General Policies in the Physics Laboratory

Safety: Keep your station clear of all unnecessary materials. Store books, bags, coats, umbrellas, etc in the space provided on the side of the room. No food or drink or smoking in the lab. Safety is the first priority in the laboratory. Take special precautions when using electrical apparatus. A 120 V AC source, the type found in all homes as well as our laboratory, is particularly dangerous when used improperly. Be sure all power cords have intact insulation with no bare wires. Report any defects or hazards to your instructor immediately, particularly broken glassware or spilled water.

Care of the equipment: Several pieces of laboratory equipment are delicate and expensive. Be sure you know how to use them before attempting the experiment. (Some labs require that the wiring be checked and approved before you connect it to a power supply.) If you are not sure of their proper use, ask your instructor. Report any problems, and leave the station the way you found it. Do not borrow any equipment from another lab station or leave any of your equipment on another lab table.

Lab station: Before beginning an experiment, compare the apparatus at your station with the list given for the laboratory experiment to verify that all necessary materials are present. After performing an experiment, leave the laboratory station neat with the equipment ready for use by the next class. You are aspiring to be a professional, so your laboratory station and your work should reflect that of a competent, responsible professional.

Lab etiquette: You are expected to be on time for the laboratory class. Be considerate of your lab partner(s) so that your group can realize the maximum benefit from the class. Do not borrow equipment from other stations. (Ask the instructor for help.) Turn off your cell phone.

Laboratory groups: Please form your own groups, working at the same station together for a few weeks. I might shuffle the groups, but you can also change groups if you wish.

Attendance: See the syllabus for college policies. You are expected to be at every lab class. There are no makeup for labs or lab exams.

Come prepared: You should bring your lab manual, a calculator, pen (no pencils), straightedge, and some blank paper for notes or for space to continue answers to questions in the lab report. You should read the referenced materials, particularly the lab procedure, and complete the “prelab” (which is due at the start of the period) before coming to class. Hasty work is rarely good work.

Writing: Communication skills are emphasized along with technical skills in this laboratory. You need to be able to write reports as well as perform experiments. Now is the time to develop the habits of a professional. Write reports and advance assignments using complete sentences, proper grammar, and correct spelling. Your writing should clearly and concisely express definite concepts, not vague generalities. Avoid slang, abbreviations (except for units) and jargon. Plagiarism is not acceptable.

Numbers: You should report the correct number of significant digits, and do so by using the standard form used by (almost) all scientists. Write 0.373 m, not .373 m. [Make this a habit.] For numbers in scientific notation, write $2.73 \times 10^{-5}$ A or 27.3 $\mu$A, never 2.73E-5 A. You must always include uncertainties when they have been calculated in the lab.

Computer software: It is illegal to copy computer software. Do not do it.