MVLA 2024-25 COURSE INFORMATION SHEET

Course Title: Physics

School: LAHS

UC/CSU requirement: Yes/Yes

Textbook and/or other learning resources: Pearson Physics, James S. Walker

Course Description/Student Learning Outcomes:

The purpose of this course is to give students a college preparatory introduction to classical Newtonian physics. Students will learn about the classical laws of physics, increase their scientific literacy, enhance their problem solving skills and apply the rules of algebra and right triangle trigonometry. Skills students will:

- Develop reading comprehension and summary writing skills.
- Use algebra to build mathematical models to be used in a laboratory setting.
- Design and perform experiments to verify predictions made by their mathematical model.

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

- i. Class Introduction
- 1. Equilibrium
- 2. Constant Velocity Motion
- 3. Kinematics and projectiles in free fall
- 4. Dynamics
- 5. Momentum
- 6. Energy
- 7. Electricity and Magnetism

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 - 25%

Laboratory - 30%

Classwork - 15%

Homework - 10%

Class Discussions and Project Engagement - 10%

Semester Final - 10%

2. Achievement evidence collected within each grading category:

Assessments - a combination of multiple choice and free response questions.

Laboratory - lab report documents that may include spreadsheet analysis and written observation, lab quizzes for check for individual understanding of the lab results.

Classwork - Confirmation activities started in class, sometimes finished for homework

Homework - Reading notes and written homework problems will be checked for completion at the start of the class in which they are due, feedback will be given verbally. Lon Capa questions will be graded for accurate answers, feedback will be given instantly and students will have multiple chances to answer for full credit. Class Discussion and Project Engagement - In discussion circles, everyone will have an opportunity to present problems and ask questions of other groups. Presentations and questions will be tracked. Project engagement will be tracked on a daily basis when appropriate.

3. Grading scales:

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 plan on scheduling 45 - 60 minutes after each class working towards mastery on homework problems. During this time students should have a focused academic mind and work without distractions. Homework includes readings with note taking, problem sets, lab write-ups, classwork completion, and online activities. Examples of homework beyond current assignment include: test corrections, rewriting lecture notes, practicing past problems, and watching instructional videos to support conceptual understanding.

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

Students with EXCUSED absences ("Illness, quarantine, health appointments (medical, dental, and optometry), religious holiday observances, death in the immediate family or serving on jury duty are the only legal reasons to be absent from school. School [LAHS]-initiated activities that cause a student to miss a class are also considered "excused absences.") will have as many days as they were gone to submit work for full credit. It is recommended that planned absences have work organized in advance, as students often find it challenging to make up work while also completing the current work for all classes.

6. Academic integrity violation practices (<u>LAHS Academic Integrity Policy</u>): <u>MVHS Academic Integrity Policy</u>):

Students are expected to work together on classwork, homework and lab work. 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 should be unique, as should all observations and analysis. Work together, but do not write together.

7. Late work practices:

If submitted before grading: full credit

After grading but before returned: max grade 70%

After graded items returned: 50%

Lab reports where a student did not themselves conduct the experiment have a max grade of 50%

8. Revision practices:

Tests can be retaken after test corrections are individually completed and submitted as per the instructions. Corrections must be done by students on their own time, and is in addition to the continuing class work. Retakes will update the grade, corrections are for access to the retake and are only graded as satisfactory/unsatisfactory. Labs and quizzes can be made up to 50% if less than a 50% is achieved.

9. Extra credit practices:

Phones that are left in the student's assigned pocket will earn one extra credit point per day, to be entered in the "Class Discussion" category.

10. LMS Used:

Canvas

Instructors' email addresses:

Silja.Paymer@mvla.net Room: 611

Additional information:

Students should keep their textbook at home.

Students should organize their work in a 3 ring binder that is 1" or larger.

If a student is observed using a phone in class, they will be required to put it in their assigned pocket at the front of the room. If this will be a problem, the phone should be left in a location outside of the classroom.