Course Description – Physics and AP Physics Mr. Jeron Carr – carr_jeron@ausd.us – <u>http://mrcarr.weebly.com</u> – Room B-220

<u>Course Description</u>: Physics is a yearlong course with a laboratory component covering a variety of topics: motion, force, energy, electric and magnetic phenomenon, heat, and waves. Success in this course requires diligent and cooperative effort on the part of the student, regular class attendance, full participation in activities, consistent completion of assignments, and conscientious studying for tests.

<u>Contact Information</u>: Students or parents are encouraged email me at "carr_jeron@ausd.us". I typically respond to email within two workdays. If you haven't heard from me please resend your message and/or write me a note that can be placed in my teacher mailbox. The classroom telephone does not ring for off-campus calls and is not a good way to contact me.

<u>Class Expectation</u>: As young adult, high-school students, there is an expectation that it not be necessary to list every possible inappropriate behavior. So, I have three basic guidelines:

- Be Responsible: Take care that you are where you need to be, completing what is supposed to be finished, with the materials you ought to have.
- > Be Respectful: Treat others the way you would hope to be treated yourself.
- > Be Resourceful: Make a true effort to solve your own problems, don't be afraid to amaze yourself.

Negative Consequences: based on the severity of the inappropriate behavior repercussions may include:

- \checkmark exclusion from class discussions
- ✓ detention
- ✓ full page essay
- \checkmark phone call or meeting with parents
- counselors, etc.)✓ referral to the Dean's Office

 \checkmark meeting with school personnel (coaches,

✓ lower Conduct grade (citizenship)

Student Office Hours: Currently, I plan to be on campus Monday and Wednesday after school until 4pm for my students. In addition to these times, I am usually in my room during lunch, and appointments can be made for before school. If you intend to come in for help, be certain to let me know to expect you.

Parent Appointments: For discussions too complex for email, please, schedule an appointment through the guidance office with a couple possible meeting times. I will choose the first meeting time for which I don't have a prior conflict. Appointments may be scheduled before school, at lunch, after school or during 2^{nd} period (8:45-9:41). Making an appointment with a description of the problem allows me time to prepare for our discussion. It also lets me focus my attention entirely on working with you.

Required Materials – (Note: A materials check may be called at any time for a grade)

- 1. Notebook: College ruled and devoted entirely to Science (at least 50 blank pages)
- 2. A Flexible Folder with Pockets: This will be kept in the science room.
- 3. Part of a Binder or another Folder: This will be kept in the backpack.
- 4. Loose Notebook Paper: 5 pieces that do not need to be ripped out of the notebook.
- 5. Writing Materials: Two working pencils, two erasers in good condition, two red pens.
- Additional colors may be helpful, but NO BLACK PENS should ever be used.
- 6. Other: a pencil box and a calculator (graphing calculators must have memory cleared for tests).

Grading Scale: Students will earn points for participation, homework, projects, daily work, labs, tests and quizzes, weighted roughly as follows: 55% Tests, 20% Labs, 20% Homework and Class Work/Responsibilities, and 5% Participation. The grading scale is the standard scale: A (90-100%), B (80-90%), C (70-80%), D (60-70%), F (0-50%). I reserve the right to alter the exact category and grade break points between classes and marking periods.

Food, Gum, Drinks, etc.:

Only a bottle of water may be used during class and only so long as it is not a distraction to others. If you somehow end up with food that makes a mess in the classroom, be polite and clean the mess up.

Homework: All homework problems must be attempted individually, first. If you get stuck, ask a group member for help. (Note: If no group member has made it to where you are in the assignment; wait patiently, skip that problem temporarily, or help them catch up to you.)

Helping includes	Helping does not include
 Pointing to a good explanation in a reference (notes, 	 Handing over your paper to copy.
book or internet).	Reading any portion of your
Pointing to a similar problem in a reference.	paper, neither steps nor answers.
Identifying the concepts needed to solve the problem.	Telling the group member to just
Re-teaching the concepts, but with a different situation.	work harder.
Pointing out a careless mistakes.	

When homework is completed it will be **corrected** in "**red**" ink against the answer key by a student, then in green ink by me. Homework is graded primarily on completeness and honesty in grading. Students can get 10-20% wrong depending on the assignment and still earn 100%.

Lab Work: Labs are a combination of group and individual work. All group labs must be stapled together to be on time.

Group Grade: Anything that <u>must be identical</u> for the group to work together should be <u>group work.</u> These parts are usually the question, materials, procedures, and numeric measurements. Possibly only one lab will be graded for these parts, so always put your group's best lab on top.

Individual Grade: Everything that <u>can be different</u> should be <u>individual work</u>. <u>Too much similarity</u> <u>may result in a zero for the lab</u>. These parts are the **hypothesis**, **diagrams**, **observations**, **math work**, **conclusions**, and **error analysis**.

Tests: There will be tests every chapter and unit. Tests are cumulative and represent the bulk of your grade. There will be a test correction policy to earn back partial credit on test questions.

Make-Up Work

It is the student's responsibility to complete missed notes and assignments related to an absence.

- Students who are absent from the classroom due to illness or other unforeseeable circumstances have 2 days from the date of return to school to complete all missed assignments/tests/quizzes/labs. Make-up tests may be given during lunch or after school and they may be different from the regular test.
- Students who are absent from the classroom due to planned activities must turn work in on or before the due date. Tests or quizzes that will be missed will be taken on the day the student returns.
- Speak with me immediately, if you believe you deserve special consideration.

I have read and agree to abide by both the class and laboratory safety guidelines and policies.

Period: Course Title:	_ Date:
Student Name (Print):	_ Student Signature:
Parent Name (Print):	Parent Signature:

SAFETY REGULATIONS FOR SCIENCE STUDENTS

While working in the science laboratory, you will have certain important responsibilities that do not apply to other classrooms. You will be working with materials and apparatus which, if handled carelessly or improperly, have the potential to cause injury or discomfort to some one else as well as yourself. As science laboratory can be a safe place in which to work if you, the student, are foresighted, alert, and cautious. The following practices will be followed:

- 1. **<u>Report any accident to the teacher immediately</u>**, no matter how minor, including reporting any burn, scratch, cut, or corrosive liquid on skin or clothing.
- 2. Prepare for each laboratory activity by reading all instructions before coming to class. Follow all directions implicitly and intelligently. Make note of any modification in procedure given by the instructor.
- **3.** Any science project or individually planned experiment must be approved by the teacher. Use only those materials and equipments authorized by the instructor.

4. Inform the teacher immediately of any equipment not working properly.

- 5. Clean up any non-hazardous spill on the floor or work space immediately.
- 6. Wear appropriate eye protection, as directed by the instructor, whenever you are working in the laboratory especially during hazardous activities involving caustic/corrosive chemicals and heating of liquids.
- 7. Splashes and fumes from hazardous chemicals present a special danger to wearers of contact lenses. Therefore, students should wear regular glasses (inside splash-proof goggles, when appropriate) during all class activities or purchase personal splash-proof goggles and wear them whenever exposure to chemicals or fumes is possible.
- 8. The fume hood should be used when using chemicals that emit toxic or irritating vapors.
- 9. Students with open skin wounds on hands must wear gloves or be excused from the laboratory activity.
- 10. Never carry hot equipment or dangerous chemicals through a group of students.
- 11. Check labels and equipment instructions carefully. Be sure correct items are used in the proper manner.
- 12. Be aware if the chemicals being used are hazardous. Know where the material safety data sheet (MSDS) is and what it indicates for each of the hazardous chemicals you are using.
- 13. Never taste anything or touch chemicals with the hands, unless specifically instructed to do so.
- 14. Test for odor of chemicals by waving your hand above the container. "Waft"
- 15. Eating or drinking in the laboratory or from laboratory equipment is not permitted.
- 16. Use a mechanical pipette filler (never the mouth) when measuring/ transferring liquid with a pipette.

- 17. When heating materials in a test tube do not look into the tube or point it in the direction of any person.
- 18. To treat a burn from an acid or alkali/base, wash the affected area immediately with plenty of running water. If the eye is involved, irrigate at eyewash station without interruption for <u>15 minutes</u>. Report to teacher immediately.

19. Know the location of the eyewash station, fire extinguisher, fire alarm box, and exits.

20. Know the proper fire- and earthquake- drill procedures.

- 21. Roll long sleeves above the wrist. Long, hanging necklaces, bulky jewelry, and excessive and bulky clothing should not be worn in the laboratory.
- 22. Confine (tie back) long hair during a laboratory activity.
- 23. Wear shoes that cover the toes, rather than sandals, in the laboratory.

24. Keep work area clean. Floors and aisles should be kept clear of equipment and materials.

- 25. Light gas burners only as instructed by teacher. Be sure no volatile materials (i.e alcohol or acetone) are nearby.
- 26. Use a burner with extreme caution. Keep your head and clothing away from the flame; turn off when not in use.
- 27. Use a fire blanket (stop, drop, and roll) to extinguish any flame on a person.
- 28. **Dispose of laboratory waste as instructed.** Use separate, designated containers (not the wastebasket) for: 1. Matches, Litmus paper, wooden splints, toothpicks, and so on 2. Broken and waste glass 3. Rags, paper towels, or other absorbent materials used in the cleanup of flammable solids or liquids 4. Hazardous/toxic liquids and solids.
- 29. Students are not permitted in laboratory storage room or teachers' workrooms without the approval of teacher.
- 30. Remove all broken glass as soon as possible. Never handle broken glass with bare hand; use a brush or dustpan. Report broken glassware, including thermometers, to the instructor immediately.

31. Operate electrical equipments only in a dry area and with dry hands.

- 32. When removing an electrical plug from its socket, pull the plug not the electrical cord.
- 33. Always approach laboratory experiences in a serious and courteous manner.
- 34. Always <u>clean</u> the laboratory area <u>before leaving</u>. Students and teacher should wash hands with soap and water if chemicals have been used. All materials should be returned to their correct place.
- Persistent or willful violations of regulations may result in lowered lab grade, the loss of laboratory privileges and possible dismissal from the class.