



Materials Science and Engineering – Undergraduate Instructional Laboratory Safety Guidelines – Fall 2013

To ensure safe practices in our laboratories, The Department of Materials Science and Engineering has adopted the following guidelines for the undergraduate instructional laboratories. These guidelines will be continuously enforced, and non-compliance will result in suspension from the laboratory, and loss of laboratory privileges. We believe having an understanding of inherent hazards and learning how to be safe should be an integral and important part of the educational process.

All students, and TA's must understand and agree to the information in this document and *must sign the document* prior to undertaking any work in the laboratory.

- No students are allowed to work in the laboratory alone. There must be a trained TA, or instructor with you at all times.
- Students must know location of all exits, evacuation plan, first aid kit, eye wash, fire extinguisher, and safety shower.
- Wear approved eye protection (safety glasses, or goggles) at all times in the laboratory.
- Shoes must completely cover the foot. No sandals are allowed.
- Long hair must be tied back, and all loose clothing or dangling jewelry must be secured while in the laboratory.
- No food of any kind in the laboratory. No water bottles on tables in laboratory. Water must be kept in your bag.
- No equipment may be used by students without proper training. All students will be trained, and sign off on training for specific equipment. If you do not know/remember how to operate a machine, you must ask.
- Perform only experiments and tasks approved by the instructor. Never do anything in the laboratory that is not called for in procedures or instructions. Carefully follow all directions – written or oral. Unauthorized experiments are prohibited.
- Do not yell, scream, or make sudden loud noises or movements that could disrupt someone else's work.
- If any equipment is malfunctioning in any manner, you must get an instructor or TA immediately. It is important to communicate any malfunctioning equipment.
- All accidents, no matter how minor, must be reported to instructor.
- All aisles and work space must be kept clear of clutter. All exits, fire extinguishers, and cut off valves must remain accessible at all times.
- Do not use extension cords without permission.
- When using compressed air, only use approved nozzles, and never direct air at another student.
- All equipment guards must remain in place. Students may not tamper or modify equipment.
- Exercise care when walking past pneumatic, and mechanical equipment. Stay outside of taped areas.

- Any use of exposed flames must be approved and monitored by instructor. Use of gas canisters for flames requires student safety training, and sign off.
- All chemical storage rules must be observed at all times. All chemicals must remain closed until used, and all chemicals must be marked with substance name, hazard information, concentration, date of creation, and student name.
- Students must always use weighing paper, or boat for weighing substances on balances.
- All waste chemicals must be put in approved and labeled containers. There is to be no chemical waste into sinks or garbage cans.
- All waste must be disposed of properly. Hazardous materials to hazardous waste area, broken glass to broken glass waste, waste chemicals to approved containers, paper and garbage to garbage can, or recycling. Students should know location and practices associated with waste storage and disposal.
- Any use of ovens requires training and sign off. All substances in ovens, must be recorded in oven log book, along with student name, time of use, and temperature program.
- When done with a project, experiment or activity, students must dismantle all components and return to required location. Students are responsible for safe disposal of all materials.
- Any unsafe or dangerous behavior must be reported to instructor.
- Students are expected to demonstrate mature judgment in their work activities in the laboratory.

There is a safe way to do all jobs in the laboratory. You are responsible for your safety and the collective safety of all students in the laboratory.



Materials Science and Engineering Laboratory Safety Guidelines Agreement

I have read the Instructional Laboratory Safety Guidelines, and I understand its contents. I agree to abide by all of the rules and regulations within the guidelines at all times while in the Undergraduate Student Laboratories. I understand that violations of safety guidelines may result in my expulsion from the laboratory, and that any continued infractions may result in my being withdrawn from the course.

Signature of Student

Date

Print Legal Name

Instructor or Faculty Advisor