HICKMAN HIGH SCHOOL

AP Physics 2: Algebra-Based

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Room 116

Science

Schoology Message

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Welcome, awesome scholars!

Advanced Physics courses at Hickman High School are vitally important in helping students experience the richness and excitement of knowing about and understanding the natural world. We'll use appropriate scientific processes and principles in making personal decisions, engage in public discourse and debate about matters of scientific and technological concern; and increase your economic productivity through the use of the knowledge, understanding, and skills of a scientifically literate person in your future career.

01 Course Description and Class Rules

AP Physics 2:Algebra-Based is a second-semester algebra-based college level course designed to provide advanced students with the conceptual framework and factual knowledge to solve algebra-based physics problems and laboratory investigations. Advanced algebra skills are needed to solve mathematical equations related to physics. The course will provide a solid foundation for students wishing to pursue future studies in medicine, science and engineering. Topics include fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. The course will prepare students for the AP Physics 2 exam and is NCAA Approved.

Rules:

- Be respectful of yourself, your teacher, your peers, and your school.
- Use electronic devices appropriately, respectfully, and responsibly.
- Be an active participant in your learning.

02 Units of Study

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
Electric Charges, Forces, and Fields	Electric Potential	Electric Circuits	Magnetic Fields and Electromagnetism	Thermodynamics	Geometric Optics	Waves, Sound, and Physical Optics	Modern Physics

04 Grades and Stuff

Your grade in this class depends on how much content you learn and how well you demonstrate an understanding of that knowledge. The chart below outlines what will count in the grade.

Grade Distribution: 100% Mastery Score

Quizzes	Tests	Labs	The Final	Other Assignments
These cover individual lessons and can be retakes as needed.	These cover several lessons and may cover content from previous units as well.	You will make corrections on lab reports until they meet AP standards	Is an opportunity to retake the semesters tests.	Will be expected of you and will help you learn but will be in the 0% Body of Evidece

A separate Workplace Readiness score will also be reported on progress reports and grade cards. This is a zero-weight score that will not impact grades directly. It is intended to show growth and consistency in life skills such as arriving prepared for class on time, cooperative and respectful interactions with peers and teachers, active participation in class, on-time completion of assignments, and appropriate technology use.

03 This is a College Classroom!

What makes it a College Classroom?
A college classroom is typically different from a high school classroom in several key ways, including the teaching style, expectations, depth of content, and academic grading policies. Here are some of the main differences:

Piece 1: Teaching Style

Many college courses make use of mulyiple teaching methods. This course does as well. While we will not rely solely on one teaching style, all content will be available through notes videos found in Schoology.

Critical Thinking

Covering content using multiple methods allows us to be thorough, making sure that we touch all of the topics covered on the AP Physics exam. It also gives students practice using a variety of skills including critical thinking and note-taking skills. Regardless of the method, it is certain that they require participation and interaction from the students so that they can get the most out of the learning experience.

Piece 2: Expectations

In a college class, a considerable amount of responsibility is passed on to the student. It is very likely that you are already experiencing this transition with time management and the need to balance your activities, school work, sleep, etc.

Self-Confidence

In this class, you will also need to do this to complete assignments and lab reports that do not have deadlines, being prepared for tests that do not have prepared study guides for you to complete, and advocating for yourself when you need help understanding concepts. This will build your self-confidence and leave you prepared for the responsibilities of a college student.

Piece 3: Depth of Content

An in-depth approach to course material contributes to a more enriching and transformative educational experience, equipping students with a strong intellectual foundation and a range of skills that extend beyond the classroom.

Problem-Solving Skills

Building on the foundational physics knowledge, we now get to reach farther, use our problem solving skills to make connections, and build your confidence in learning. This enhanced understanding will allow students to tackle real-world challenges and encourage curiosity that will prepare them for advanced study whether it is in physics or not.

Piece 4: Academic Grading Policies

Grades in college courses often rely heavily on fewer assignments and exams. There is often less emphasis on daily homework and more emphasis on comprehensive assessments like essays, research papers, and final exams.

Knowledge

While I won't be asking students to write any essays or research papers, we will be write lab reports in the style of lab experiment questions form the AP Physics C: Mechanics exam. These lab reports, along with unit tests will be the only things that count toward your grade. You will have the option to retake tests at the end of each semester as this is the best preparation for the exam.

05 What do I need for class??

Binder/Folder. A place to keep your papers is necessary to keep track of things. You will be provided with paper.

Writing Utensils We will be writing on paper every day!

School issued Laptop WITH CHARGER. It may be dead when you get to my class. You will need it EVERY DAY.

Graphing Calculator. You can check one out from the Media Center or purchase one. See AP Classroom for details on what kinds of calculators are OK.

06 Extra Help

In class There will be plenty of time for students to get help with what they need in class. We will go over how to get help in class during the first two weeks of school.

Individual Tutoring
You can schedule a time to work with me outside of class by sending me an email or message on Schoology.

WISE Lab
WISE Lab is a place that is available during study hall or advisory that may not be the most helpful for students in AP Physics, depending on what block a student has it. If this is not helpful, we'll have to rely on one of the other options.