to "Lincoln Physics"**. Thank you in advance for your support! Please initial the option that applies to you.

_____ I will not be making a donation at this time.

_____ I would like to donate $25 and have attached cash / check (circle one)

_____ I would like to donate some other amount, $_____, and have attached cash / check (circle one)

Concerns/Accommodations: Is there anything you would like to share with me concerning your student? Please use the space below (or the back of the page) for your response.