

Appendix F1

Chemistry Lab Instructor Orientation

Before the start of classes:

1. Besides the courses listed on the New Employee Orientation checklist from HR, complete the courses "Laboratory Safety Fundamentals" and "Environmental Protection and Hazardous Waste for Science". They all can be accessed through CSULearn.
2. Read ACS's "Safety in Academic Chemistry Laboratories" (*booklet*) & College of Science's "Safety Procedures" (*handout*).
3. Graduate TAs need to get a Description of Duties Form (*handout*) from the Instructor-of-record.
4. Review the lab syllabus, schedule, handouts, etc. with the Instructor-of-record and the Stockroom.
5. Get familiar with equipment use and care. Ask the Stockroom or Instructor-of-record for help.
6. If a student gets injured (burn, cut, chemical, eye), he/she should be offered assistance in getting to the Student Health Center. Review the Emergency Procedures & Report Forms (*handouts*).
7. Read the CSUEB brochure "Dealing with Disruptive Student Behavior" (*handout*).
8. In the Chemical Hygiene Plan, review "Appendix D: Emergency Response Plan" (*handout*).
9. Learn the fume hood fan failure protocol (remove chemicals, close sash, post a DO NOT USE sign, notify facilities).
10. Find the lab's Ventilation System Emergency Shutoff (in hallway) to be used in case of a major spill.

On the first day of lab, review the following with your class:

1. Point out location and use of fire extinguisher, fire blanket, eyewash, safety shower, spill cleanup kits, porous floors with non-functioning drains. Gas cylinders doubly strapped & chained at all times.
2. Review Earthquake and Evacuation procedures. Must grab wallet/car keys before exiting!
3. Instruct students how to clean up chemical spills and broken glass.
4. Review "Student Safety in the Laboratory" (*handout*). All must sign Agreement of Compliance form.
5. Review Personal Protection Equipment for eyes, skin, respiratory. Students must obtain and bring their own safety glasses with side shields (or goggles). Lab coats are optional and are not provided. Gloves are required when handling chemicals and are provided.
6. Review Employee's "Right-to-Know" (OSHA), sources (CRC, Merck Index, NIOSH Guide), and the (Material) Safety Data Sheet (SDS) lookup on desktop computers in Sc S415.
7. Students use Locker Deficiency Forms (*handout*) on first day only to get items from stockroom.
8. Billing reminder: Return all checked out items. Withdrawing students must do a locker check-out.

About 5 minutes before each lab period begins:

1. Unlock, open, lock, and *then* prop the door wide open. Doors are never to be left unlocked.
2. Check the room: Are the hoods working? Are the lab preps in order?

Start the lab on time:

1. Review safety issues relevant to the experiment (chemical hazards, safety procedures).
2. Review waste disposal procedures for the experiment. Give students specific disposal instructions.
3. Review use and care of equipment for the experiment.
4. Never leave students unattended.

Frequent reminders are needed on the following topics:

1. Eye protection must be worn at all times. This applies to both students and instructors.
2. Closed water bottles/food must be stored in backpacks at the perimeter of the lab (not in the hallway).
3. Tell stockroom when waste jugs get full. Do not let them overflow! Pasteur pipets go into broken glass.
4. Keep acetone wash bottles in hoods. Rinse acetone into Organic solvent waste jugs, not down the sink.
5. Keep reagent bottles capped. Do not mix up reagent pipets. Caps can be off of waste jugs during class.
6. Students must not use compressed air to dry glassware! (Use vacuum to remove traces of acetone.)

End the lab on time, and be responsible when closing down the room:

1. Make sure all students have left. If they did not clean up, you, the Instructor, must do it!

2. Clean up any spills on benches, in hoods, or on balances or other equipment.
3. All utilities (water, gas, vacuum, air) and equipment off. Hotplates should be off and unplugged.
4. Put all chemicals and acetone wash bottles in hoods. Cap all bottles, including waste jugs. (It's the law.)
5. Leave hood sashes halfway up/down (the calibration setting). Straighten chairs. Wipe chalkboards.
6. Turn lights off. Close the door and check to make sure it is locked.
7. Leave the room in good shape for the next class! At check-out, scramble the locks within your section.

I certify that the above trainings are complete and above information have been reviewed.

Lab Instructor's Name: _____ Signature: _____ Date: _____