



Al-Mustaqbal University
College of Science
Forensic Evidence Department



جامعة المستقبل
AL MUSTAQBAL UNIVERSITY

كلية العلوم

قسم الأدلة الجنائية

المحاضرة الأولى

L

المادة : بايولوجي عملي

المرحلة : الأولى

استاذ المادة : م.م بشرى حسين عطية



General safety rules

1. Eating and drinking are not permitted in the laboratory.
2. All bags or belongings must be kept at the designated places.
3. Perform experiments as directed. Do not try any unauthorized experimental procedure. Follow all verbal and written instructions given by lecturer/lab officers.
4. Be prepared for every practical session. Read the procedure in advance and understand your tasks. Know the hazards before you conduct the experiment.
5. Do not enter any laboratory without permission. Never work alone unsupervised.
6. Always check the location and operation of emergency equipment. This includes eyewash, safety shower, fire blanket and first aid kit.
7. No horseplay or fooling around in the laboratory.
8. Keep noise level to minimum in laboratory. Use of mobile phone is strictly prohibited.
9. Smoking, eating or drinking in the laboratory are strictly FORBIDDEN.
10. Handle all living organisms or specimens used in a laboratory activity in a humane manner. Preserved biological materials are to be treated with respect.
11. Clean your lab bench, put away all equipment and reagents, and wash your hands at the end of each work session.

Personal safety

1. Contact lenses should never be worn in the laboratory because they cannot be removed rapidly if reagents accidentally splash in the eyes.
2. Tie back long hair to keep it away from flames and chemicals.
3. Wear shoes which cover the entire foot. No sandals or canvas shoes. Clothing should not be loose or floppy. Arms and legs should be covered.



4. Wear appropriate protective equipment (PPE). A lab coat and goggles should be worn at all times. In addition, gloves should be used as appropriate.

Laboratory safety

1. Obtain permission from PI/lab officer for work extension after office hour or during weekends. There should be a minimum of two users in the laboratory after 6 pm or during weekends.

2. Read all chemical labels carefully. Read them 3 times: when you pick it up; just before you use it; and after you are finished. Many mistakes resulted from mixing the wrong chemicals. Review Material Safety Data Sheet (MSDS) if needed.

3. Never taste a chemical. Checks odours only if instructed to do so, by gently wafting.

4. Avoid the inhalation of organic vapours, particularly aromatic and chlorinated solvents. Avoid contact with skin and clothing.

5. Take great care while transporting chemicals or specimens from one part of the laboratory to another. Hold them securely and walk carefully.

6. Never take chemicals, specimens, supplies or equipment out of the laboratory without the consent of lecturers/lab officers.

7. Always work in a well-ventilated area. Use the fume hood when working with volatile substances or poisonous vapours. Never place your head into the fume hood.

8. Replace caps on containers immediately after use. Never return unused reagent to the reagent bottle as this will contaminate the reagent. Label your bottles accordingly.

9. Dispose of chemicals properly. Nothing goes down the drain. Container should be available for waste chemicals. Broken glass goes in special receptacles/containers.

10. Clean up spills immediately. This Includes water.

Prevention of fire and accidents

1. While heating chemicals in test tube, never direct the mouth of tubes to yourself or others around you. Do not directly observe the mouth of the test tube or lift up the lid while reaction/heating is taking place.



2. If fire happens during the experiment, stay calm. Inform the lecturer/lab officers and call the fire brigade. Move to the assemble points in an orderly manner. Do not use the elevator.
3. Water is not suitable to extinguish fire cause by organic solvents. Use fire blanket to put off small fire or fire on clothing. For larger fire, use fire extinguisher (Read the manual carefully before operate it).
4. Wash off chemicals splashed or spilled on your skin or body immediately and for 15 minutes. Remove contaminated clothing immediately. Notify your lecturer/lab officers.
5. Treat burns immediately by putting the burned area under cold water for at least 15 minutes. Report all accidents and injuries to lecturer/lab staffs immediately.