



Chemistry Right-to-Know Training Syllabus

Personal Protection

1. **Eye Protection is required** for all experiments in the Anoka-Ramsey Community College (ARCC) Chemistry Labs. Your eyes are one of the most sensitive parts of your body to chemical splashes, so their protection is a top priority in this course. **Departmentally approved eye protection must be worn (covering the eyes) by ALL students, faculty, and staff when ANY laboratory chemicals are in use or other hazards are present in the laboratory.** Eye protection may only be removed immediately before exiting the laboratory, or if an announcement is made by the instructor that it is safe for the entire class to remove their eye protection. **Minnesota state law (*Student Rights, Responsibilities, and Behavior: Eye Protective Devices, 2001; Minnesota Statute §121A.32.*)** requires the use of eye protection and describes penalties for institutions, instructors, and students in violation. Glasses or goggles are provided for you, but you may optionally purchase your own from the bookstore. Other eye protection may be allowed with the instructor or lab manager's approval.
2. **Appropriate clothing** that provides minimal exposure to chemical spills and other hazards shall be worn at all times while in the laboratory. Closed toed shoes are required to minimize possibility of injury from spills or dropped objects. Use caution with long hair, jewelry, or loose-fitting clothing to avoid contact with chemicals, biological hazards, open flame or incinerators, as well as any moving machine/equipment parts.
3. **Gloves** are provided by ARCC for student use. Disposable nitrile gloves are available in four sizes (small, medium, large, and x-large) at the front of the lab area. The gloves are designed to be thrown away after use. They should also be discarded and replaced if any chemical has been spilled on them during use. Other gloves are also available for specialty use.

Safety and Fire-Protection Equipment in Lab

4. Learn the locations of the **fire blanket, fire extinguisher, emergency shower, eyewash, fume hoods**, and other safety features in the laboratory. Become familiar with their operation.

5. **Fume Hoods** should be used when strong acids, volatile organic chemicals (VOCs), or other dangerous chemicals are being worked with. When using the hood keep the sash as low as possible. This will allow the hoods to properly exhaust vapors from the room, keeping the user safe.
6. Learn which **exits** to use in an emergency. Keep the aisles free from obstructions such as coats and bags. Push your chair in when you leave your workstation, even temporarily.

Injuries and Blood

7. Conduct only authorized experiments in lab.
8. No Horseplay in the lab. Accidents have been known to happen when fooling around.
9. Report any injuries to your instructor, including minor cuts and burns.
10. Students are **not** to clean up any blood spills. If blood is spilled **notify the instructor** or lab manager immediately.

Chemical Equipment and Handling

11. Learn the location of **chemical SDS/MSDS sheets** for the chemicals used in each experiment. These sheets explain the risks and hazards of all the chemicals used in the lab experiments.
12. **Clean up all chemical spills** immediately. If you are unsure how to handle a specific spill, contact your instructor or the lab manager. Learn the location of the laboratory's **chemical spill kits**.
13. When heating anything in a test tube, always **point the tube away** from yourself and others.
14. **Never leave a burner unattended**. Always turn the burners off when not in use.
15. **All food and beverages are NOT ALLOWED and NOT to be CONSUMED** in the ARCC chemistry lab area. No exceptions, this includes chewing gum.
16. Always **wash your hands** before leaving the laboratory.
17. Never return unused chemicals to a reagent bottle. They should be discarded into a proper waste container. Mistakes here may have disastrous consequences. **Get in the habit of taking only what you need** when measuring chemicals out from the stock reagents.

Waste Disposal

18. **Place chemical wastes into the correct waste container** when each lab is completed. Your instructor will explain the correct disposal method for each experiment's waste before lab begins on the given day. Replace the lid on the waste container after use.
19. **Place all broken glass into the designated broken glass container.** Do not throw broken glass into the garbage. This will contribute to a safe working environment for all individuals that work in and clean up the lab area. Your instructor may have local specifics for this also.

Common Sense

20. Use common sense while observing all safety rules, posted and unposted, in the laboratory. This will contribute to a safe working environment for all individuals that work in and clean up the lab area.
21. Always remember, **safety first!**

Housekeeping Rules

22. **Clean your used glassware COMPLETELY** and return it to the drawer to dry (not on the bench top). Scrub the glassware with Alconox or Dawn soap and tap water. Finish the washing by rinsing the glassware with deionized water.
23. Throw away all paper towels, weighing paper, weighing boats, etc. when you are finished. **The bench top should be clean and clear** when you leave. If the bench surface needs cleaning it can be scrubbed with Soft Scrub and green pads to remove any materials.
24. All special supplies and chemicals should be returned to **wherever the chemical or supply was found.**
25. If you are missing glassware or equipment in your drawer or cabinet, please **ask your instructor** to help you find a replacement for the missing piece. **DO NOT go to other drawers to find supplies.**
26. Proper laboratory housekeeping is worth 5 points for the semester. Your instructor will periodically check your work area (unannounced) after you have left lab for the day and give you credit for good housekeeping or mark you off if your housekeeping skills need to be improved.