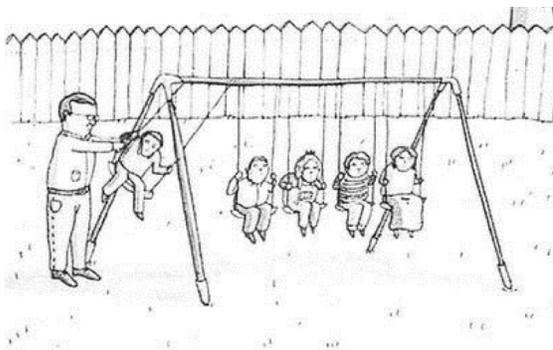


Honors Physics Course Syllabus

Instructor: Nathan Belcher
School Phone: 843.881.8200 x27383
Office Hours: TR 7:45-8:15

Email: nathan_belcher@charleston.k12.sc.us
Website: nathantbelcher.com/honors-physics



Why science teachers are not asked to monitor recess.

Course Description

This course is an overview of the major topics of physics. We will answer questions such as:

how do you calculate the stopping distance of a car?

how does a double rainbow form?

how is electricity generated in power plants, solar cells, and wind turbines?

what orbital properties determine the speed and period of a planet?

which muscle group is the most powerful?

Employing laboratory experiments, projects, and mathematical calculations, students will discover ways to describe the world and enrich their thinking and analyzing capacities. The course is based on the physics standards set forth by the South Carolina Department of Education and seeks to develop problem-solving skills that will help students in college and beyond.

Course Outline

3 rd Quarter Topics		4 th Quarter Topics
Kinematics (motion)		Circular Motion and Gravitation
Newton's Laws, Forces, and Friction		Electric Forces and Fields
Work, Power, and Energy		Circuits and Magnetism
Momentum		Heat Transfer
		Waves, Sound, Light and Optics

Grading

Only seniors with a grade of a 90 or above will be able to exempt the final exam.

The South Carolina Department of Education has shifted to a 10-point grading scale. An "A" is 90-100, a "B" is 80-89, a "C" is 70-79, and a "D" is 60-69.

The physics teachers are implementing components of Standards Based Grading in accordance with Wando High School's Personalized Learning efforts. Standards-based grading is defined as "measuring students' proficiency on well-defined course objectives." What that means to students is the following:

- Students will be assessed on a proficiency scale of 1-4 on each standard. Achieving a score of "3" for an objective indicates that a student is proficient in that standard. Level 4 work is considered mastery.
- Proficiency on quizzes is achieved by scoring 80% or above, and students may perform corrections to regain half the missed points. Scoring below 80% requires students to study and re-take the quiz to achieve proficiency. Students may perform corrections on the retake, and the maximum score on a retake is a 90%.
- Proficiency on tests is achieved by scoring 70% or above, and students may perform corrections to regain half the missed points. Scoring below 70% requires students to study and re-take the test to achieve proficiency. Students may perform corrections on the retake, and the maximum score on a retake is a 90%.
- The highest grade that students can earn for achieving proficiency in all required standards is a 92. In order to earn a grade higher than a 92, students must do Level 4 work. In any course, it is reasonable to expect students to exceed proficiency, and this concept is reflected in the gradebook setup.
- Level 4 work includes the following: Challenge assignments on the required standards, exploring higher-level standards, independent research, and other work approved by the teacher.

We ask for your flexibility and feedback as we try something new that we think will benefit students greatly, as each person will be able to learn at the pace that suits him or her best.

Gradebook Set-Up

First Quarter Grade	47% Major Assessments, 30% Quizzes/Labs, 15% Daily Work, 8% Level 4 Work
Second Quarter Grade	47% Major Assessments, 30% Quizzes/Labs, 15% Daily Work, 8% Level 4 Work
Semester Grade	40% First Quarter, 40% Second Quarter, 20% Final Exam.

Expectations

1. *Be prepared.* Bring your binder and calculator.
2. *Be respectful.* Listen while others are talking, be careful with school equipment, and help to keep our classroom looking as nice and new as it did on the first day of school.
3. *Be productive.* Be engaged and on task during our time together. Treat time like treasure. Students will be allowed a limited number of bathroom passes during the quarter.

Students are expected to maintain high academic standards. Copying the work of another student on ANY assignment or talking during quizzes and tests will result in grade penalties, including earning a zero.

Signatures

I understand that the grading scheme for Honors Physics incorporates aspects of standards-based grading. As such, the maximum grade a student can earn for meeting the standards is a 92. Exceeding the standards is required to earn a grade higher than a 92.

Student: _____

Parent/Guardian: _____