

Proposed Teaching Laboratory Safety Guidelines

A. Laboratory Dress Code:¹ (for cases where a specific dress code is appropriate)

- A.1 In *all* laboratories, students must wear footwear that covers the entire foot during laboratory sessions.
- A.2 *Safety glasses (goggles), hearing protection, and/or gloves must be worn.
- A.3 *A laboratory coat must be worn during laboratory sessions.
- A.4 *Long hair should be tied back to avoid possible injury.
- A.5 *Dangling jewelry should be removed.

*Where required by the activities and/or conditions in the laboratory.

B. Laboratory Conduct Rules:^{1,2}

- B.1 Always conduct yourself in a professional and responsible manner at all times in the laboratory.
- B.2 Follow the instructions of the laboratory instructor.
- B.3 Be familiar with your assignment(s) before you come to the laboratory.
- B.4 Students should never work alone in the laboratory — *unless specifically authorized to do so by the instructor*.
- B.5 Unauthorized experimentation/use of equipment in the laboratory is strictly forbidden.
- B.6 Use caution in the laboratory — and notify the instructor immediately of any unsafe conditions you observe.
- B.7 Under no circumstances should laboratory materials or specimens be removed from the laboratory.
- B.8 Students should never eat, drink, use tobacco products, apply make-up, etc. while in the laboratory.
- B.9 Students are not permitted to bring guests to the laboratory without *prior* permission from the instructor.
- B.10 Female students must notify their physician if they are or may become pregnant while enrolled in a laboratory class (this is a serious safety consideration).

C. Laboratory Safety Rules:^{1,2} *General*

- C.1 All laboratories must have an emergency plan and students must be familiar with this plan.
- C.2 In an emergency, proceed to nearest emergency exit, and then to the designated assembly area.
- C.3 Know the location of all safety showers, eyewash stations, fire extinguishers, emergency exits and MSDS sheets.
- C.4 Student bags, backpacks, etc. must be stored out of the pathway of emergency exit(s) (preferably outside the laboratory).
- C.5 Students must be trained and/or become familiar with all laboratory equipment.
- C.6 Alteration, misuse, and/or destruction of laboratory equipment and/or facilities will result in punitive action.
- C.7 All laboratory work space is to be kept clean.
- C.8 Broken glass, sharp objects, chemical, biological, and general waste must be disposed of in accordance with university regulations.
- C.9 Under no circumstances should chemical or radioactive waste ever be washed down the sink!
- C.10 Only soap, water, and approved biodegradable materials can be washed down the sinks (ask the instructor).
- C.11 Notify the laboratory instructor *immediately* if a spill, fire, injury, or other accident occurs.

D. Laboratory Safety Rules:² *Chemical*

- D.1 All chemicals in the laboratory are to be considered dangerous.
- D.2 Never touch, taste, or smell any chemical (unless you are specifically instructed to do so).
- D.3 Check the label on chemical bottles *twice*, and then take only as much chemical as you need
- D.4 Never return unused chemicals to their original containers.
- D.5 Never take chemicals or other materials from the laboratory area.
- D.6 Never pipette by mouth to fill a pipette. Use mechanical means, such as a pipette bulb or pipette filler.
- D.7 Acids must be handled with extreme care — *always add acids slowly to water*.
- D.8 Handle flammable and/or hazardous liquids over a pan to contain spills.

E. Laboratory Safety Rules:³ *Biological*

- E.1 Handle all biological materials as if these are pathogenic (*i.e.*, could cause disease).
- E.2 Always use specified sterilization practices (never take short-cuts).
- E.3 Always dispose of biological waste in appropriate (bio-hazard) receptacles (*never in general waste bins*).

F. Enforcement: (course dependent)

- F.1 Improperly attired students (*e.g.*, open shoes, no goggles, etc.) will be expelled from the laboratory for that session.
- F.2 Students will be required to demonstrate appropriate safety practices, and this can affect the student's grade.
- F.3 Students will be required to sign a consent form indicating that they will abide by all safety rules.

Notes:

- 1. Adapted from: <http://studenthelp.itee.uq.edu.au/ohs/page3.html>
- 2. Adapted from: http://www.sciencebyjones.com/safety_rules.htm
- 3. Adapted from: http://www.carnegieinstitution.org/first_light_case/horn/labsafety.html

"Lab Rules" hits on Google: (Literature study)

(keywords: Laboratory rules class)

http://www.eiucomm.net/lab/lab.php?page_name=labrules

<http://www.geog.umd.edu/openlab/rules.html>

<http://studenthelp.itee.uq.edu.au/ohs/page3.html>

(keywords: Laboratory rules class)

http://www.sciencebyjones.com/safety_rules.htm

http://www.carnegieinstitution.org/first_light_case/horn/labsafety.html

<http://chemistry.about.com/od/healthsafety/a/aa080104a.htm>

(funny) <http://sciencespot.net/Media/scimthdsafety.pdf>

http://facstaff.gpc.edu/~pgore/geology/historical_lab/labsafety.html

http://nobel.scas.bcit.ca/debeck_pt/science/safety.htm

(segways)

<http://www.labsafety.org/freedocs.htm>