IB Physics I

**The purpose** of this course is to provide a rigorous introduction to Physics, and prepare for the Higher Level IB Physics test. You will be more than prepared for the Standard level. This course is designed **for students that have a strong mathematical background**. The first year we will focus primarily on mechanics - the study of movement, force, energy, momentum, rotational mechanics, statics, and at the end of the year we will do a unit on waves and fluid mechanics.

**The Website-Tutorials/Problem Solutions:** tuhsphysics.ttsd.k12.or.us

**TAG:** Physics is a rigorous course designed to challenge bright and hungry minds. Students that need further accommodation will find that there are numerous challenge activities, as well as open-ended labs that can be expanded and used in lieu of other assignments as negotiated with the instructor.

**The text** we will use is Physics - sixth edition by Douglas Giancoli

**Grading:** I will grade you on a **point system weighted** in the following manner, not total points:

|  |  |
| --- | --- |
| Formative Assessment 10%  Summative Assessment 60%  Labs 30% | A 90%  B 80%  C 70%  D 60% |

**My Academic Expectations:**

1. **Come to class prepared** with paper, a writing utensil, and a **calculator**.
2. **Participate in class**.
   1. If there is a Warmup at the beginning of the period, actually do it.
   2. If we are doing Direct Instruction, take notes, and do the whiteboards.
   3. If we are doing Group Work actually do it, and help others in your group
3. Do the **Video Flips** as they are assigned. When a lesson is flipped, your only form of instruction is watching the videos, and taking notes. Failure to do this is as serious as skipping class. You need to **refer to and follow your unit syllabi**

If I find that you are not living up to these expectations we will need to have a discussion that involves your parents.

**Formative Work** **will not be accepted after you take the test that work prepares you for**. We will work on group work in class, homework and a formative assessment before we take assessments in class on a given concept.

**Summative Assessments** will be **closed book and notes, and I will take away your cell phone**; however, **for all but kinematics and projectile motion, I will give you the IB data packet so you do not have to memorize the formulas.** (Although that is quicker) I will supply a clean copy of the data packet. Summative assessments can be re-taken once, and I will average the two scores. If you miss a Summative Assessment you will need to make it up before school during Make Up time.

**Labs:** You will need to do your lab write-ups on paper punched for a 3-ring binder. **Do not use a bound lab notebook**. I will share my lab write up expectations with you later. All labs **can be improved** and turned in until you are satisfied with your grade. It is a good idea for students planning to take the IB test to save their labs so they can refer to them when they get ready to do their internal assessment project their Senior year.

**Late work:** Work that is turned in before or on the due dates will be promptly graded and turned back. **Late work** **will be graded as I have time.**

**21 Day Rule:** All re-takes of assessments, and lab revisions must be completed within 21 days of the date it was due. After 21 days, grades are **final**.

**Missing class:** If you miss class, it is your responsibility to **read the syllabus** to see how you can make up work, get notes from someone, and study the missed material from your book or on the website.

**Tracking grades:** You will need to check your scores on line. **It is your responsibility** to keep track of your own grade and inform me of errors I may have made typing in your scores. Keep your graded assignments until the end of the semester.

**Cell Phones** are not to be seen or heard during Direct Instructional time. On Assessment days we will typically put phones in the **Cellphone Palace**.

**Equipment:** I will expect you to treat school equipment with care. Prior to each lab I will explain the proper treatment and usage of each piece of equipment. If you do not pay attention during this time or repeatedly abuse equipment or endanger other students, I will deny you the use of that equipment and you will receive a zero for the related assignment. If you break any lab equipment through carelessness or deliberate improper use, I will bill you for the replacement cost of the equipment. I will not bill you for damage to equipment from normal use or accidents. This room is shared by three intensively lab-oriented courses, so at times you will find intriguing equipment that you have never seen set up in some part of the lab, or in the cupboards and drawers. If it is **demo equipment**, or equipment you have not used in a lab, or is set up as a part of someone's investigation, **do not disturb it**. If your curiosity gives you no respite, come in during outside of class, and ask me about the equipment.

**Extra help:** Should you find that you need extra help or time to finish a lab, you can come in before or after school for help. Often there are help videos on the website that explain the material that is on the tests. If you want to be sure to find me after school, make an appointment. **When I am busy I may not be able to help you outside of an appointed time**.

**Tardy policy:** If you are tardy three times in a quarter, you will be warned. Since tardiness disrupts the class, I will require you to stay after class and straighten my room **the day of your fourth or fifth tardy**. Failure to stay for my detention will result in a referral for school detention. I will refer you to the Dean of Students, and contact your parents on your sixth tardy, and every tardy thereafter.

**Cheating:** Don't cheat. I define cheating as the improper or undisclosed use of someone else's thoughts, work, or ideas. If I find that you have cheated, two things will happen; I will have a conference with your parents and you, and you will receive **zero** points **permanently** for the assignment, or assessment.

**We will respect** other people and their property in this class. I will not tolerate the isolation and ridicule of any group of people on the basis of their race, gender, sexual orientation, or religion.