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|  | **Physics**  **Mr. Hammer** (room G190)  Contact information: Ext. 190 (try email first) jaredhammer@alpinedistrict.org |  |

I’ll give you a copy of this document in paper form because, well, you need something that can be crumpled and shoved at the bottom of your backpack, but you can also find a copy of it online on my website: [Hammerscience.weebly.com](http://hammerscience.weebly.com/)

Physics can sometimes be intimidating, but it’s a lot of fun and we’ll have an amazing time exploring and learning about motion.

**Course Description:** In this course, you will learn about the physical world around you in the same way as scientists do. You will be confronted with a series of situations in which you will decide what factors might be related, how you can measure them, and then collect data. You will graphically analyze the data, and learn how to clearly describe the relationships you found. You will then go on to explore how these relationships you discovered could be applied to new situations. Students will learn from their peers in class discussions, from the teacher in direct instruction, and from their independent struggle with the material. Successful completion of Elementary Algebra (Secondary Math II) is **prerequisite** to this course. We will be using Algebra as a tool to help us analyze and understand the world around us. Computer use is an integral part of this course, so parents are required to grant student access to school computers through the district Acceptable Use Policy on Skyward.

**What You Will Learn:** Among concepts to be covered this year are: motion, forces, energy, gravity, static electricity, and wave phenomena. Students will be taught how to think scientifically as they conduct experiments and analyze data. Students will learn the content of the Utah Core Curriculum for Physics. A copy may be viewed and downloaded at: <http://www.uen.org/core/core.do?courseNum=3640>

Visit the Westlake physics website for homework/notes: <https://sites.google.com/site/thunderphysicswestlake/>

Each unit page on the website has a variety of resources (i.e. notes, readings, videos, websites) to help you with the content.

**What To Do If You’re not “getting it”:** If you begin to feel overwhelmed, or if you think you may need some help, please come visit with me!!! Help is available before school (after 7:15) and after school (T-F until 3:15 PM). The sooner you come in for help, the better off you will be.

In addition, seek help from your classmates and work on the assignments collaboratively. Physics can be a lot of fun, but if you start to get behind it is easy to feel lost.

**Supplies:** Please bring the following materials to class each day:

* Notebook or binder with college-ruled paper
* Pen or pencil
* Whiteboard marker
* Scientific or graphing calculator (does trigonometry), separate from any other device
* Graph paper would be nice, but not necessary at least at first.

We will be using various other equipment in the lab. Students are expected to use equipment safely by following the given instructions. Students may be held accountable for lost or broken equipment caused by improper use.

**Textbook:** The Utah State Board of Education has created a free PDF Physics textbook. You may download it for free, or purchase a printed copy if you wish. There will be some reading assignments from this textbook: <http://www.uen.org/oer>

**How You Will Show What You Learned:** You will demonstrate your understanding of Physics through quizzes, homework, lab reports, citizenship, participation, projects, and unit tests.

**Quizzes:** There are two kinds of quizzes: We will have **bell quizzes** before class every day. These will have several questions covering the previous day’s materials and a couple to get you thinking about what we will learn that day. These are meant to encourage you to come on time and therefore will have *no make-ups*. However, I will drop two per term. These are graded based on completion and effort, not on correctness. We will also have **regular quizzes**, typically twice per unit. Again there are no make-ups but I will drop two of these per *semester*. (One per term).

**Homework:** Nearly all of the homework for this class will be done online through the class website. There will generally be a homework assignment for every class period. Homework assignments will be due by 11:59 PM on the date indicated for each assignment, which is usually after the following class period. You should use that time to ask questions during class and seek help outside of class time. Homework assignments will be scored as they are completed and are worth 10 points. Homework assignments may be submitted an unlimited number of times before the due date for full credit. You may be awarded an extra point if you complete and submit the assignment on the date it is assigned. Assignments submitted after the due date are subject to the late work and make-up policies.

**Lab Experiments:** Much of what you learn this year is based on the results of your experiments. You will be working in lab teams of 3-5 students. If I notice that one member of a lab team seems to be doing most of the work, I will lower the report grade for all members. For each lab, students will be required to complete a lab worksheet or a formal, typed lab report, which will usually be due 1-2 class periods after the completion of the lab. If you do not finish the experiment within the allotted class time, you are responsible for arranging a time to complete the lab outside of class or complete the makeup lab. These lab assignments will be graded according to a rubric that is presented in class. While some elements of the worksheets or reports may be the same for all members of a lab team (such as data and graphs), I expect each individual to **write his/her own lab worksheet or report with his/her own conclusions**. Receiving three identical copies of a lab assignment will result in a lower grade for each team member. Lab assignments are subject to the late work and make-up policies.

**Term Project:** Each term you will be expected to complete one project that applies learning up to that point to complete a task. These projects will be done in groups. Specifications for each project will be given to you at the beginning of the corresponding unit.

**Tests:**  Tests are opportunities for students to demonstrate what they know and find out what they have not yet learned at the end of every unit. Tests will consist of multiple choice and free response questions. You may use one 3 x 5 inch note card, with any information on it you would like, provided that you prepare it yourself, and it is handwritten. You will need a pen or a pencil and a calculator on tests; please remember to bring your own. Tests will be graded and returned within 2 class periods. At part of taking each test, you will be required to complete a test analysis form and to correct problems for areas you have not mastered. The test analysis and corrections will be due **within three periods** of receiving the test back. If your analysis and corrections are incomplete, **your test will be considered incomplete and will be scored as a zero until you complete them** **satisfactorily.** If you do not finish or take the test on the day it is given, you should plan on making it up by the next class period. Any test not completed within two weeks will receive a zero and may not be made up.

**Final Exam:** We will have a comprehensive final exam during the last week of school. Questions for the final exam may be taken from anything that we covered during the entire year. You must be present and take the final exam.

**Grades:** I’m sorry I have to grade you, I truly am. I hate grades, always have, but it helps me know how you are progressing and administration says I have to…

That being said, just try your best and in the end things will work out. Don’t worry too much about your grade. I’m mostly concerned about you learning, so if you see that you’re struggling with your grade, come and talk to me and we’ll see what we can do to help you improve.

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| Homework | 15% |
| Tests | 60% |
| Labs & Projects | 20% |
| Quizzes & Participation | 5% |

Letter grades will be assigned according to this percentage scale:

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| --- | --- | --- |
| 93-100% A  90-92% A-  87-89% B+  84-86% B | 80-83 % B-  77-79% C+ 74-76% C  70-73 % C- | 67-69% D+  64-66% D  60-63% D-  0-59% F |

**Grading In Class:** From time to time we may grade assignments, labs, or quizzes in class. Students may be required to grade or review the work of others, and have their work graded or reviewed by other students. I also use student aides to grade some work.

**Progress Reports:** You may check your grades on the Skyward website (grades will be updated on Fridays). I will periodically send out progress reports via email. It is your responsibility to notify me of any errors ***immediately***.

**Remediation:** If you score below mastery on any section of a unit test, you will not receive credit until you have remediated it. By completing a series of assignments such as a test analysis, notes and extra practice, and a performance assessment, you will be able to receive credit for that section and increase its score by up to 50%.

**Late Work Policy:** Late homework and lab assignments may be submitted until the end of each term but will receive a 50% penalty. If you do submit something late, you are responsible for making sure I know you’ve made it up. I won’t go back and check Skyward unless you let me know.

**Make-up Policy:** **Plan ahead** if you know in advance that you will be absent. The topics and assignments covered each day are listed on the physics website and the homework website. Copies of paper assignments may also be obtained in the appropriate box in Mr. Fluckiger’s room or from the website. If you are absent the day an assignment is given, you have **three class periods** to learn the content and submit the assignments missed without penalty. Assignments submitted after that time will be considered late. If you are submitting an assignment within the three period make-up window, you must indicate you are submitting it as a makeup and the date you were absent on the assignment or in an email. Otherwise, the assignment will be considered late. If you are absent when an assignment is due, **you must still submit the assignment by the original due date unless you arrange it with me before the absence**. If you are absent the day a test is given, you have **five class periods** (or until the end of the term, whichever is sooner) to make-up the test without penalty. If you do not make-up the test within that time, you will not be able to take the test and will receive a zero for it.

**Attendance Policy:** The Westlake Attendance Policy will be followed and enforced in this class. This policy can be found on the school website:

<http://whs.alpineschools.org/about-whs/attendance-policy/>

**It is your responsibility to ensure that your attendance is accurately recorded each class period.** If you are late to class, you must sign the Tardy Log or your attendance will remain an unexcused absence. If you are absent from my class but attend other class periods on the same day, you will be marked truant unless otherwise excused. Absences, tardies, and NC’s may be made up directly with me before or after school.

**Classroom Norms:** This is high school. You know how to behave in a classroom. Don’t make me a babysitter. My rules are these:

1.) My students, including you, have a right to learn, don’t encroach on that right by being disruptive.

2.) Keep in mind I determine your grade. If you’re polite and generally on-task, then I’ll probably be more lenient when it comes to a grade that’s on the fence. And, well…vice versa.

**Cell Phones and Electronic Devices:** I don’t want you on your phones while we’re doing stuff. Sometimes they’ll be helpful when doing quizzes or certain activities but if they become a distraction I reserve the right to have you turn it off and shove it at the bottom of your backpack in front of the whole class ☺.

**Cheating:** If a student is caught cheating on a test or assignment they will receive no credit for that assignment and their parents or guardians will notified of the incident.

**Discipline:** Disruptive behavior will be dealt with according to the degree and frequency of the offense according to the following series of interventions:

1. Warning.
2. Conference between the student and the teacher.
3. Conference between the teacher, the student, and a parent. This may be a phone call home.
4. Referral to the administration for disciplinary action.

Patterns of disruptive behavior, including refusal to participate or failure to stay on task, may also result in losing participation/citizenship points which will directly lower your grade.