

Laboratory Safety Guidelines

The Biology and Physics Department is committed to providing a safe environment for all. However, laboratory safety is a mutual responsibility and requires full participation and cooperation of all involved persons - students, faculty and staff. The following Lab Safety Guidelines have been established for your protection as a student in the Biology and Physics Department. These rules will be rigidly and impartially enforced. Noncompliance may result in a grading penalty and/or dismissal from lab.

Personal Protection

- 1. Safety glasses must be worn at all times in the Lab. This is the policy of Kennesaw State University, a state requirement and an OSHA requirement. The glasses must be of the impact protection type with splash guards and must meet ANSI Z87.1 specifications. Other eye/face protection may be required with specific procedures. The bookstore has approved safety glasses. The glasses must be worn at all times within the lab space even while working on the computer or writing in your lab book.
- 2. Contact lenses are discouraged. The safety of wearing contact lenses in laboratories has been hotly debated over the last several years. Both the ACS and OSHA have issued statements indicating that contact lenses can be worn if and only if proper protective eyewear is also worn. The Biology and Physics Department recognizes that some eye conditions require contacts for certain vision correction therapies. However, students who choose to wear contacts must recognize the inherent increased risks they are difficult to remove if chemicals get in the eye, they have a tendency to prevent natural eye fluids from removing contaminants, and sudden displacement can cause visual problems that create additional hazards. Soft contact lenses are especially problematic because they can discolor and also absorb chemical vapors causing damage before the wearer is alerted to the problem. If you choose to wear contacts, please tell your lab instructor.
- 3. Appropriate gloves will be provided when needed. Use of gloves is required for handling certain chemicals. Gloves are very expensive. Do not change gloves needlessly.
- 4. Appropriate clothing is required. Your clothing is a barrier between your skin and chemicals. You must be covered to the knee also no bare

- midriffs or shoulders. Knee length shorts are acceptable, anything above the knee - shorts, skirts, or dresses are not. Lab coats are recommended and can be purchased from the bookstore.
- 5. Shoes must be worn. No sandals, thongs, open toed or open heeled shoes.
- 6. Roll up sleeves and tie up loose clothing and long hair when working with equipment, open flame, any chemicals or biological substances.
- 7. Do not eat, drink (including sport bottles and water bottles), or store food in the labs.
- 8. Smoking or use of other tobacco products is prohibited.
- 9. Wash hands after working with chemicals.
- 10. It is the recommendation of this department that all students of reproductive age, especially women who have recently conceived or are anticipating conception during the semester, discuss the course content and reagents with their physician if they are concerned about reproductive toxins.

General Lab Rules

- 1. Conduct yourself in a responsible manner at all times in the laboratory.
- When first entering a lab room, do not touch any equipment, chemicals, or other materials in the laboratory area until you are instructed to do so.
- 3. Read all instructions carefully and plan your work. Understand the experiment and if in doubt, ask.
- 4. Follow the written lab procedure laboratory activity at this level is not meant to be creative. Improper combinations or amounts of chemicals can be very dangerous. No unauthorized experiments are to be performed. If you are curious about trying a procedure not covered in the experimental procedure, consult with your laboratory instructor.
- 5. Lab tables should be as uncluttered as possible to allow work space and avoid accidents. Also, keep the aisles clear to prevent tripping over your gear, and so that other people can pass unhampered. Place book bags, pocketbooks, etc. under the lab tables. In some labs, seats or stools are not to be used during labs students need to be mobile to avoid possible spills and are not to place themselves under the edge of the lab bench where chemicals may spill.
- 6. Lab activities require your undivided attention. No music allowed in student labs. Radios (including Walkman type) and other entertainment devices are not permitted. No cellular phone use.
- 7. Biology and Physics lab computers are for laboratory business only no Internet surfing or checking email.
- 8. Treat chemicals with respect and understand the chemicals you are using. Material Safety Data Sheets (MSDSs) are available in the red binders in each room. Do not remove the MSDSs from the binders. Bring the binder to the Biology office (Room SC308) to request a copy.

- 9. Learn where the safety and first-aid equipment is located. This includes fire extinguishers, fire blankets, and eyewash stations.
- 10. Notify the instructor immediately in case of an accident, no matter how small it seems.
- 11. Students are never permitted in the Biology and Physics storage rooms or preparation areas unless given specific permission by their instructor.
- 12. Handle all living organisms used in a laboratory activity in a humane manner. Preserved biological materials are to be treated with respect and disposed of properly.
- 13. Leave the lab area clean. Put equipment and chemicals away and wipe off the bench top.

Disposal of Wastes:

- 1. Do not dispose of chemicals in the sink. (Rule of Thumb: If you don't want to drink it, don't dump it in the sink). Follow your instructor's directions for disposal. Be sure to dispose of chemicals in the proper waste collector. Do not mix chemical waste without being instructed to do so. Any container that is used to collect chemical waste must be properly labeled and closed at all times unless actively pouring into it.
- 2. Properly dispose of animal tissue in the red or orange Biohazard bags. Never throw animal tissue in lab garbage cans. Your instructor will provide necessary detail.
- 3. Dispose of broken glass in the cardboard "broken glass box" in your lab. Place "Sharps" (scalpels, needles, razorblades, etc) in the sharps boxes.

Do not place general trash in the any of the specialized collection containers.

Do not let the potential hazards listed above make you afraid to participate in the lab. If instructions are followed and care is taken, the likelihood of an accident is greatly reduced. Labs are usually the most fun part of any science course.

Who to Contact

If you have any questions, the following people are your safety resources:

- Your instructor
- Biology Faculty
- Biology and Physics Department Laboratory Safety Officer/ Lab Coordinator - Dale Zaborowski, SC 309, 770-423-6165, dzaborow@kennesaw.edu