

Physics and Honors Physics

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Content: In physics, we will discuss motion, forces, energy, work, light, waves, sound and electricity. We look to understand these topics from a conceptual standpoint as well as modeling using mathematics and technology. Physics will build more upon the conceptual portion of the course while honors physics will involve more mathematical analysis.

Standards/Instructional Strategies: Students will be expected to solve open-ended and non-routine problems on homework sets and during authentic assessments. Students will be expected to use the textbook as a resource and occasionally to learn new material independently through labs and other forms of inquiry. Students are expected to be self-motivated, taking responsibility for their own learning and seek help when needed. The teacher is available before and after school.

Resources :

Graphing Calculator TI-83 (at least)

Physics: Principles and Problems by Gencloe textbook

Academic/Behavioral Expectations:

Classroom Expectations:

Respect...
...school property
...others and their property
...the right of others to learn
...the teacher
...yourself

Additional guidelines:

1. Know the student handbook. If it is in there, it applies in here.
2. Take care of personal business between classes.
3. Be in your seat ready to work when the bell rings.

You are expected to participate in class activities in the following manner:

1. Attend class regularly

If you miss a class *for any reason* it is your responsibility to get your make-up assignment outside of class.

Assignments will be posted on the board or you can ask me or a classmate. If you know you will be absent, get your work before you leave. If you are gone on exam day, you will be expected to take the exam the day you return. If you miss the day *before* an announced exam, you will be expected to take the exam when you return.

Reminder: **make-up work is your responsibility.**

2. Be prepared for class

You need to be in your seat with materials when the bell rings. Failure to do so will result in a tardy. Refer to the student handbook regarding Senior High School Tardy Policy.

3. Contribute to class activities.

While working with groups or individually you need to stay on task. Any actions which are deemed disrespectful will result necessary discipline action. During class you will be asked to contribute to discussions, solve problems and be fully engaged in labs and demonstrations. I encourage on-topic questions and discussion. Please ask clarifying questions or follow-up questions as needed and when needed.

Grading Plan: Physics: Homework/Formative Assessments 15%, Labs 15%, Summative Assessments 70%

Your grade will be calculated using weighted points. Each unit covered will consist of practice problems, formative assessments, summative assessments, labs. There will be a cumulative final for all students, both semesters.

Practice Problems:

Assignments will be given periodically and need to be completed for class the next day. Diligent completion of homework is essential for success in this course. Since homework is primarily for practice, you will be given full credit for a good faith effort to complete all the problems. A good faith effort means you must do one of two things for each problem:

- Give a worked out solution (not just the answer). If the problem is odd numbered check your answer in the back of the text.
- If you can not solve the problem, you must provide a written statement of where you got stuck.

Practice problems points will be awarded as follows:

15: Completed the assignment with good faith effort

7: Half or less than half of the assignment/work was missing

0: No assignment or no work

Late practice problems can be accepted for half credit.

Formative Assessments:

Occasionally on any given day, a homework check will be given. The formative assessment will be used to see how accurately you are completing the practice problems.

The formative assessments will be worth 15 points

If you perform better on the summative assessment than you do on formative assessment for the unit, the quiz score will be replaced with the improved percentage. Each formative assessment will be assigned as a homework score in the gradebook.

Summative Assessments:

Summative assessments will be given at the end of each unit. Summative assessments will be announced in advance. Any cheating will result in a zero as well as a discipline referral. If you miss an exam, a grade of zero will be placed in the gradebook until it is taken care of. You have until review day of the next unit to complete the missing exam outside of regular class time or the zero will stay in the gradebook.

Summative assessments are worth 100 points

Labs:

Requirements for labs will vary depending on the unit. Some labs will be graded on completion, some on accuracy. Labs will be used to investigate, demonstrate and assess knowledge. Expectations and grades will be clearly laid out before the lab begins. If you are absent for a lab, you will need to make up all/parts of the lab before the unit exam. We will discuss those situations as they arise.

For non-assessment labs, a lab score of 15 will be calculated.

Scale: Grades will be determined using:

A	93% and above A	C	73 - 76%
A-	90 - 92%	C-	70 - 72%
B+	87 - 89%	D+	67 - 69%
B	83 - 86%	D	63 - 66%
B-	80 - 82%	D-	60-62%
C+	77 - 79%	F	59% or less

Updates: Changes to this plan will occur if it is in the best interest of a student or a group of students.