

3.9. Biological Safety in Teaching Laboratories

Teaching laboratories are frequently used for laboratory classes, demonstrations and lectures. Because hazards are present in these areas, the following rules and guidelines are provided to ensure that students and instructors are safe and compliant. These guidelines are intended to assist in outlining the requirements for use of personal protective equipment (PPE), the use of appropriate street clothing, and prohibition of food and drinks in laboratories. The classroom instructor is responsible for ensuring that participants adhere to these rules and guidelines.

3.9.1. Food and Drinks

- No food or drinks are permitted in teaching laboratories at any time.

3.9.2. Personal Protective Equipment (PPE)

3.9.2.1. *When hazards are present or used in the laboratory:*

- The instructor and students must utilize the appropriate PPE for the experiments. Manipulated or observed
- PPE is always used when biological materials are presented and nearby on bench tops.
- Safety eyewear (goggles, safety glasses) must be used to prevent injury or exposure of the eyes.
- Protective clothing (lab coats) must be worn to prevent contamination of the body and street clothes. Protective clothing must be left in the lab or locker at the end of the period and must be decontaminated prior to removal from the lab.
- Appropriate chemically resistant gloves must be used for handling chemicals to prevent contamination of the hands.

3.9.2.2. *When biological demonstrations are being performed for observational purposes:*

- The instructor and audience must be equipped with the appropriate PPE to protect them from the hazards associated with the demonstration.
- Instructors must not deviate from the established procedures or adjust quantities of materials during the demonstration without prior approval.

3.9.2.3. *When hazards are not present in the laboratory (i.e. when all chemicals, biological, or radiological materials are secured in closed containers (chemical cabinets, biological freezers or incubators) and bench surfaces are clean and/or decontaminated:*

- PPE is unnecessary and does not need to be utilized.

3.9.3. Street Clothes

Street clothing and footwear appropriate for laboratory work must be worn by the instructor and students for all activities (including lectures, lab sessions, and demonstrations) because some lectures are followed by lab sessions in the same course.

Street clothing should be chosen so as to minimize exposed skin below the neck. Long pants are required. Avoid rolled up sleeves. Shorts (including cargo shorts), capris, and miniskirts are inappropriate clothing in laboratories.

Shoes must cover the entire foot. Open-toed shoes and sandals are inappropriate footwear in laboratories. Fabric and athletic shoes offer little or no protection from biological spills. Leather shoes with slip-resistant soles are recommended.

When PPE is utilized for laboratory sessions and demonstrations (not lectures) long hair must be restrained and jewelry/watches removed.