MVLA
2025-26
COURSE INFORMATION SHEET

Course Title: AP Physics 1
School: Los Altos High School
UC/CSU requirement: Yes / Yes
Textbook and/or other learning resources: Openstax College Physics 2e

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 1 exam. The curriculum for this course is determined by the College Board. Students will learn to build mathematical models of the physical universe using concepts, principles in physics, algebra and trigonometry. Students will learn to translate between multiple representations of physical principles. Students will learn to design experiments, collect and analyze data to confirm a hypothesis. Students will learn to make qualitative statements supported by quantitative evidence.

Course Outline/Units of Study/

The AP Physics 1 course studies kinematics, Newton's laws of motion, work, energy, power, linear momentum, torque, rotational dynamics, energy & momentum of rotating systems, oscillations and fluids.

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.

Grading categories and their percentage weights:
Assessments = 50%
Laboratory = 30%
Assignments = 10%
Semester Final Assessment = 10%

1. **Achievement evidence collected within each grading category:**
   Tests and quizzes are formatted in free response and/or 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 questions.
   The final exam is formatted as a multiple choice exam using the College Board's AP Classroom.

2. **Grading scales:**
   Letter grades in Aeries 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

3. **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

4. **Excused absence make-up practices (Education Code 48205(b)):**
   Students with excused absences will be given additional days (the same amount as they were absent) to make up missed assignments for full credit.

   Students who know they will be missing class ahead of time must inform the instructor at least two days prior to schedule make-up of the work. All missed assignments are due within the same number of days as the absences.
   Make-up Assessments:

   - Students must communicate with their teacher in order to begin arrangements for a makeup test as soon as possible.

- All missed assessments must be made up within **two school days**.

5. **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 and written work should be unique to each student.

6. **Late work practices:**
   Unexcused late work is not accepted for full credit and will result in a zero.

7. **Revision practices:**
   The Correct To Learn (CTL) Portfolio gives students an opportunity to create a body of evidence demonstrating their continuous work towards mastery of topics in physics. By reviewing assessed work, identifying misconceptions, and correcting errors, students should increase their understanding of concepts, perform at a higher academic level, and learn more. While students are encouraged to complete the CTL Portfolio, participation is not required. The primary intention is to help students learn and master the material, and any portfolio submitted must follow the guidelines outlined in this document. These CTL Portfolio guidelines are designed to support students in their formative development while working to develop college-level academic behaviors.

   CTL Portfolios will be assessed at the end of the semester for students whose semester grades are within 2% of the next letter grade.

8. **Extra credit practices:**
   Extra credit will not be granted in this course.

9. **Additional grading practices:**

10. **LMS Used:**
    Mr. Arias: Canvas
    Mr. Manildi: Canvas
    Mr. Talcott: Canvas

Instructors' email addresses:

hector.arias@mvla.net, joseph.manildi@mvla.net, david.talcott@mvla.net,

Additional information:

Students should:

- organize their work in a 3 ring binder, folder or notebook.
- bring a scientific or graphing 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 entire instructional period.
- try to learn from their experience with lessons, labs, classwork and homework such that they remember what they have learned for the rest of their lives.
- be respectful of the cleanliness of the learning environment.
- be respectful of their peers, teachers and classroom materials.