

Honors Physics: 2016-2017

Mrs. Whittaker

Turner Ashby: Department of Science

Email Address: lwhittaker@rockingham.k12.va.us

Class Website: www.lwhittakertahs.weebly.com

Expectations and Guidelines

Goals of the Class:

My goals for this class are to expose students to the beauty, simplicity, and power of physics as it explains the universe in which we live. Students will see the application of physics in many other aspects of life. In addition, this class aims to prepare each student for the transition to higher education or the work force by emphasizing problem solving, critical thinking, and verbal and written expression.

General Expectations:

Be Respectful – Be respectful and courteous. I expect behavior becoming of upperclassmen during class. This includes a level of respect for the classroom and equipment used.

Be There – Be in class on time. But in addition, be mentally prepared to be in class. Tardies will be counted according to Turner Ashby's school policy.

Be Prepared – Be ready with homework and assignments. Be good stewards of your time outside of the classroom.

Be Curious – Be ready to learn something! Allow yourself the freedom to be curious and ask questions!

Grades:

Grading – Total points system on a 10-point scale.

Homework

- Homework is graded based on both effort and accuracy.

Lab Reports – More information below

Quarter Projects – More information below

Tests – Tests will be given at the end of every chapter.

Exams – There will be a mid-term and final given in this course counting as %14 of a students' semester average. All students will take a mid-term, but students who maintain an A average or meet attendance requirements may exempt the final exam.

Turning-in Assignments – Assignments will be collected either as hard copies or electronically on a case-by-case basis. Please listen in class for instructions.

Virginia SOL Standards for Physics:

Can be found on the Virginia Department of Education's website:

http://www.doe.virginia.gov/testing/sol/standards_docs/science/

Teaching Methods:

Notes – Following and copying notes and examples will aid in your understanding of physics.

Style of Assignments – Homework, practice problems, and tests are *applications* of things taught. Please do not expect to be given the same problems but with different numbers.

Homework – Homework may be done collaboratively, but should show each person's individual work and effort.

Mistakes - As best as possible, I will follow your thought-process through problems to assign partial credit. If you make a mathematical mistake, but carry the mistake through, I will also award partial credit. However, this is only possible if you show your work.

Falling Grades – If I see a decline in the quality of work over a two/three week period, you will be asked to meet with me to discuss options or help. I will talk with you first, but I will contact your parents if necessary.

Physics Guidelines:

Don't Cram - Please don't wait until the last minute to study. Physics is easier to digest in small doses.

Read – Read your textbook. Even though material will be covered in class, reading the text can help solidify ideas and concepts.

Practice – Like playing a sport or an instrument, practice will help. Work through practice and example problems on your own as a way to gain confidence.

Extra Help/Tutoring – I am available for tutoring upon request. Please email or talk to me to set up an appointment.

Extra Credit – Extra credit is given along the way, normally at the end of each chapter.

Make-Up Work:

Sick - Following Turner Ashby's guidelines, if you are absent, you have one odd/even day for each day missed to make up material covered in class.

- You are responsible for catching up on examples and notes taken in class.
- You **MUST** make up any lab that is missed.
- **Website** – Homework assignments as well as material covered in class will be posted each day to my class website. Use this resource first to get caught up.

Athletics/Extra-curriculars - If you miss class due to an athletic or extracurricular event – let me know in advance. If work is due that day, make sure you get it to me before you leave.

Late Work – Work that is not ready to be turned in at the time I collect it is considered late. Late work receives a 10% deduction *per day*.

****Anything more than one week past the due date will not be accepted without making prior arrangements.**

Class Electronics Policy:

Laptops – Computers may be used but should be used for educational purposes.

Cell Phones in Class – I do NOT allow cell phones to be used in class, unless for a specific educational purpose with my permission. Cell phones should be off and put away when you enter the classroom.

Violations

- 1st Offense: A verbal warning
- 2nd Offense: Phone held until the end of class.
- 3rd Offense: Phone given to the administrators.

Labs and Lab Reports: More information about labs to follow

Labs – There will be at least 1-2 labs per physics topic. Each lab will require either a lab report or a lab reflection.

Lab Reports – Labs will be completed with partners or small groups, but lab reports are to be done individually. *The only thing that should be identical amongst partners is the raw data.

Missed Labs – If you miss a lab, you must make up the work either during a study hall, before, or after school. You may not copy data from a friend. Arrangements need to be made the first day you are back. Labs must be made up within a week upon your return to school.

Lab Equipment and Etiquette – Care needs to be taken with all lab equipment. Follow all instructions and make sure your equipment is returned properly. No independent experiments are allowed without teacher permission and supervision.

Quarter Projects: *More information to follow

1st and 2nd Quarter: Physics Presentations

Each Thursday or Friday, students will present a topic of his or her choice related to physics. This project will be comprised of a 10-minute presentation to the class using Powerpoints, Prezi, videos, experiments, etc... followed by a question and answer session with the class.

3rd Quarter: Physics Research Project Related to Current Events in Particle Physics

This project will be made up of three components: article reviews, a research paper, and classroom debate based on current discoveries and research in the realm of particle physics and gravitational waves.

4th Quarter: TBA

Signature Agreement:

By signing this, you acknowledge that you have thoroughly read the class syllabus as well as the Honor Code and agree to abide by the class policies and rules presented.

Teacher Signature: _____

Student Signature: _____

Honors Physics: Mrs. Whittaker

Signature Agreement:

By signing this, you acknowledge that you have thoroughly read the class syllabus as well as the Honor Code and agree to abide by the class policies and rules presented.

Teacher Signature: _____

Student Name (printed): _____

Student Signature: _____

Parent Signature: _____