

Safety Guidelines for Students Taking Chemistry Classes

At the University of Evansville

Background

This document was generated by the Department of Chemistry's Safety Committee, which was established by the department in response to recommendations by the American Chemical Society to help promote a safety culture in academic institutions. The purpose of this document is to outline basic safety requirements for students taking chemistry classes at the University. The safety of students working in the laboratory is of the utmost importance to ensure a worthwhile learning experience.

Responsibility For Safety

The safety of students in the laboratory requires a total commitment from the entire University community. Individuals working in the lab must not only see to their own personal safety, but also to the safety of others. This is especially true in the teaching lab where several students are working together on experiments. To establish and maintain a proactive safety culture:

- Students must accept their role in this endeavor and must comply with all the safety rules set forth by the department in its various forms.
- Faculty, who teach these labs, must ensure that students are adhering to all the safety rules, and must ultimately accept responsibility for ensuring the safety of their students through proper mentoring and monitoring.

Prior to Beginning Work in the Lab

All students taking a chemistry lab course must complete safety orientation; no work can occur in the lab until this requirement is satisfactorily met. Details about the time and place for the safety orientation will be announced at the beginning of each semester. The safety orientation will include, but not necessarily be limited to, a safety video, a power point presentation that covers the basic lab safety rules, safety equipment, handling chemicals, and waste management. Additionally, a chemistry safety self-test is required. The safety rules and a host of other safety information are presented on the Department's Safety Website and should be consulted as a means of preparing for the safety orientation.

Work During the Lab Course

Safety does not end with the completion of the safety orientation; it is a continuous endeavor so long as a student is enrolled in a laboratory course. In addition to the safety rules and safe practices you learn in the safety orientation, you will receive safety instruction specific for each experiment you perform in the lab. Your instructor will highlight the chemical hazards, the appropriate personal protection required, the best practices to handle the chemicals you use, and proper waste disposal for each laboratory experiment. As a student you must pay attention to these additional safeguards so that you can perform your experiments in a safe and productive manner.

In order to promote a safety culture in our laboratories and incorporate safety in our teaching we will adhere to the Four Principles of Safety: 1) **R**ecognize hazards, 2) **A**sses risks of those hazards, 3) **M**inimize, manage, or control those hazards, and 4) **P**repare to respond to emergencies (Hill and Finster, 2010).

All students (even those in advanced chemistry courses) are strongly encouraged to review the safety rules and other safety information provided on the Department's Safety Website throughout the semester.

Reporting of Incidents and 'Near Misses'

You are required to inform your instructor whenever you have a chemical spill or personal injury due to an accident in the lab, no matter how minor. Your instructor, in turn, is required to report the incident to the safety committee, who will then submit the report to Risk Management.

Even if you have a 'near miss', where a spill or injury almost happened should be reported. Even though a spill or injury did not occur, a description of the 'near miss' might provide insights into potential steps to avoid such a situation in the future. Such action can help the department improve upon safety and allow us to modify our safety rules and practices.

References

Hill, R.H. and D. Finster. 2010. Laboratory Safety for Chemistry Students. Wiley. 552 pp.