Introduction: Physics 195L is a one unit laboratory course designed to be taken concurrently with a Physics 195 lecture course. In this course, you will perform experiments over a range of topics including mechanics, wave motion, and resonance phenomena. These experiments are designed to reinforce the theoretical concepts presented in the lecture course.

Attendance: Due to the fact that you cannot perform an experiment if you are not present, attendance is mandatory. Lab sheets will not be accepted for experiments that you do not personally perform. This means that I will not accept reports based on your partner’s data if you are not actually there.

Grades: A written lab report (located at the back of the lab manual) is required for each experiment and will be worth 15 points. In addition, reading quizzes will be given throughout the semester at the beginning of lab based on the experiment being performed that day. Course grades are assigned by the percentages based off the total possible points for the class (see table at the bottom). Labs make up 75% of the total and quizzes are the remaining 25%. Extra credit may be given during the semester at my discretion. There is not final exam. Late reports will not be accepted.

Lab Partners: Normally, experiments are conducted by a two partner group. Even though you conduct each experiment as a team, each partner turns in their own report. I encourage you to choose a new lab partner for each experiment.

Lab Reports: Every report must begin with your name, your lab partner’s name and the date the experiment was performed. Because these reports are based on the data you take, missing data will result in losing points. I strongly suggest that you have me inspect your data sheet (for missing data) before turning in your report. In addition to the data, a conclusion for each lab report will be submitted online through the course Blackboard site (see attached page for more information). Lab reports are due at the end of each class.

Cheating: Cheating will not be tolerated. If you are caught cheating, you will get a zero for that lab or quiz and will be reported to the Center for Student Rights and Responsibilities. If you are caught cheating a second time the penalty is an automatic FAIL in this class and you will be reported to the university administration.

From SDSU’s official academic dishonesty policy: Cheating shall be defined as the act of obtaining or attempting to obtain credit for academic work by the use of dishonest, deceptive, or fraudulent means. Examples of cheating include, but are not limited to (a) copying, in part or in whole, from another’s test or other examination; (b) discussing answers or ideas relating to the answers on a test or other examination without the permission of the instructor; (c) obtaining copies of a test, an examination, or other course material without the permission of the instructor; (d) using notes, cheat sheets, or other devices considered inappropriate under the prescribed testing condition; (e) collaborating with another or others in work to be presented without the permission of the instructor; (f) falsifying records, laboratory work, or other course data; (g) submitting work previously presented in another course, if contrary to the rules of the course; (h) altering
or interfering with the grading procedures; (i) plagiarizing, as defined; and (j) knowingly and intentionally assisting another student in any of the above.

**Safety Issues**

The CSU takes the issue of classroom and campus safety very seriously. The office of Business and Financial Affairs has set up a web site where SDSU staff, faculty and students can find information about San Diego State University’s emergency preparedness plan and opportunities for training on many aspects of the classroom/workplace. See http://bfa.sdsu.edu/emergency/. In particular, please note the following:

**SDSU Campus Safety.**
- Be aware of your surroundings.
- If you see something suspicious, report it!
- If you have an emergency, call 911 from any phone on campus.
- Other incidents, call Campus Dispatch at 4-1911.
- In the evening, call Campus Escort if you would like an escort to your vehicle or campus dorm.

**Classroom Safety.**
- If there is an emergency, stay calm and follow the procedure in the flip book.
- Follow the Evacuation Route if you need to evacuate. We evacuate to the Mediterranean Garden and roll call will occur there. Please show up at the evacuation area since your absence from roll call could cause resources to be used that could be used to help others who may actually be in trouble.
- "Shelter in place" is usually called when a person that is carrying a weapon on campus has become violent and has injured others, or is threatening to injure others. Lock the door from the outside, only open to the Department of Safety Officer, PDS, or other officials of the University.

Note that during any emergency, students should not use their cell phones. Lines of communication are critical to keep open for emergency information. Only Staff and Faculty should keep their cell phones on, and only receive calls if the situation calls for it.

*As your instructor, I reserve the right to make any necessary changes or corrections to this syllabus.*
195L Lab Schedule

01/22/15 Meet for attendance
01/29/15 Lab Orientation
    Syllabus
02/05/15 [1] Unit Conversions
    Page 1
02/12/15 [3] Errors
    Page 13
02/19/15 [4] Freely Falling Body
    Page 23
02/26/15 [5] Newton’s 2nd Law
    Page 28
03/05/15 [7] Centripetal Force
    Page 40
03/12/15 [8] Ballistic Pendulum
    Page 46
03/19/15 [9] Conservation of Momentum
    Page 50
    Page 65
04/02/15 Spring Break
    **No Lab**
    Page 7
04/16/15 [12] Simple Harmonic Motion
    Page 73
    Page 79
04/30/15 Make-Up Week
05/07/15 **No Lab**