

Piner High School Physics

<http://web.mac.com/carpnet>



The universe is a busy place. We miss most of what happens around us every day. Physics is the study of how the world works and why it works the way it does. One of our goals this year is to become more aware of the events that take place around us, and to more fully understand why they occur.

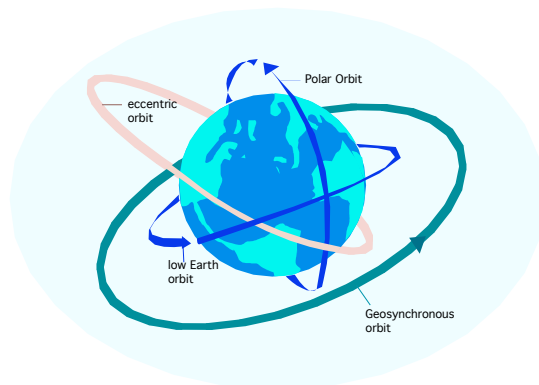
Obviously we cannot bring the entire universe into the classroom, but we can recreate specific phenomena in the classroom and use what we learn to answer questions about the parts of the universe that are beyond our physical grasp. Along the way we will use graphs, diagrams, mathematics, and verbal explanations to help represent the physics behind the events that we observe.

Course Organization

Your grade will consist of the total points earned over the semester in the following assignment categories:

- Daily Work** Problem sets, a lab notebook, text work, writing assignments, video notes, and other homework. These assignments are generally worth 20-50 points each.
- Lab Write Ups** Formal write ups of lab work. These will follow a specific format and must be typed. Each write up is generally worth 100 points. You will have the opportunity to rewrite some of these after receiving feedback.
- Projects** At least once each semester we will organize a project. These may be design projects (building rockets or other devices) or research-based projects involving library research and presentations. There will be opportunities for you to select you own topics and design your own projects. Projects are generally worth 200-250 points.
- Quizzes and Exams** Each unit of study (about 2 to 3 weeks long) will include a formal exam. We will occasionally have smaller quizzes as well. Some of these quizzes may be unannounced. Exams will always be announced and will include significant opportunity for review. Exams are generally worth about 100 points and exam scores are adjusted based on high scores (i.e. exam scores are “curved”).
- Grading Scale** A standard grading scale will be used to assign letter grades.

- A > 90%
- B > 80%
- C > 65%
- D > 55%



Course Expectations

Notebook: Please devote one binder entirely to physics. The binder should have the following sections clearly labeled according to the units we study. I will give you the titles of these units as the year progresses.

Late Work: NO late work is accepted unless by prior arrangement, and few situations warrant an extension. This is especially true of write-ups and projects. If you are going to be absent the day a write up or project is due, please make arrangements to have the work turned in for you. Computer difficulties are not adequate excuses for not meeting deadlines. Plan ahead: have extra ink, learn how to save, backup, transport, and print files on school computers, and so on. These are all skills that you will need in college and in the working world. Master them now.

Attendance: The tardy policy will be honored here. As always, you may make up work for excused absences. I am generally very flexible with make up, but it is your responsibility to make arrangements to get missed work. This will often require coming to see me after class or during break. Be aware that some work is simply too difficult to make up (some labs, for example) and that you may miss important assignments for which points can be made up, but which will factor heavily in quizzes or exams.



We will work hard this year. It is difficult to succeed in physics without some concerted and focused effort. Our goal is to understand the universe more deeply than we currently do, and that requires far more than simply showing up and listening. You will need to think and solve problems; you will need to communicate your ideas publicly and be willing to evaluate and possibly modify them when you encounter new information; you will be expected to work through some potentially frustrating problem solving experiences. Above all, I hope that you experience the satisfaction of arriving at a deeper understanding of how the world around you operates.

