

OnRamps Physics 302K

Website: http://msquacksphysics.weebly.com/ Phone: 841-1931

Tutorials: Tuesday 4:30 – 5:00 & Wednesday during Lunch **Room:** 161

Course Objectives: One objective of this course is to provide you with an overview of the major developments in historic and contemporary physics. These developments were the result of scientific investigations performed by people just like the students seeking to make sense of the physical world. Thus, a second objective of this course is to develop your abilities to collect and analyze data, and to make reasonable and defendable scientific explanations based on data.

Pre-Requisites: Completion of or co-enrollment in Algebra II.

Supplies: For class, you must ALWAYS bring the following materials:

One-Inch Binder with Pockets

- Pencils
- Scientific Calculator
- Chromebook with Charger

Also, please provide ONE of the following consumables:

- 1 Pack of Dry Erase Markers, OR
- 2 Boxes of Tissues, OR
- 1 Ream of Copier Paper, OR
- 2 D-Cell Batteries

Class Expectations:

SHOW RESPECT - You are expected to treat each other, school property, the teacher, and yourselves with respect. Out of respect for others, there should be *no talking nor texting* when others are talking; no profanity; no abuse of equipment/materials; and, no horseplay.

BE PREPARED - Most planned classroom activities require the use of notebooks, calculators, and writing implements. You are expected to come to class on time with the appropriate materials and prepared to work on Physics.

COLLABORATE - Sharing ideas and information is important to learning science in the classroom. However, *do your own work*. Copying answers from someone else's homework/lab is *never okay*.

ASK QUESTIONS - Questions are the essence of science. It is *your responsibility* to monitor your own understanding. If you don't understand the material, ask questions.

Policies and Procedures:

Calendar: A calendar of class activities and homework is available on the Pre-AP Physics page on Ms. Q's website. Please refer to this calendar as needed.

Getting Down to Business: You should check for a posted assignment once you have entered the classroom. If an assignment is posted, you are expected to begin the assignment immediately.

Communication: If you have questions about your grades, attendance, or other issues please complete the form in the Admin Binder on Ms. Q's desk so that the issue is documented and may be addressed quickly.

Turning in Work: Unless otherwise stated, assignments must be placed in the In Box at the beginning of class on the day they are due. Assignments not in the In Box once attendance has been taken will be considered late.

Late Work: As a penalty for lateness, 10% of the assignment grade will be deducted for each DAY (not block) an assignment is late, excluding weekends. If an assignment is five or more days late, the maximum possible grade for the assignment is a 50%.

Tardies: We will adhere to the Austin HS Tardy Policy detailed on the tardy log sheet; if you are tardy to class, please sign in on the tardy log.

Absences: It is *your responsibility* to find out what assignments you missed during an absence. In general, you may be given two days to complete classwork missed during an absence for every class missed.

Missed Exams: In the case where you miss ONLY the day of the exam, it is expected that you will complete the exam immediately upon returning to class. Otherwise, you must make arrangements with Ms. Q to complete the exam upon your return.

Missed Labs: It is *your responsibility* to make up any missed laboratory activity within **ONE WEEK** of the activity. If you do NOT complete the work within this time, you will receive a zero for the lab. It is *your responsibility* to make arrangements with the Ms. Q to complete lab work.

Academic Dishonesty: If you are caught cheating on an assignment, you will receive a zero for that grade, and forfeit the opportunity to redo the assignment. Please consult the Academic Dishonesty Policy for further clarifications. Cheating makes teachers sad \otimes .



Cell Phone Policy: Cell phones will be turned off and placed in the cell phone caddy at the beginning of each class, before the bell rings, and may be retrieved at the end of class, once the teacher releases you. Any cell phone found not stowed in the caddy may be collected and turned in to the office.

Grading:

The six-weeks grades will be weighted as follows:

50 % Exams and Projects

30 % Daily Work and Homework and Labs

20 % Skills Checks

More Information Related to Grades:

Test Grades: If a student receives a failing grade on a test, the student may choose to come in during tutorials and complete test corrections for Prior to retesting, students MUST come in during designated times to complete corrections and/or remedial work. Since this is our first year offering OnRamps Physics, this policy may change to accommodate the needs of students.

Semester Exam Waiver: We will be following the AHS Semester Exam Waiver policy. Additional information will be provided later.

Problem Solving Procedures: No Work, No Units, No Credit, No Kidding!!!! Don't find out the hard way. You will NEVER win this argument. Many have tried, all have failed. To receive full credit, in ABSOLUTELY ALL problems in daily work and on exams (except multiple choice), you should use the following problem solving format: (1) Write out given information including units; (2) Write out the unknown(s); (3) Write the general equation(s) you are using; (4) Solve the equation(s) for the unknown(s) in terms of the variables... we'll call this equation the working equation. (5) Plug the given information into the equation, and solve. (6) Check the dimensions of the answer to make certain they are correct and circle the answer to identify it.

Formal and Informal Lab Reporting: Guidelines for lab reporting will be provided separately.

Success In Physics Will Most Assuredly Be Yours If You Follow This Advice:

ATTEND CLASS. Most of the concepts in Physics build upon each other. Missing class not only means that you miss material covered during your absence(s), but also that when you do return to class, you may have difficulty understanding new material based on material you missed.

THINK, THINK AGAIN, and then THINK AGAIN. Before turning to someone else for help, see if you can figure it out for yourself. Often, the best learning is done when you wrestle with a tough concept. No one, including me, can do it for you, AND I am less interested in helping you if you cannot provide evidence that you have seriously attempted to help yourself first. One of our shared goals is to make sure that you all become independent thinkers and problem solvers.

TAKE GOOD NOTES. It is important that you take notes in and out of class. Sometimes, the material I cover in class is NOT covered in the resources I provide. Look over your notes after class, and make sure they are complete and make sense to you.

DO YOUR OWN WORK! DO YOUR OWN WORK! DO YOUR OWN WORK! I cannot stress enough the importance of doing your own work. It is nothing short of **essential** to your understanding the subtleties of the material. If you are having trouble with classwork, you will no doubt have trouble with the quizzes and tests. When you need help, don't hesitate to come get help *before* the assignment is due. It is only when you attempt the work ON YOUR OWN that you find out what you don't understand.

STUDY! Do you need a paradigm shift in your thinking on smarts (See the questionnaire)? You may think that Jimmy and Janie Smartypants don't have to study... that they always get A's in Physics because they are "naturally smart". As with all things, there are some folks who don't have to work as hard at Physics as others. However, many students really need to work to keep on top of the material.

What should you study? Study your notes, homework problems, the textbook, and any other materials we cover in class. Make sure you are familiar with the equations and variables needed to solve problems. Also, rework homework problems, particularly if you had difficulty with them the first time around... they do get easier with practice.

I strongly suggest you don't resort to "cramming" for a Physics test. Your life may be much simpler if you spend the time we have together in class trying to understand the material... if you pay attention and do your own work, you'll probably find that all you need to study for one of my tests is a pleasant, painless review.

KEEP IT IN PERSPECTIVE. I realize that you don't eat, sleep and breathe Physics. If you are having difficulty keeping up, please come talk to me, and we can discuss your concerns. Physics should never be a source of sadness or frustration for you.

"Education is the most powerful weapon which you can use to change the world."