Hillsborough Community College is committed to providing a safe laboratory 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 Laboratory Safety Guidelines have been established for your protection as a student in this course. These rules will be rigidly and impartially enforced. Noncompliance may result in dismissal from lab.

**Personal Protection**

1. You are required to wear appropriate eye protection (safety goggles or glasses) for any experiments involving glassware, flame, chemicals, bacterial cultures, body fluids, or the dissection of preserved specimens. This is a Hillsborough Community College requirement, a state OSHA requirement and a federal OSHA requirement. Unless indicated by the instructor, eye protection must be worn at all times within the laboratory.

2. The wearing of contact lenses is discouraged. The safety of wearing contact lenses in laboratories has been debated for many years. Both the American Chemical Society (ACS) and OSHA have issued statements indicating that contact lenses can be worn if, and only if, proper protective eyewear is also worn. Students who choose to wear contact lenses in the laboratory 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.

3. Appropriate gloves will be provided when needed. Use of gloves is required for handling certain chemicals and biological materials. Gloves represent a significant expense for the laboratory. Do not change gloves needlessly.

4. Appropriate clothing is required. Your clothing provides a protective 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. If your legs are exposed above the knee, you must wear a laboratory apron.

5. You must wear shoes with closed toes and tops. You may not remain in the lab wearing sandals, flip-flops, and 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, or store food in the labs. Nothing should be placed in or near your mouth including lipstick, pens, pencils, etc. Do not apply make up while in the laboratory.

8. All chemicals in the laboratory are to be considered dangerous. Never touch, taste, or smell any chemical (unless you are specifically instructed to do so).

9. Notify the instructor if you become ill while in the laboratory (headache, nausea, weakness, dizziness, etc.)

10. Notify the instructor immediately in case of an accident, no matter how small it seems.

11. Use caution in the laboratory — and notify the instructor immediately of any unsafe conditions you observe.

12. Be cautious around burners and hotplates. Always assume that they are hot. Never leave them unattended.

13. Smoking or use of other tobacco products is prohibited.

14. Wash your hands after working with chemicals and before or immediately upon leaving the lab. This is the simplest, most effective method of minimizing transfer contamination from laboratory materials.
15. We recommend 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 Laboratory Rules**

1. Conduct yourself in a responsible manner at all times in the laboratory.
2. Do not touch any equipment, chemicals, or other materials in the laboratory area until you are instructed to do so.
3. Be familiar with your assignment before you come to the laboratory. Read all instructions carefully and plan your work. Understand the experiment or exercise and if in doubt about what to do, 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.
5. Think through what you are about to do so that you do not endanger yourself or others in the lab.
6. 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 unharmed. 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.
7. Lab activities require your undivided attention. No portable music devices of any kind are permitted. No cellular phone use is permitted.
8. Keep flammable materials away from heat sources such as burners and hotplates.
9. Learn where the safety and first-aid equipment is located. This includes exits, fire extinguishers, fire blankets, safety showers, eyewash stations and first-aid kits.
10. In an emergency, proceed to nearest emergency exit, and then to the designated assembly area.
11. Notify the instructor immediately in case of an accident, no matter how small it seems.
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 for the next class. 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 it is not safe to drink, 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 biological materials (i.e. blood, other body fluids, preserved specimens, and related material) in the red or orange Biohazard bags. Never throw animal tissue in lab trashcans. Your instructor will provide detail as necessary.
3. Immediately clean up spilled chemicals or broken glass and dispose of them in appropriate containers.
4. Dispose of broken glass in the cardboard “broken glass box” in your lab. Place “Sharps” (scalpels, needles, razorblades, etc) in the sharps box. Place general trash (paper) in the trashcans and not in the any of the specialized collection containers.
1. What are the reasons you should always wear eye protection (safety goggles or glasses) while in the laboratory?

2. What are the reasons for the requirement to wear appropriate clothes and shoes in the laboratory?

3. Why should you never bring food or drinks into the laboratory?

4. What is the safety implication of being familiar with the lab exercise prior to coming to class?