

# Physics (Honors)

## Highland Academy, 2019-2020

### Purpose

Physics is about all the stuff that is, and, about how this stuff interacts through the exchange of energy. The purpose of this course is to give the learner an understanding of our universe and how it works.

### General Course Topics

Measurement and Uncertainty  
Motion and Energy  
Fluids and Solids  
Heat and Thermodynamics  
Waves and Sound  
Light and Optics  
Electricity and Magnetism  
Atomic and Nuclear

### Assessment

All classwork will be viewed in the light of the teacher's expectations, which will be clearly communicated for each assignment. Exceptional scores require exceptional performance.

This is how much each type of learning assessment counts:

- Tests: 30%--given after two or three related chapters. They will consist mainly of true/false questions, along with problems.
- Labs: 20%--occurring every week or two. Lab investigations will focus on applying what's been studied in class. Labs will involve a formal, 5-part lab report, containing: statement of purpose, description of measuring methods, data collected, calculations done on data and summary/interpretation of the calculations' meaning. One week will be given to do a formal lab report from when the data are collected.
- Quizzes: 30%--given at any time over whatever we've been doing recently. Quizzes will occur a time or two for every chapter. They will usually consist of working a problem or two.
- Homework: 20%--usually given from the problem sets in the textbook.

### Assessing Student Work

Unless another scoring rubric is specified, the following will be used to assess student work:

- Quizzes and Homework with 10 or more questions: scores will be determined by taking the percent correct
- Tests: scores will be determined by taking the percent correct and adding to this an adjustment, if necessary, based on the performance of the entire class on a given test. The adjustment will be an offset sufficient for all students whose percent is 1 standard deviation above the mean (or greater) to receive a score in the coveted 90-100 range. This same adjustment will be applied to all students' percents. The instructor reserves the right to limit the adjustment to 15 points added to the students' percents. For classes involving small numbers of students, this offset might be a judgment call by the instructor, based upon previous scores of larger classes over similar material.
- Labs, Quizzes and Homework with less than 10 items: scores will represent a percent of the teacher's expectations. Scores will be separated by increments of 5 points: 5 points off for each minor mistake; 10 points off for each major mistake.

100% fully met or exceeded teacher's expectations

95% a minor mistake

90% 2 minor mistakes or a single significant mistake, and so on

0% assignment not turned in or made up

Letter grades will be issued according to the following scale:

A: 93-100	A-: 90-92	
B+: 87-89	B: 83-86	B-: 80-82
C+: 77-79	C: 73-76	C-: 70-72
D+: 67-69	D: 63-66	D-: 60-62
F: < 60		

### Late Work

Tests, Quizzes, Labs, and Homework are to be made up as soon as possible after returning from an absence. The general rule will be for the assessment to be completed within the number of days missed, from the time of returning to class. (Example: Johnny is out of class on Thursday and Friday, missing an assessment. Johnny returns to class on Monday. Johnny will have two days, for the two days missed, to make up the assessment for full credit. Johnny will need to complete the assessment by Wednesday, or receive 10 points out of the 100% trimmed off of his score for each day after Wednesday that he waits. After 10 school days from this deadline, no credit will be given for completing the assessment.)

For late work that is submitted, unrelated to an absence, 10 points out of the 100% will be trimmed off of the score for each day late after the due date.

Exceptions might be made to this late work policy for catastrophic illnesses and for other extreme circumstances. These circumstances will be determined by the instructor and principal. See page 33 of the *Highland Academy Handbook* for further information.

### Behavioral Expectations

- interact orderly and courteously; speak one at a time.
- treat the building and equipment with care.
- come to class with what you need -- pencil, notebook, textbook.
- absences and tardies will be handled according to the school policy.
- no food, drink or gum.
- visits to the restroom will be allowed if they don't become excessive. What constitutes excessive will be a judgment call of the instructor. (These visits are for emergencies.)
- it is THE STUDENT'S RESPONSIBILITY to find out what was missed when absent by looking at the assignment web page, by asking the teacher or by asking a classmate.
- class time is to be used for working on Physics tasks.