Biological research involves hands-on laboratory experience. You may be doing activities that involve the use of hazardous chemicals, biohazardous materials, and/or potentially dangerous equipment. You must assume responsibility for the safety of yourself and others working in the lab. The following are some safety and procedural rules to help guide you in protecting yourself and others from injury in the laboratory. Safety is a continuous process and requires informed participation by faculty, lab personnel, and all students. These rules must be followed at all times.

1. No food or drinks are allowed in any prep areas or instructional laboratories. Some research labs may have designated areas for food and drink. Never use laboratory glassware as containers for food or beverages. Never apply cosmetics in the laboratories. Food and drinks can be stored inside backpacks or purses.

2. Inform your instructor if you are pregnant, immune-suppressed, allergic to any substances that are being used in the laboratory, and/or have any other condition that may require special precautionary measures.

3. A full-length, full-sleeve lab coat is required in all BioSafety Level-2 (BSL-2) laboratories when working with BSL-2 organisms. BSL-2 teaching laboratories are Harney 322 and CSI G04. Lab coats should be completely buttoned. Avoid wearing your lab coat outside of the laboratories or prep areas, which can expose others to hazards. Gloves and safety glasses should be worn while handling BSL-2 organisms. Lab coats are recommended in all other laboratories which are not BSL-2 laboratories.

4. Safety glasses, lab coats, and gloves are required when handling hazardous chemicals. The hazard level of any chemical is defined by the Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS). A binder containing all MSDS and SDS for chemicals stocked by the USF Biology Department is found in the laboratory manager’s office (Harney 319).

5. Wear safety glasses whenever handling ultraviolet light.

6. Wear gloves whenever handling hazardous chemicals or biohazardous materials. Wear heat-resistant gloves when handling hot glassware or materials exiting the autoclave.

7. Open toed shoes are not allowed in any laboratory or prep area. Socks are recommended for BSL-2 laboratories and while handling hazardous chemicals. Sandals and flip-flops are not appropriate in the laboratory; exposed skin can be harmed by spilled chemicals or broken glass.

8. Pants or skirts with tights underneath are required in the laboratory. Shorts are not appropriate attire for laboratories.

9. Long hair, scarves, and headwear should be tied back to avoid contact with flames and chemicals. No baseball hats are allowed in the laboratory.

10. Do not bring others with you into the laboratory who are not enrolled in the course (including children, friends, relatives, etc.). There are too many hidden dangers.

11. Conduct yourself in a responsible manner at all times in the laboratory. Understand how to respond in case of emergency. Do not engage in horseplay in the laboratory or use a cellular phone while handling chemicals or equipment. No mouth pipetting. Never taste or smell a chemical in laboratory glassware.
12. Be aware of the locations and operating procedures for all safety equipment such as fire extinguishers, fire blanket, safety shower, eyewash station, first-aid kits, chemical spill kits, PPE, and MSDS binders. Know the locations of exits and fire alarms. Know the locations of any gas shut-off valves if using gas.

13. If there is a fire alarm sounding, containers or tubes should be quickly closed, gas valves turned off, and electrical equipment unplugged. These can create additional hazards for fire fighters or cause serious damage if the building must be evacuated for a long period of time.

14. Be prepared to do lab work by reading the procedures and all MSDS or SDS before working with chemicals or biohazardous agents. For new procedures, you should receive training. Lack of preparation can lead to injury. Unauthorized experiments are prohibited.

15. Immediately report all spills and injuries, regardless of how minor, to your research advisor, department chair, or the laboratory manager.

16. Clearly label all solutions and samples generated during the laboratory session. The label should include the chemical name, concentration and solvent (where applicable), date prepared, and your initials. Disposal of chemicals in unlabeled bottles or containers is difficult, as these chemicals are potentially hazardous.

17. Dispose of wastes in their appropriate containers, as directed by your research advisor or laboratory manager. Hazardous chemicals should not go down the drain. Glass containing hazardous chemicals or biohazardous materials should not go into glass waste boxes. Syringes or razor blades should go into designated sharps containers. Plastic serological pipets should be placed in cardboard discard boxes. Any biological waste (DNA, protein, and cells) or items that come in contact with them (tips, flasks, and tubes) should be discarded in red biohazard bags. Biohazard bags and pipet boxes should be autoclaved before disposal in a waste bin.

18. Observe good housekeeping practices. Work areas should be kept clean and tidy at all times. Bring only your laboratory notebook and protocol sheets to the work area. Keep coats, backpacks, and bags in designated areas of the laboratory so that they are out of the way. Bags left on the floor between lab benches can be a safety hazard. Clean your workspace and equipment after completing your laboratory work.

19. Wash your hands prior to leaving the laboratory. If handling biohazardous materials, use antibacterial soap.

I have read and understand these safety rules. I agree to comply with these rules. I know that failure to follow these rules will result in my losing the privilege of working in the laboratory. I have been provided with a copy of this document for my own records, and I am returning a separate signed document to the University of San Francisco.

NAME (Print): ________________________________

SIGNATURE: ________________________________ DATE: ____________

COURSE: ________________________________ INSTRUCTOR: ________________________________