MVLA
2024-25
COURSE INFORMATION SHEET

Course Title: AP Physics C - Mechanics
School: Los Altos High School
UC/CSU requirement: Yes / Yes
Textbook and/or other learning resources: Physics for Scientists and Engineers, Serway/Jewett

Course Description/Student Learning Outcomes:

The purpose of this course is to teach students about classical Newtonian mechanics and to prepare them to successfully pass the College Board's Advanced Placement Physics C Mechanics exam. The curriculum for this course is determined by the College Board. Students will learn to build detailed mathematical models of the physical universe using algebra, trigonometry and introductory differential & integral calculus.
Instructional approaches include demonstration, direct instruction, laboratory investigations, class discussions, problem solving of AP Physics Free Response Questions (FRQs), textbook work and AP exam type assessments. The Fall Semester is focused on Mechanics.

Course Outline/Units of Study/CTE Industry Standards(If applicable to your course):

The AP Physics C course studies kinematics, Newton's laws of motion, work & energy, uniform circular motion, rotational kinematics & torque, universal gravitation and oscillations.

Assessment and Grading (BP 5121 / AR 5121**):** To ensure that every student has an equal opportunity to demonstrate their learning, the course instructors implement aligned grading practices and common assessments with the same frequency.

1. **Grading categories and their percentage weights:**
   Tests & Quizzes =55%
   Laboratory = 25%
   Classwork & Homework = 10%
   Semester Final = 10%

2. **Achievement evidence collected within each grading category:**
   Tests and quizzes are formatted in free response and multiple choice questions.
   Laboratory work combines pre-lab mathematical models with data collection and analysis using spreadsheets.
   Classwork and Homework are formatted in free response and multiple choice prompts.
   The final exam is formatted as a multiple choice exam using the College Board's AP Classroom.

3. **Grading scales:**
   Letter grades are assigned based on overall percentage:
   A = 100-90%, B = 89.9-80.0%, C = 79.9-70.0%, D = 69.9 – 60.0%, F < 59.9

4. **Homework/outside of class practices (AR 6154):**
   Students should dedicate 60 - 75 minutes between each class period in a state of academic mental focus, not distracted by external stimulus, working towards mastery in physics by completing homework assignments. To maximize credit students should follow the Solution- Guidelines

5. **Excused absence make-up practices (Education Code 48205(b)):**

6. **Academic integrity violation practices (LAHS Academic Integrity Policy):**
   Students are encouraged to work together on classwork, homework and lab work to share ideas. However, every student should turn in their own work, not work copied or taken from another student. Lab groups might have the same data, but the programming of the spreadsheet to analyze the data and written work should be unique to each student.

7. **Late work practices:**
   Unexcused late work is not accepted for credit.

8. **Revision practices:**
   See the Correct To Learn Portfolio.

9. **Extra credit practices:**
   Students may have their semester grade increased up to 2.0 % by maintaining a Correct To Learn Portfolio.

10. **Additional grading practices:**

11. **LMS Used:**
    Google Classroom

Instructors' email addresses:

adam.randall@mvla.net

Additional information:

Students should:
- keep their textbook at home.
- organize their work in a 3 ring binder, folder or notebook.
- bring a scientific calculator to class everyday.
- write in pencil, not permanent ink.
- use self control to not use digital devices during class for non academic purposes.
- be prepared to be in class for the instructional period.
- try to learn from their experience with lessons, classwork, lab work & homework such that they remember for the rest of their lives.

Please use the restroom before or after class.
Please do not eat during class.
Please do not bring food or drinks into the classroom.
Please do not use cell phones or communication devices during class time.
Please be respectful of your peers, teachers and classroom materials.