

Safety Teams

You will be assigned to laboratory safety teams consisting of 2-3 students, and each team will be responsible for the safety activities for at least one experiment during the semester. The team will research hazards of that lab and ways to minimize associated risks, and then make a brief (approximately 5 minute) pre-lab presentation to the class that will also include a one-page handout. During the lab, the team will act as monitors for good and safe laboratory practices and will be responsible for ensuring that the lab is left in good order for the next lab section.

Pre-lab Presentation: In your pre-lab presentation you will summarize on a one-page handout, and explain to the class the four major categories of safety issues for that day's experiment:

- Chemical Hazards
- Procedural Hazards
- Personal Hazards
- Waste Management

Using your lab manual and lab textbook, generate a list of all chemicals that will be used and produced during your assigned experiment. Use MSDS's to learn about proper handling of these chemicals. What are the hazards associated with these chemicals? What wastes will be generated, and how should they be disposed (e.g., aqueous waste, halogenated waste, non-halogenated waste)? **You must e-mail your handout to the instructor at least 2 days prior to the lab period.**

Assessing Laboratory Practices: During the lab, you will monitor the class for improper laboratory practices such as bringing food or drink to the lab, leaving reagent bottles uncapped, failure to clean up spills (especially at the balance), or improper disposal of waste. Good laboratory practices are everyone's responsibility; but during your safety team's assigned week, it will be your job to raise awareness of ways your lab mates could improve their laboratory practices. **Safety team members must be present for the entire lab period.**

Post-lab Inspection: During your assigned week, your safety team will be responsible for conducting a post-lab inspection of the laboratory. All safety team members must be present for this inspection. Complete the post-laboratory checklist (see below). If you have been an effective leader during the lab period, you should identify few problems. Remedy any problems you identify with the help of the lab assistant and lab instructor.

Grading: You will receive an individual grade for our performance on the safety team. The grade will be based on your pre-lab presentation, the handout, your leadership during the lab period, completion of the post-lab inspection form, and the state of the laboratory when you leave.

Post-lab Inspection Form

Safety Team Members _____

Experiment _____ Date _____

Course _____ Lab Section _____

I. Items in proper location, operational, proper repair, inspection current:

	Satisfactory	Unsatisfactory	Notes:
Safety Equipment (Inspect, do not test) ¹	<input type="checkbox"/>	<input type="checkbox"/>	
Mel-temp Apparatus	<input type="checkbox"/>	<input type="checkbox"/>	
Thermometer Case	<input type="checkbox"/>	<input type="checkbox"/>	
FTIR	<input type="checkbox"/>	<input type="checkbox"/>	
Balances	<input type="checkbox"/>	<input type="checkbox"/>	
Broken Glass Container	<input type="checkbox"/>	<input type="checkbox"/>	
Ring stands	<input type="checkbox"/>	<input type="checkbox"/>	
Gloves, Pasteur Pipets	<input type="checkbox"/>	<input type="checkbox"/>	

¹Safety Equipment includes first aid kit, safety shower, eyewash, and fire extinguisher.

II. Fume Hood

	Satisfactory	Unsatisfactory	Notes:
Lights, Vacuum, Air, Water off	<input type="checkbox"/>	<input type="checkbox"/>	
Sash down	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Plates off and unplugged	<input type="checkbox"/>	<input type="checkbox"/>	
Return Clamps/holders (except buret clamps)	<input type="checkbox"/>	<input type="checkbox"/>	
Check Traps (clean if necessary)	<input type="checkbox"/>	<input type="checkbox"/>	

III. Housekeeping

	Satisfactory	Unsatisfactory	Notes:
Bench tops & Tables clear	<input type="checkbox"/>	<input type="checkbox"/>	
Floor clear	<input type="checkbox"/>	<input type="checkbox"/>	
Equipment stored	<input type="checkbox"/>	<input type="checkbox"/>	
Chemicals put away	<input type="checkbox"/>	<input type="checkbox"/>	
Waste labeled, capped	<input type="checkbox"/>	<input type="checkbox"/>	
