# MVLA 2023-24 COURSE INFORMATION SHEET

Course Title: AP Physics 1 School: Los Altos HS CTE Pathway Sequence (if applicable): N/A UC/CSU requirement: Yes Lab Science D Textbook and/or other learning resources: online College Physics textbook at https://openstax.org/details/college-physics

### **Course Description**

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, and waves. The specific skill areas covered in this course are modeling, mathematical problem solving and reasoning using algebra and graphing, scientific questioning and argument, data analysis of experimental data, experimental design, and making connections between scientific content areas.

### Student Learning Outcomes:

Students will be able to:

- 1. Understand physics concepts and answer conceptual problems about those concepts.
- 2. Set up and solve numerical word problems using physics formulas, using algebra and vector math.
- 3. Graph physics data and interpret graphs of physics data.
- 4. Develop experimental procedures using lab equipment to investigate physics topics
- 5. Construct logical written paragraph responses to prompts about physics scenarios
- 6. Work with other students in a group setting.
- 7. Use a variety of software tools to learn lab concepts and techniques.

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

#### Please see above.

**Assessment and Grading (**<u>BP 5121</u> / <u>AR 5121</u>): 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: Assessments: 30%, Classwork and Homework: 25%, Laboratory: 30%, Semester Final: 15%
- 2. Achievement evidence collected within each grading category: In physics the process and the correct answer are important. Work must be shown on all problem-solving assignments and the answer must be correct. Often, the answers to problems are given, so students may check answers as they do the work. Homework will be assessed for both process and the correct answer, and partial credit is given if work is shown. Credit will not be given for just an answer. Assessments may be a mixture of both multiple-choice, written response questions, or lab practical assignments. No partial credit is given on multiple-choice, but will be given on any written or skills based questions.
- 3. Grading scales: A standard grading scale will be used for summative grades.
  - A = 100%-90.00% B = 89.99%-80.00% C = 79.99%-70.00%

D = 69.99%-60.00 F = 59.99% and below We update gradebooks at least once every two weeks but possibly more often. **Student Information System** (SIS) <u>http://sis.mvla.net/</u>

- 4. Homework/outside of class practices (<u>AR 6154</u>): Students can expect homework to be assigned in each class period. Work is due online or in class by the due date posted. Work should be submitted in a single document. Students should expect 75-90 minutes of homework after each class period. Up to 5 hours a week is allowed by board policy. Homework is allowed to be assigned over Spring Break in AP classes. Various software platforms will be used for homework and lab simulations. All numerical problem solving requires that all work be shown in order to receive full credit, unless a digital system is being used for a homework assignment and specific work is not required.
- 5. Excused absence make up practices (<u>Education Code 48205(b)</u>): All work missed due to an excused absence must be made up. Missed tests and quizzes will require the teacher to create a make-up assessment, so the student is expected to contact the teacher via email and arrange a make up time as soon as possible. Missing work or late work is recorded as a zero. Requests for extensions beyond the usual make up period must be made to the teacher directly, and it is up to the teacher to determine what a reasonable time to make up work is.
- 6. Academic integrity violation practices (<u>LAHS Academic Integrity Policy</u>): Students will be held to a high standard of academic integrity and school academic integrity policies will be adhered to. Any assignments for which you are determined to be in violation will result in a permanent zero for that assignment. Students are expected to do all of their own work on every assignment. In the distance learning format this is especially important. Sharing answers to tests and quizzes via any method is cheating and will be handled as such. Group work will be graded on individual contribution but a partial component may reflect a group submission or document. Grades may not be assigned equally depending on contribution, especially in a larger group project or assignment.
- 7. Late work practices: Late work will not be accepted for credit, but can be reviewed and assessed by the instructor.
- 8. Revision practices: There are different options for "revision practices" depending on the instructor. One option for revision will take the form of test retakes. The other option for revision is a digital portfolio of assessment corrections. Either option can increase a student's semester grade by as much as 2.0 %.
- Extra credit practices: The only opportunity for additional credit comes in the form of the revision practices described above. These are an ongoing effort on the part of the student that may result in their semester grade increasing up to 2.0%. Information about the "Correct To Learn" Portfolio can be found <u>here</u>. Information about the test corrections can be found <u>here</u>.
- 10. Additional grading practices: There are no additional grading practices.

## Instructors' email addresses:

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Additional information: