

# Physics 1

2015 - 2016

## Welcome

Welcome to Physics 1. I hope you find this year challenging and exciting. **Physics is a branch of science governing the interaction of matter and energy.** We will learn about mechanical and electromagnetic interactions, waves and optics. This course is designed to be an introductory, college prep overview of Physics. Together, we will raise questions and search for solutions that are explained by physical laws and theories.

## Grading

Grade will be a total accumulation of point from tests, (approximately every three weeks) quizzes, labs and homework.

- **Lab activities:** Depending on the topic, laboratory experiences will vary from simple data collection and analyzation to full write-ups. Points will vary accordingly based on complexity and length of lab. Labs are to be written in the Quad Ruled Composition Book except when told to do a full lab report
- **Homework:** Many will be instructor written problem sets covering class work.
- **Quizzes:** Given, announced and unannounced. Quizzes will cover material being immediately covered
- **Tests:** All tests will be announced in advance. Tests cover everything taught in the course until that time. There will be an opportunity for test correction after the test. A student may earn **up to 50%** of the points back for writing a correct version of the missed problem. More details will come on this after the first test.  
**LEARN FROM YOUR MISTAKES! DO NOT DO IT JUST FOR THE POINTS**  
Tests will never leave my room
- **Participation:** This can be hard for quiet people but I will try to make it comfortable for everyone. This be 7% of the grade.
- **Cheating:** Cheating will result in a zero for that assignment, test or quiz and sent to the administration for further review.

Basically: a point is a point is a point. Nothing is weighted.

## Grading Scale

100 – 90	A
89 – 80	B
79 – 70	C
69 – 60	D
59 – 0	E

This is it. DO NOT count on any other curve!

For those who are close (ex. 89.4%) and have done everything possible including test corrections, some extra credit will be assigned during the semester; **NEVER at the end of the quarter!**

## Materials for Class

3 - ring binder with dividers for topics

pencil

Protractor

scientific calculator

ruler

**The world's easiest points  
ever for getting this material  
by Mon Sept 14.**



## **Class Procedure and Policies**

This is a college prep class in more ways than one. The content area is important for everyone attending college, in a scientific field or not. But just as importantly, you are the only person responsible for your work in this class. I will not be looking over your shoulder making sure you turn in assignments. If you miss a class, it will be your responsibility to make sure you get the notes and assignments from that day.

Making up work that you missed due to an excused absence is your responsibility. If you miss a lab, test or quiz, you have one week from when we did that assignment to make it up. If you do not make it up within that one week, I will record a zero for that assignment. The only time to make up assignments is before or after school by appointment. No makeup assignments will be done at lunch or during a class period. Don't even ask.

Most of the knowledge will be learned by you through labs, activities, discussions and whiteboards, and not through notes. This is how science works. This can make it very difficult for you to learn everything you miss when you are absent. You can catch up but it is more than just getting the notes and worksheets from friends. I understand emergencies do occur but I hope you think carefully before missing class.

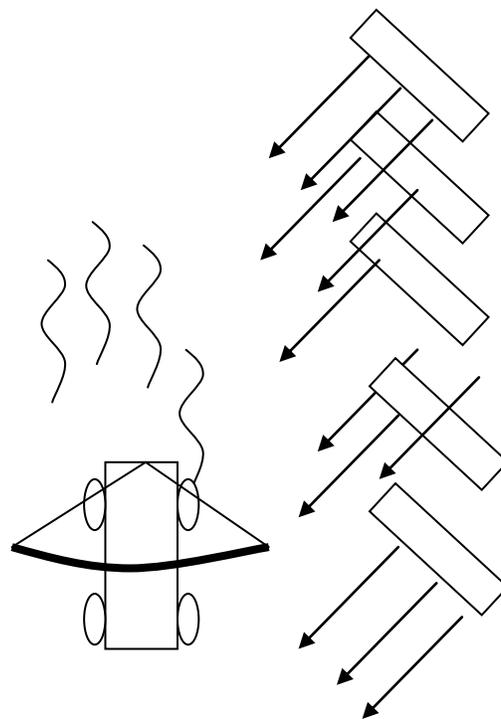
I am available for help almost any day before and after school and even lunches on most days, no appointment necessary. You are welcomed and encouraged to come see me to talk about how you are doing or ask specific questions. Your progress in this course is your responsibility, so you will need to be aware of your understanding and recognize when you might need extra help.

I will remind you that I have 125 students. If 2-3 students come in after school and I give each student 10 minutes, you may be waiting a while. Another great alternative, and one that helps most college students, is form a study group. This way you will hear the same material from a different person and you will use the collective mind to come to solutions that may take you longer to reach alone. If you write "Whoa doggies" on the first quiz, you will receive an extra credit point! DO NOT COPY each other's work but learn how to do it. A third alternative is peer tutoring. This is a wonderful resource at Troy High. This is not a class you want to get behind in!

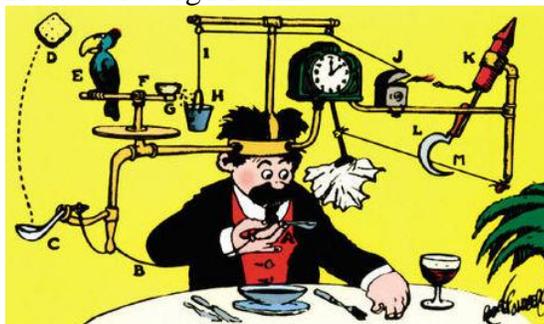
Late work will not be accepted unless you had an excused absence on the day the assignment was due. Tardies will be dealt with according to school policy.

We will have one construction project every quarter. This is where you and one partner will be asked to build something out of materials from home. 1st quarters' project will be a sail car. A car that can be set on the floor in front of 5 fans on the side and travel down wind. 2nd quarters project will be a sail car that can travel downwind AND upwind. Questions and problems will be required with each project

3rd Quarter Project will be to build a renewable energy device. I'm still the working out the details on this project and we may fall back on the Rube Goldberg machine.



Rube Goldberg Machine



4<sup>th</sup> Quarter: You will make a band. You will team up with 2-4 other students to make 3 different musical instrument: wind, percussion, string. You must write lyrics about a physics concept. This will be performed in front of the class.



I hope you enjoy this year and learn a lot that will help you.  
John G Morrison