William Rainey Harper College
Department of Chemistry
General Laboratory and Safety Instructions
(revised Spring 2011)

1. Read and study the experiment before class. Learn about the hazards of the chemicals before you use them. Chemical hazard information is provided on the Material Safety Data Sheets located in the yellow binder in the Discussion Room or search for MSDSs on-line. Check the Chemistry Department web page by following the links www.harpercollege.edu→Academics→Departments→Chemistry→Resources→LabSafety and save this site http://dept.harpercollege.edu/chemistry/safety.html. A list of chemicals that will be used in the course is posted along with links to chemical vendors' MSDSs.
2. If you have any concerns about exposure to any substances in the laboratory consult the MSDSs. Read the entire MSDS paying particular attention to section #11.
3. Always wear authorized safety goggles.
4. It is strongly recommended that students cover as much skin as possible while working in the lab. Therefore, long pants, a shirt that covers the upper arms, shoulder, chest, back and midriff, socks and closed toed shoes should be worn. Never wear shorts or skirts above the knee. No tank tops or bare mid-riffs. No sandals or open toed shoes of any kind. This is required minimum coverage.
5. If your hair is long, tie it back when working with chemicals or flames.
6. Leave extra books and outerwear outside the lab in the discussion room.
7. Don't bring iPods, MP3 players, cell phones or other media devices into the laboratory.
8. Don't do any of the following while in the laboratory: eat, drink, smoke, chew gum or tobacco, handle contact lenses, apply cosmetics, and take medicine. Leave all food and drinks in the discussion room. (After you leave the laboratory, wash your hands before conducting any of these activities.)
9. Always follow your instructor's safety instructions and safety instructions written in experiments. All chemicals have the potential of being hazardous, it is how they are used, concentrations, exposure levels and susceptibility that affects an individual.
10. Use only the reagents set out for you by your instructor.
11. Never contaminate the contents of reagent bottles. Pour reagents into your own containers before pipetting them. Do not waste the reagents. Know the amounts needed and take an appropriate amount for your use.
12. Never return unused or excess chemicals to reagent bottles.
13. Never keep reagent bottles at your workstation. Return them promptly to the designated area so that others can use them.
14. Follow the instructor's directions for chemical waste disposal.
15. If any large quantity of chemical is spilled, notify the instructor immediately.
16. Don't remove chemicals or equipment from the laboratory. If something is missing from your equipment drawer, notify your instructor.
17. Never leave an experiment unattended. Ask someone to watch it if you have to leave.
18. Perform only authorized lab experiments.
19. Read the chemical name on reagent bottles twice. Many chemicals have similar names. Also read the hazard information on the label.
20. Avoid unnecessary exposure to chemicals. Promptly remove chemicals if they contact your eyes, skin, or clothing.

21. Never taste a substance used in the laboratory.
22. Never smell a substance by putting your nose over the container. Instead, use your hand to fan the vapors toward your nose and only if instructed to do so.
23. Avoid an accident by adding acid to water—never add water to acid.
24. Never heat a stoppered test tube or flask.
25. Avoid pointing the open end of a test tube toward yourself or others.
26. Never pipet using mouth suction. Use a rubber bulb or a special pipeting device. Never force the glass pipet into the rubber bulb or pipeting device.
27. Never insert glass tubing or a thermometer into the hole of a rubber stopper unless it's been pre-split.
28. Place broken glass in the specially marked cardboard container.
29. Operate instruments only under the direct supervision of an instructor.
30. Notify the instructor if any accident or injury occurs, regardless of how small it might seem.
31. In case of fire, remove yourself from danger and notify the instructor.
32. Know the location of the emergency phone, fire extinguisher, fire blanket, fire pull station, eye wash, safety shower, and first-aid kit.
33. Know where to exit and where to meet for fire evacuation and tornado. Do not ignore alarms.
34. Don't enter the Prep Room or the Work Room without permission.
35. Conduct yourself in a responsible manner when working in the laboratory. If someone else's behavior puts you in jeopardy, notify the instructor.
36. At the end of the laboratory period:
    - clean your glassware
    - wipe down your bench-top workspace
    - rinse out the sponge and your workspace and lay the sponge flat by the cup sink
    - return supplies and equipment to the fume hood and community lockers
    - return glassware to the student locker in a neat, orderly condition
    - wash your hands with soap and water