

## AP PHYSICS C: MECHANICS DESCRIPTIVE GRADING CRITERIA

*“Whatever you do, do your work heartily, as for the Lord and not for people, knowing that it is from the Lord that you will receive the reward of the inheritance. It is the Lord Christ whom you serve.” Colossians 3:23-24*

AP Physics C: Mechanics is a calculus-based, college-level physics course. It covers kinematics; Newton’s laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; oscillations; and gravitation. The purpose of this course is to help students develop a deep understanding of the foundational principles that shape classical mechanics. By confronting complex physical situations or scenarios, the course is designed to enable students to develop the ability to reason about physical phenomena using important science practices, such as creating and analyzing representations of physical scenarios, designing experiments, analyzing data, and using mathematics to model and to solve problems.

The framework of the classroom in AP Physics C: Mechanics will be as follows:

- Approximately 1 day of in-class instruction on the more difficult calculus-based concepts of physics (since the foundational conceptual and algebra-based mathematical physics content has previously been taught in Physics Honors).
- Approximately 1-2 days in the physics laboratory designing and conducting inquiry-based laboratory investigations and making first-hand observations, data collection, analysis, and interpretation.
- Approximately 1-2 days in the physics classroom solving problems quantitatively and qualitatively while practicing reasoning skills and argumentation, the application of mathematical routines, and analyzing theoretical relationships.

Each week for homework, the AP Physics C: Mechanics student will be required to do a hand-full of problems from the book *5 Steps to a 5: 500 AP Physics C Questions to Know by Test Day*. Answers are provided in the book so students can check their understanding. Students will also take an assessment on AP Classroom of either multiple choice questions or a unit Progress Check Multiple Choice and Free Response. Multiple Choice questions can be submitted through AP Classroom, whereas the Free Response problems will be turned in showing all appropriate work, justifications, and explanations. As the second semester progresses closer to the AP Physics C: Mechanics Exam, weekly assessments may be in the form of complete AP Physics C: Mechanics Exams, both multiple choice and free response.

The weekly assessments on AP Classroom will be graded as follows:

<b>A Outstanding</b>	<b>57%</b>
<b>B Good</b>	<b>43%</b>
<b>C Satisfactory</b>	<b>34%</b>
<b>D Unsatisfactory</b>	<b>26%</b>
<b>F Failing</b>	<b>0%</b>