

AP Physics 1: 2016-2017

Mrs. Whittaker

Turner Ashby: Department of Science

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Expectations and Guidelines

Goals of the Class:

The course is designed to allow students to see the beauty and elegance of the universe through the eyes of physics and the language of mathematics. In addition, we will be preparing for the rigors of the Advance Placement test in May and/or higher level physics courses taken at the collegiate level beyond this year.

Course Expectations:

This is an Advanced Placement level class designed to give students an experience similar to a college course. In light of that, expect the class to move quickly through the required material. Students must take responsibility for their own work by not only completing required assignments but also recognizing when extra help may be needed. My goal is to do everything possible to prepare students for the AP test in May. However, ultimately, students' success is determined by their own attitude, commitment, and effort.

Course Text:

Giancoli, D. (2005). Physics: Principles with Applications, 6th revised edition Upper Saddle River, NJ: Prentice Hall. ISBN 0-13-060620-0

Units of Study:

Kinematics: 1-dimensional and 2-dimensional motion (4 ½ weeks)

Dynamics: Newton's Laws of Motion (3 ½ weeks)

Uniform Circular Motion and Universal Gravitation (3 weeks)

Work, Power, and Energy (2 ½ weeks)

Impulse and Momentum: Conservation of momentum and collisions (2 ½ weeks)

Rotational Motion: Torque, rotational kinematics, dynamics, and energy, and conservation of angular momentum (3 weeks)

Simple Harmonic Motion: Simple pendulums and spring-mass systems (2 ½ weeks)

Electrostatics: Electric charge and electric forces (1 ½ weeks)

DC Circuits (3 ½ weeks)

Mechanical Waves and Sound (2 weeks)

**Pacing guide available on class website*

Grading and Evaluation:

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

Homework –

- Reading will be assigned along with mandatory chapter outlines.
- Practice problems will be given for additional practice after most classes. Practice can be done collaboratively, but should be attempted individually.

Quizzes and Tests –

- Short quizzes will be given on Fridays with a handful of exceptions. Quizzes will center around material covered most recently. However, older material is still fair game.
- Tests will be given at the end of each quarter as a cumulative review of the material covered during that nine weeks.
 - Tests and quizzes will be timed to mimic the necessary pacing of the AP test.

Final Exam – The AP test itself will count as the final. For anyone not taking the AP exam, an exam will be given during class on the day of the AP test. Student who end the course with an A average for the year may decide not to count the score of the exam in their final average.

Laboratory Work:

Labs – Labs will be done either as Guided Inquiry (GI), a procedure will be given, or Open Inquiry (OI), the procedure will be created as a part of the lab.

Lab Notebooks – Students will keep a lab notebook during the year.

Lab Materials – Many colleges will ask to see lab work and a lab notebook in order to give credit for the lab portion of the course. Please keep graded copies of any formal lab reports as well as your lab notebook through the year.

Time – Due to the fast-paced nature of the course, some labs will need to be conducted after school. Please give yourself one to two free afternoons during which labs can be completed.

Projects:

Both collaborative and independent projects will be assigned following the AP test in May.

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.

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 to my class website. Use this resource first to get caught up.

Athletics/Extracurriculars - 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.**

Inclement Weather:

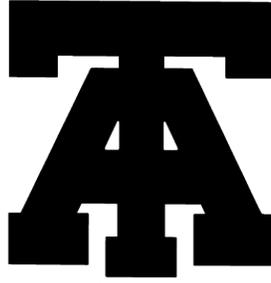
In the event of a school cancellation due to inclement weather, student should check their email for any material or work to be completed during the day or days off. Materials will also be added to Google drive or any other medium agreed upon by the class for ease of use.

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: Laura Whittaker

Student Signature: _____



Turner Ashby High School Honor Code

Wherever I am, my honor lets others know that I am truthful, reliable, and moral. My actions are the foundation of my honor, and thus my character. To be honorable, I must always be honest, trustworthy, responsible, and respectful. I must always strive to uphold my honor.

Honor Expectations

Upon my honor,

- I will do my own individual work on each assignment – class work, homework, quiz, test, or other assessment (unless the teacher states that I may collaborate with others).
- I will not share information with other students regarding material, questions, or answers on any quiz, test, or assessment (unless the teacher states that I may collaborate with others).
- I will not give or receive information on any work specifically announced as pledged. (On my honor, I have neither given nor received information on this assignment.)
- I will not plagiarize by copying or claiming someone else's work as my own, including the undocumented use of print or Internet sources.
- I will respect the property of the school and others by not taking or defacing such property.
- I will show respect for others and will treat with dignity those who are different from me.

Consequences for Violating the Honor Code

- ▶ Required consequences of any Honor Code violation are (1) submission of the report form to the appropriate administrator and (2) parent notification.
- ▶ Academic violations should earn academic consequences.
- ▶ Consequences should follow this flow chart for agreed upon violations involving cheating. Offenses are handled on a per year basis without carryover; however, report forms remain on file available to the administrator.
- ▶ In situations where the teacher and student do not agree that a violation has occurred, the teacher refers the situation to an administrator for investigation and intervention. If the administrator finds a violation has occurred, the consequence should follow the flow chart.

1st Offense

- Student gets a zero or opportunity to redo assignment and average grade with the zero.
- Teacher discusses with parents via a phone call home with a copy of the report form to follow.
- Teacher files a copy of the report form with appropriate administrator.
- Administrator assigns one day of Saturday School.

2nd Offense

- Student gets a zero.
- Student gets no opportunity to redo assignment.
- Teacher discusses with parents via a phone call home with a copy of the report form to follow.
- Teacher files a copy of the report form with appropriate administrator.
- Administrator assigns one (1) day OSS (may show up on college applications).

3rd Offense

- Student gets a zero.
- Students get no opportunity to redo assignment.
- Teacher discusses with parents via a phone call home with a copy of the report form to follow.
- Teacher files a copy of the report form with appropriate administrator.
- Administrator assigns three (3) day OSS (may show up on college applications).

4th Offense

- Student gets a zero.
- Students get no opportunity to redo assignment.
- Teacher discusses with parents via a phone call home with a copy of the report form to follow.
- Teacher files a copy of the report form with appropriate administrator.
- Administrator assigns five (5) day OSS (may show up on college applications).
- Referral to student conduct committee

