LABORATORY SAFETY

RULES AND GUIDELINES FOR WORKING IN

CHEMISTRY LABS AT OCCC
GENERAL RULES

- Never enter the lab or conduct experiments unless your instructor or a lab assistant is present.
- Know the location of all exits and safety equipment in your lab.
- Horseplay, pranks, or other acts of mischief or disrespect are not allowed.
- No unauthorized experiments or changes to experiments are allowed.
- When in doubt, ask before doing.
GENERAL RULES

- Only your lab notebook, calculator, and pencil are allowed at the lab bench.
  - Store other personal belongings, including cell phones, in the designated storage area.
- Cell phones may not be used for any purpose in the lab.
- Smoking, drinking, eating, chewing gum, applying lip balm or make-up and handling contact lenses are not allowed in the lab.
  - Leave water bottles, cups, etc outside the lab area.
- Wash your hands with soap & water before leaving lab.
PERSONAL PROTECTIVE EQUIPMENT AND PERSONAL ATTIRE

- A lab apron and chemical splash goggles must be worn at all times in the lab.

- You must wear appropriate personal attire in the lab:
  - A shirt with sleeves that covers the entire torso (from the collar bone to below the top of your pants or skirt – front and back)
    - V-neck, scoop neck, and other deep cut shirts (front or back) are not allowed.
  - Pants or long skirt that cover the entire leg
    - Leggings are not acceptable.
    - Pants with rips that are not covered by your apron are not acceptable
  - Shoes that cover the entire foot (top of foot, toes, and heel included)
PERSONAL PROTECTIVE EQUIPMENT AND PERSONAL ATTIRE

- Long, loose sleeves must be secured.
- Hair that is longer than shoulder length must be tied up and secured behind your shoulders.
- STUDENTS WITHOUT APPROPRIATE CLOTHING OR SHOES WILL NOT BE ALLOWED TO PARTICIPATE IN LAB.
- STUDENTS WITHOUT GOGGLES WILL NOT BE ALLOWED TO PARTICIPATE IN LAB.
ACCEPTABLE

Hair longer than shoulder-length must be tied back.

Shirt with round collar is ideal. Button type openings must be buttoned.

Shirt MUST overlap pants by no less than two inches with arms raised over your head. Skin must not be exposed.

Long pants or long skirt required. Jeans are best!

Department-approved safety goggles are required.

Sleeves must cover the shoulder completely. Loose sleeves must be secured.

Waist of pants needs to be appropriately positioned at or above your hips.

Shoes MUST cover your ENTIRE foot. Heels can be no higher than one inch. All laces must be tied. Skin must not be exposed. Tennis shoes are generally best!

If you do not dress similarly to these students, you may not enter the lab!

Please dress appropriately!
UNACCEPTABLE

Loose hair and floppy sleeves can be hazardous around open flames.

Shirts must easily cover your entire torso.

No shorts, capris, or nylon leggings; these do not provide adequate protection. Holes in clothing expose skin and will not be allowed.

Goggles on your forehead do not protect your eyes.

Sleeveless shirts or blouses with only partial sleeves are not permitted.

No boat, scooped, V-neck, or low cut necks, either in front or back allowed.

No slip-ons, Crocs® or similar shoes with perforations, ballet slippers, or open-toed shoes. Skin must not be exposed.

If you dress similarly to these students, you will NOT be permitted in lab.
HANDLING CHEMICALS

- Handle all chemicals as if they were hazardous.
- You may be exposed to potentially hazardous materials in the process of completing your lab activities.
  - Consult your personal physician for advice if you have specific concerns.
- Read labels carefully and follow precautions.
  - Double check that you have the correct chemical before measuring and using.
HANDLING CHEMICALS

- Always use a pipet filler to pipet chemicals, including water.
- Never taste chemicals.
- Never smell chemicals unless directed by your lab instructor.
  - Use the technique of wafting
- Always add concentrated acids or bases to water
  - Never add water to concentrated acids or bases
CHEMICAL SPILLS AND CLEAN UP

- Clean up after yourself.
- Report all spills to your instructor.
- Clean up all spills immediately by following directions provided by your instructor.
- Do not leave chemicals, spatulas, or used weighing paper in the balance area or hood.
- Put away all equipment and glassware.
- Wash your lab bench with water and dry with paper towels at the end of lab.
CHEMICAL WASTE DISPOSAL

- Always follow the instructions given in your lab manual or by your instructor for waste disposal.
  - Ask your instructor if you are unsure of the proper disposal method.
- Solid chemicals should be placed in the red solid waste cans (located on the floor in the lab)
- Liquid waste disposal
  - Inorganic waste – white can in the hood
  - Organic waste – red can in the hood
BROKEN GLASS

- Never pick up broken glass with your hands.
  - Use the hand broom and dustpan or a pair of tongs to pick up broken glass.
- Dispose of broken glass and disposable glass supplies in the broken glass boxes in the lab.
  - Never put paper in these containers!
INJURIES

- Report all injuries to your instructor.

- Treat all body fluids as if there were infectious
  - Assume, for example, they are contaminated with bloodborne pathogens such as the AIDS virus or Hepatitis B

- Do not expose yourself to danger when aiding a fellow student
  - Protect yourself with gloves before handling body fluids

- Seek medical advice for injuries
INJURIES

- Minor cuts
  - Wash with soap and water and bandage appropriately

- Serious cuts
  - Stop blood flow by applying pressure to the wound.
  - Seek immediate medical attention.

- Burns:
  - Cool under running water.
  - Seek medical attention if necessary.
INJURIES

- Chemicals in eyes:
  - Wash eyes at the eyewash for 15 minutes.
  - Seek medical advice.

- Chemical spills on the body:
  - Rinse exposed body part under water.
  - Wash thoroughly with soap and water.
  - Large spills may require the use of the safety shower located in each lab.
FIRES AND FIRE PREVENTION

- Keep flammables away from Bunsen burners and hot plates.
- Never leave a lit Bunsen burner unattended.
- Report all fires to your instructor immediately.
- Try to extinguish the fire yourself only if you are trained and capable.
FIRES AND FIRE PREVENTION

- Small paper fires
  - Extinguish with water or fire extinguisher
- Chemical fires:
  - Smother with sand or fire extinguisher
- Electrical fires:
  - Fire extinguisher only
- Personnel fires:
  - Stop drop and roll
  - Use fire blanket to smother flames
  - Use safety shower