FORSYTH COUNTY COURSE SYLLABUS 2018-2019

COURSE TITLE: AP Physics C

TEACHER NAME: Kent Ames E-MAIL: kames33@forsyth.k12.ga.us

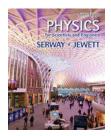
<u>ROOM:</u> West Hall Room 367 PHONE: 770-781-2264 EXT: 100367

Course Description: AP Physics C: Mechanics is a challenging and rigorous year-long, 2nd-year course that uses a mathematical approach to an in-depth study of energy and matter in motion. All students will be prepared to take the Advanced Placement Physics C exam for Mechanics upon completion of this course. AP Physics C is designed to provide a comprehensive first-year calculus-based college-level physics experience. Emphasis is placed equally on application, understanding of the concepts and preparation for the AP Physics C exam.

This advanced physics course is designed to provide the individual opportunities to experience science as a discipline and method of investigation through a combination of study, discussion, problem solving, and laboratory observation. By the end of the course you will be able to demonstrate skills necessary to recognize problems, gather quantitative data, efficiently solve problems and explain concepts, and communicate your results and solutions. Open-ended questions are stressed in order to assess students' understanding of physical concepts, and the use of mathematics to illuminate the physical situation rather than to show manipulative abilities.

Standards: The Georgia state standards for physics can be found at this website: www.georgiastandards.org. The College Board standards can be found at The College Board

Course Text:



Physics for Scientists and Engineers (AP® Edition)
9th Edition
Raymond A. Serway: John W.

Raymond A. Serway; John W. Available through WebAssign

Supplementary resources: Physics for Scientists and Engineers 6th ed.;

Tipler, Paul A., Mosca, Gene Classroom set

Required Assignments:

- Summative Assessments (75% of semester average)
 - o Final (2.0)
 - o Major Tests (Unit, Midterm)
 - o Summative (Inclass) Quizzes (0.25)
 - o Lab Reports (0.25)

- Formative Assessments (25% of semester average)
 - Homework
 - Class work
 - o Formative (WebAssign) Quizzes (2.0)
 - Lab Participation

Laboratory Work: There will be a laboratory assignment nearly every week during the 90-minute block class. You will work with your lab partners during the class to collect and evaluate the data required for completing the lab. Your lab data, observations and evaluations will then be utilized to create a lab report. Some reports will be group efforts and some will be individual efforts. Most labs will be due the next week after the experiment was completed in class.

Electronic Assignments on ItsLearning: There will be homework and quizzes administered through the school's secure online itsLearning platform and WebAssign. These will often be timed assignments requiring access to a home internet connection and computer. Students without these should notify Mr. Ames so other arrangements can be made.

Tutoring: I am usually available from 7:45am - 8:15am M-F, and 3:45pm - 4:30 pm M-Th. You may also arrange to see me during Instructional Focus.

Supplies needed for class Pencils, pen, graph-lined Spiral notebooks, graphing calculator, USB flash drive, ruler, and BYOT (Laptop, I-pad, Tablet or Smart Phone).

In order to use our school funds for lab essential lab equipment, I ask each student to provide one of the following: *Blue Painter's Tape or Duct tape, Tissues, or large Dry Erase Markers.*

Make-up Work: Make-up work is work assigned in class while you were absent, not work assigned prior to that period nor assignments already posted on the itsLearning Planner and thus available to the student. Students have five (5) school days upon returning to school to complete make-up work. The teacher has the discretion to grant more time base on extenuating circumstances.

There will be no late Formative work accepted. Late Lab reports (Summative) will be assessed based on a 5 point reduction in the maximum possible score for each day late.

Grading Policy:

A = 90 - 100 B = 80 - 89C = 70 - 79

C = 70 - 79

Failing = Below 70

Summative grades are assignments/assessments such as unit tests, summative quizzes, and end of semester lab binder checks, projects, midterms and finals which may integrate multiple standards. These grades reflect student mastery of standards after the learning activity is completed and count as 75% of each semester average.

Formative grades are assignments such as homework, class work, formative quizzes, drafts or portions of essays, project checkpoints and presentations. They provide practice while learning. These assignments, observations, and conversations are used to inform both the teacher and student about the learning process and lead to potential success on summative assessments. They count as 25% of each semester average.

Work Habits are behaviors that have the potential to increase academic achievement, promote lifelong learning, and foster personal accountability.

High School Work Habit Categories and Scoring 1: Does not meet 2: Meets 3: Exceeds

Responsibility (RE): The student adapts to classroom practices.

Participation (PA): The student pursues learning through active involvement.

Assignment Completion (AC): The student completes work by the designated time/date and according to directions.

Interpersonal Skills (IS): The student interacts with others to create a positive learning environment.