

LABORATORY REGULATIONS

Prepare carefully. Attentive and considerate behavior is expected at all times. Maintain clean laboratory benches and common areas. Clean your own work area and any common areas assigned to you.

EATING, DRINKING, GUM CHEWING, AND SMOKING ARE FORBIDDEN in lab (to avoid chemical ingestion, excessive inhalation of harmful vapors, and ignition sources). Food, drinks, and smoking materials (including chewing tobacco) should be left outside the lab or stored in securely closed containers away from lab work areas.

Prepare & Protect Yourself

The minimum level of safety protection needed in the Teaching Labs is safety eyewear, long pants, closed shoes, and long-lab coat. Students who arrive unprepared or inappropriately dressed may be dismissed until ready to work.

Safety Eye Protection: [Note: this is the Department rule; individual Instructors may use a more restrictive rule (e.g., goggles only).] Safety Eye Protection must be worn by everyone when anyone in the lab works with glassware or chemicals. All students, faculty, staff, and visitors are required to wear approved splash goggles or safety glasses, in addition to any prescription glasses.

Chemical splash goggles are required whenever anyone is transferring more than a small amount (~25 mL) of a hazardous material or when performing any operation involving a splash hazard. **Safety glasses** are designed for use in normal laboratory operations but offer only minimal splash protection.

Approved goggles and glasses. Chemical **splash goggles** (close fitting & indirectly vented) are required for some classes – check the syllabus. The Teaching Labs Stockrooms are not equipped to lend or sell goggles. With prescription glasses, choose safety glasses designed to fit over glasses or choose goggles. For goggles from other labs/schools/activities, check with Safety Coordinator or Instructor.

Additional eye and face protection (e.g., full-face shields) are available and used as directed by the experimental procedure or the lab supervisor. Always be sure to use proper eye protection with ultraviolet (UV) lamps and lasers.

Contact lenses: Worn **with safety eyewear** (required for everyone), contact lens wear is acceptable. The current understanding is that using contact lenses in lab creates no additional hazard.

APPROPRIATE CLOTHING: Lab Coats, Long Pants and Closed Shoes are required. Choose sturdy **shoes** that cover the whole foot and protect from spills and broken glass. Wear a **knee-length, long sleeve lab coat** closed to protect skin & clothing. Coat sleeves must cover arms & shirts. Wear **long pants** (or equivalent) to protect from spills & splash. Avoid loose or synthetic clothing; remove loose jewelry; secure hair and clothing away from flames, equipment, and chemical contamination.

GLOVES are provided in the labs and should be worn when working with hazardous chemicals. Ask the lab staff if you do not find suitable gloves stocked in your classroom. Remove gloves and wash hands before leaving the lab and entering public areas.

KNOW THE HAZARDS OF MATERIALS before beginning any procedure. Check the appropriate **Material Safety Data Sheet (MSDS)**; additional information is available on bottle labels, in your laboratory manuals & textbooks, in the laboratories, in the Science & Engineering Library and in the Chemistry Teaching Lab Stockrooms (YORK 3150 and NSB 1104).

KNOW YOUR SAFETY EQUIPMENT: In each lab, learn the exits & evacuation routes, whether a telephone is installed, location of first aid station(s), shower/eyewash stations, spill control materials & fire extinguishers. Learn how to summon assistance from the Stockroom, Campus Police, or EH&S, as appropriate (see below).

KNOW YOUR OWN LIMITS: If you have limited mobility or any condition that may limit your ability to work safely, consult with the lab staff, campus EH&S, and your health care provider. If you carry **medication** that might be needed on an emergency basis (e.g., for diabetes or asthma), inform your lab supervisor or a responsible coworker. Work stations for **physically impaired or temporarily disabled students** are available; if you need these facilities, ask your Instructor.

Emergency Response Information Forms allow students & staff to communicate medical information to emergency responders; blank forms are available in the Teaching Labs Stockrooms.

CHEMISTRY & BIOCHEMISTRY TEACHING LABS

NSB Stockroom (NSB 1104).....**822-4316**
York Hall Stockroom (YH 3150).....**534-0222**

Safety Director (Chem. & Biochem.), Dr. George.....**534-5906**
Safety Coordinator (Teaching Labs), Ms. Kennedy.....**534-0221**

Report all emergencies to campus police: (858) 534 – 4357 (x 44357)

LABORATORY REGULATIONS

Prevent Accidents and Spills

Attentive and considerate behavior is expected at all times. Maintain clean laboratory benches and common areas. Horseplay and pranks are especially dangerous in a laboratory setting and are forbidden at all times. Distractions (such as music, telephones, headphones and ear buds) are forbidden, as they may distract the user from the task at hand or prevent the user from hearing instructions or warnings.

Keep all lab materials and lab gloves away from the **face & mouth**. Never pipet or start a siphon by mouth; this has been a source of serious laboratory mishaps. **Never work alone** in the laboratory and never perform unauthorized experiments. Students are to be in the Teaching Labs only when attended by an Instructor, TA, or member of the lab staff.

HAZARDOUS MATERIALS HANDLING: **Label** all containers with contents (material & concentration) and chemical hazards. **Store** hazardous materials in secondary containers (trays or tubs) and segregate materials according to hazard classes. Store hazardous materials **below eye level** and **return** materials to their proper storage locations. Date containers when first opened.

Special secondary containers are provided for carrying hazardous materials outside the lab or between labs. To obtain a refill from the Stockroom, choose the appropriate secondary container to carry the empty bottle. At the Stockroom, request a refill and carry the filled container back to lab in the secondary container. Return the filled bottle & the carrier to their storage locations.

HAZARDOUS WASTE MANAGEMENT: Hazardous waste containers are provided; choose the correct container for chemical hazardous waste and for all broken glass (& other sharps). Unless explicitly instructed, do not dispose of any waste to the drains. Read labels and ask the TA, the Instructor, or the lab staff person for your course. The Environment, Health and Safety Specialist at the Teaching Labs (see below) or the lab safety staff at UCSD EH&S (x 43660) can also help you find information.

Use **laboratory fume hoods** for all work involving (or producing) flammable, corrosive, fuming or noxious chemicals. Any volatile toxic substance should be opened & used only in a laboratory hood. When in doubt, place the work in a hood and read MSDS.

Respond Appropriately to Accident, Spill, or Sudden Illness

TA must not leave students unattended in the classroom

SUMMON ASSISTANCE and – if you are trained – **ADMINISTER FIRST AID**. Call the Teaching Lab Stockroom (see below) or send an uninjured person with a message. Emergency contact information is posted near each telephone (where available). If you suspect an ambulance will be needed, do not hesitate to call for assistance: **858-534-4357**.

An **ACCIDENT REPORT** is necessary for **any accident or chemical spill**, no matter how minor the incident seems. These records are important in identifying recurring injuries, near misses, or problem areas.

PERSONAL EXPOSURE: If **clothing catches fire** or if a hazardous chemical is **spilled on skin or in eyes**, assist the exposed person to the shower/eyewash and rinse the areas of contact with copious amounts of water for 15 minutes or until assistance arrives; remove contaminated clothing. Call **858-534-4357** or send an uninjured person to notify the lab staff to ensure injuries receive proper treatment.

SPILL CLEANUP: Do not attempt without proper protective equipment. For large or very hazardous spills, call for assistance. For **small spills**, use the spill cleanup kits and PPE provided; consult your lab supervisor and Material Safety Data Sheets for clean up precautions. Double bag and label contaminated materials; store in the Hazardous Waste Area of the lab. Notify the lab staff - disposal will be arranged.

For a **mercury (Hg)** spill use only the mercury collectors provided in the spill kits. **Do not mix mercury with any other waste.**

BUILDING EVACUATION: **Always assure the safety of people before considering any damage to property.** When instructed, leave the lab immediately. **Use stairs, never elevators** (power may fail in an emergency). **Pull the fire alarm** as you exit. At a safe location, call **858-534-4357** and report the situation to the UCSD police. Go to the assigned location for your lab or building (see below). Lab supervisor will take attendance (to assure everyone is safe) and provide this information to responding emergency personnel. Do not leave the area or reenter buildings until instructed to do so. Note any injuries to yourself or others and any remaining dangers. Provide assistance to injured persons, as long as you do not place yourself in additional danger.

FIRE: For clothing fire, respond immediately: douse with shower or smother with fire blanket, fire extinguishers, coat, or towels; call for assistance. Do not attempt to fight equipment/property fires in the lab; evacuate the lab quickly (see **Building Evacuation**); close doors and call for assistance.

EARTHQUAKE: Move away from overhead lights, heavy unsecured objects, and hazardous materials. Choose a sheltered position to wait (under a table, in the frame of a closed door, or against a bearing wall). Once tremors stop, shut down gas lines & heat sources. Exit the building quickly (see **Building Evacuation**).

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