## AP Physics C: Mechanics 2023-2024

Revision 8/1/2024

# Instructor:

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#### **Textbooks:**

Raymond A. Serway and John W. Jewett, Jr. Physics for Scientists and Engineers, 9th edition

OpenStax University Physics Volume 1

#### About this course:

Any student who has completed a year of physics and one term of calculus or will be concurrently enrolled in calculus may register for this course.

Our goal in the AP Physics courses is to provide an excellent first-year college-level calculus-based physics education. Students coming out of the courses should have a strong conceptual understanding of physics and well-developed skills in performing and analyzing laboratory experiments. They should also be able to apply their understanding to approach and solve problems that are essentially new to them.

Lab work is integral to the understanding of the concepts in this course. At the end of the course, students will take the **AP Physics C: Mechanics Exam on May 14, 2025**, which will test their knowledge of both the concepts taught in the classroom and their use of the correct formulas.

## **Schoology**

This course is offered via the Schoology online learning platform.

# AP Classroom

Online resources provided by College Board for AP Physics C, including Unit Guides, Topic Questions, Personal Progress Checks, and more.

## AP Classroom Link

Join Code = 9J6ZP7

# **Pivot Interactives**

Pivot Interactives allows students to conduct online experimental design and analysis using video recordings. Students will use this site to submit graded assignments throughout the course.

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## Khan Academy

This site offers instructional videos and practice in partnership with AP Classroom.

Khan Academy Join Link Class code = R3D4FBG8

#### **Evaluation**

Students will receive grades on problem sets, quizzes, laboratory work, projects, and exams. Exams are typically worth 100 points and will consist of questions similar students will see on the AP Exam. Problem sets and quizzes will consist of problems from the textbook, supplements, online and web-based activities, and old AP Exams. Projects are long-term, and typically will involve groups of students developing a plan, collecting data and/or research, and presenting conclusions in a meaningful way. Laboratory work is student centered and inquiry based. Grades will be determined by taking the number of points a student has earned and dividing it by the total number of points for each category. Each category makes up a percentage of the student's quarter average. Categories include Tests (70%) and Work (30%).

Lab work is essential for understanding physics. Labs may take several in-class days to finish, and students may have to work outside of class as well. Every major unit will have an inquiry-based lab, and inquiry-based labs will make up no less than half of the laboratory work. Problem sets are integral to your success. If completed properly, they will enhance your understanding of the material and increase your success in physics. Problem sets vary in point value. Problem sets are determined by how completely and accurately you do the assignment. All answers must be written clearly and show applicable work. If you do not show the applicable work, you will not receive any credit - even if you have the correct final answer.

#### Policy for Late and Missing Assignments

- All missing grades receive a score of zero. When missing assignments are made up and graded, the score will be replaced with the make-up score. It is the student's responsibility to notify the instructor via email or Schoology messaging when a missing grade is submitted / completed. Make-up sessions for quizzes and tests should be arranged via email. Include the following information to request a make-up session. Requests should be sent to <u>pbrewer@mcpss.com</u>
  - 1. Name of course
  - 2. Name of assessment
  - 3. Documentation of excused absence
- Unexcused late assignments (*Minor and Major*) will receive a 50% deduction if they are turned in within 2 days from the assigned due date. All other unexcused late work receives a score of zero.
- Excuses (parent, doctor notes, etc.) for late assignments (*Minor and Major*) should be sent through a documented parent or guardian email account contact to pbrewer@mcpss.com. All excused late work is due within three days of the assigned due date for credit, excluding extensions for long-term absence from class. Student that do not make arrangements for makeup as specified will be ineligible for make-up opportunities in this class.

# Complete the Syllabus Contract below and submit a digital copy to Schoology. This document is required to earn grades in this course.

Printed Student Name:

I/we have read the above syllabus and understand the expectations of the class. A parent and I have signed this syllabus as a statement of accepting the challenges and responsibilities of this class in order to achieve my greatest academic potential.

Student signature:	Date:
Parent/Guardian signature:	Date: