Sonoma State University
Department of Biology

Rules and Guidelines for Safe Laboratory Practices

The Biology Department Staff can help you if you have questions regarding safety issues:

Stephanie Thibault	Darwin 203A	664-2949
Kandis Gilmore	Darwin 232	664-3157

It is absolutely required that all students and faculty utilizing these facilities have knowledge of, and adhere to, the following procedures:

No eating or drinking in the labs
Closed-toed shoes and lab coats are required at all times

Safety Equipment

Know the location of:

- CO_2 fire extinguisher – type BC – usable on things and people
- Eye safety wash
- Safety shower
- Safety fume hood

Sanitation Equipment

Hand Soap – located by the sinks.

Pipette Soakers - immediately after use of pipette, place tip down in the soaker.

Squirt Bottles - on lab benches containing 10% Bleach (i.e., 0.52% sodium hypochlorite).

Red Biohazard Container - this container is for discarding all non-glass, disposable, contaminated items, such as plastic Petri dishes, contaminated Kimwipes and paper towels that may have been used to clean up a spill, etc. Kimwipes and paper towels which you have used to dry off your hands do not go in the biohazard bags and neither do soda cans, sandwich wrappers or notebook paper, etc.

Hazardous Waste Containers - these are for the disposal of non-biological but hazardous chemical waste, i.e. microfuge tubes with beta-mercaptoethanol. Please alert the lab instructor when this yellow bag is full.

Garbage Receptacles - these are for the disposal of all ordinary, uncontaminated trash.

Broken Glass Discard Container - if the glass is contaminated then the glass is placed into the appropriately labeled coffee can [see Stephanie]. Any other uncontaminated glass can be thrown into the "broken glass" box located in all labs and classrooms. You will find a dustpan and hand broom to aid in collecting all the little pieces.

Sharps Containers - (red plastic boxes) these are for discarding all syringes, needles, razor blades and other sundry finger poking devices. All sharps go in here regardless of their contamination status.

Slide Discard - No well slides should ever be discarded. These are expensive and we therefore reuse them. The fixed slides are to be discarded into the coffee cans labeled "slide discard"

Pasteur Pipettes - if they are glass and uncontaminated, dispose into glass waste container. If they are contaminated and glass, place into the Pasteur pipette waste coffee can. If they are contaminated and plastic, they can be placed into a biohazard receptacle.

Classroom Biohazards and Other Waste Procedures

Liquid Waste

- Organic - hazardous waste container with collection date and chemical name (technicians can procure a container for you)
- Bacterial - collect in a container with bleach solution (10% bleach) or give to Dept. staff for autoclaving
- Blood - collect into bleach filled container

Solid Waste

- Glass - Contaminated glass Pasteur pipettes and slides – labeled coffee cans
  Uncontaminated Pasteur pipettes – glass waste receptacles

Animal Waste – after draining any Carosafe (into an organic waste container) all animals may be disposed of in a regular plastic garbage bag and then placed in the dumpsters outside the building. Don't place animal waste into autoclave bags (red plastic) or we will be severely fined.

Blood products – any slides with blood, animal or human, should be disposed of in the red sharps containers.

Needles, Razor Blades, Finger Poking Devices – deposit into red sharps containers

Safety and Sanitation Procedures

At the beginning of each class period, the bench surfaces should be wiped with bleach, using paper towels. Repeat this cleaning before you leave the lab. The paper towels used in this general wipe are thrown into the regular garbage can.

Wash and dry your hands thorough before and after each lab.

Closed toed shoes and lab coats must always be worn in the lab. When appropriate, use of safety goggles is also required. Lab coats protect your clothing from splattering stains (these stains are permanent), as well as protect against bacterial contamination and chemical spills.

At the completion of each laboratory session, it is the responsibility of each student to leave the area clean and as it was when you arrived.

Accidents and spills – Report to the instructor immediately. While someone is contacting the instructor, someone else should keep everyone away from the area. If there has been a bacterial spill, cover the liquid with paper towels and gently flood the area of the spill with disinfectant (10% bleach). Gather up these soiled towels with fresh, dry paper towels, preventing contact between your hands and any of the liquid (use disposable gloves if necessary). Discard these contaminated towels (and any used gloves) in the biohazard bag, unless there is broken glass involved in the spill. If there is broken glass, pick up the disinfectant soaked pieces with forceps after allowing the disinfectant to remain for several minutes or use the dustpan and hand broom. Place the disinfectant soaked pieces of the broken glass into the broken and contaminated glass discard can located in the hood. If a spill is large or you are uneasy about cleaning it up, please ask either technician for help.

If an emergency occurs call 9-911 immediately. If you need medical attention you may go to the health center. You will need to fill out an accident report form. These are available in the Biology Department Office (D200).

SDS's are available in D203A or online at:
https://msdsmanagement.msdsonline.com/company/8511B604-100D-449A-9A6B-366EFF19DA04

Other Information

Campus police - non-emergency: 664-2143
Utility malfunction: contact Stephanie or Kandis; if after hours call 664-2136
Student Health Center: 664-2921

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Rules and Guidelines for Field Trip Safety

Students must fill out and sign the appropriate Department and University Field Trip forms before the scheduled field trip.

Prior Medical Clearance

Notify the instructor of any health or physical concerns before the first field trip. Examples include allergies to bee stings, allergies to plants, pregnancy, motion sickness, disabilities that might prevent hiking, lifting, etc.

Reducing Risks/Hazards

Listed below are representative procedures for reducing hazards and risks on field trips. Special instructions pertaining to unique locations will be provided as appropriate. (for example: ocean, desert, etc.)

Wear appropriate clothing for the field: long pants, closed-toed shoes, appropriate jackets, boots, etc.
Do not wear perfume, hairspray, after-shave, etc. because it could attract bees or other insects.
Potential hazards can be encountered in the field including unsteady footings, holes in the ground, objects that can scratch or puncture the skin such as thorns, sharp branches, and broken glass. Students should not wander from their instructor and should be aware of potential hazards in their surroundings.
Do not smoke or chew tobacco. Eating and drinking will be allowed only with the permission of the instructor.
After entering the field, students should not touch their face, eyes, nose or mouth until their hands have been thoroughly washed.
Do not use test kits, collecting materials, or other equipment until instructed to do so by the instructor, who will demonstrate the proper technique for use of the equipment.
Report any incidence of broken glassware or spilled chemicals to the instructor immediately.
Field trips are closed to individuals not enrolled in lab. Students may not bring guests, children, or other individuals on field trips. Pets are never allowed.

Students may encounter both plants and animals (such as poison oak, ticks, scorpions, seals, newts, mice, etc.) that could potentially cause physical injury. The instructor will try to minimize contact with these plants and animals. Students should not try to pick any plant or try to capture any animal unless instructed to do so.

Rattlesnakes: Never attempt to move a rattlesnake. Go to a safe location and inform your instructor.

Black Bears: Make a lot of noise to scare the bear away or back away, finding nearest shelter (car or building). Do not run. Bears will chase you and outrun you. If bear charges, stand your ground. It is likely a false charge. In a rare attack, remove your backpack (if food inside) and curl up in a ball, protecting your face and neck.

Mountain Lions: Make a lot of noise and raise your arms above your head to look big to scare the animal away. Do not run. Back away into a car or building if possible. If attacked, fight back.

Medical Emergencies

Major injuries will be treated at the nearest hospital emergency room. The instructor will summon an ambulance or arrange for private transportation. The student must file an accident report in all cases.

Other Information

Students who are unwilling or unable to follow the safety regulations may drop the course during the first two weeks of the semester without penalty. Failure to adhere to these rules will lead to dismissal from class.

For more information about the following topics, see the links below:

Hazards and Safety at SSU Preserves:
http://web.sonoma.edu/cei/visit/hazards_safety.html

Hantavirus:
https://www.cdc.gov/hantavirus/index.html

Lyme Disease:
https://www.cdc.gov/lyme/index.html

Instructions for Faculty:

Faculty members are required to have students sign the following sheet to acknowledge that students have been informed of the appropriate rules and guidelines for **all of their courses that contain a lab or field component**. It is the responsibility of the **faculty member** to ensure that all of their instructors/TAs go over the rules and guidelines and that all enrolled students have signed the form. The forms are to be turned in by the **faculty member** to Stephanie by the **end of the 3rd week of classes** so that it can be kept on record.

Course:_____ Sect # _____ Instructor/TA:_____ Sem/Yr:_____

Reading, understanding, and agreeing to abide by safety rules and further safety directives from your instructor is required of all students. Failure to do so and puts you and your fellow students at risk and may result in temporary suspension or permanent dismissal from the course. **By signing on the line below, I acknowledge that I understand and agree to abide by the safety rules as outlined in this handout, and further safety directives from my instructor.**

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