

## Safety standards in laboratories

2023-2024

#### المعيار الخامس

The laboratory is the place designated for conducting scientific experiments and research. It is used to collect the data and information necessary to solve problems resulting from a phenomenon, or to know the disease that has affected a person.

#### **What must be followed for safety of biological and chemical materials?**

- Conduct an inventory of microorganisms in the laboratory
- Determine the instructions that must be followed to protect against the negative effects of samples and biological cultures
- Obligate students and others present in the laboratory to adhere to the laws followed in the laboratory
- Obligate students to wear personal protective equipment in the laboratory
- Conduct periodic inventory of chemical and biological materials.
- Update the stock of biological and chemical materials.
- Keep all materials in their original packaging.
- In addition to leaving only the permitted quantities.
- Create and keep a record to list chemical and biological hazards.
- Be careful with handling and storage methods.
- Take the necessary precautions to protect the place and human staff when transporting and storing these hazardous materials.
- Deal with waste periodically.

#### **Proper behavior in laboratories**

- Having appropriate personal protective equipment inside the laboratory.
- Imposing restrictions on entering the laboratory.
- Not handling samples outside the laboratory.
- Knowing emergency procedures.
- Reporting immediately in the event of any leakage, accidents, or injuries.
- First aid.

#### المعيار الخامس

- Knowing what to do in the event of a fire for prevention.

#### **Safety precautions after finishing work in the laboratory**

- Turn off the gas valve immediately.
- Dispose of broken glass.
- Dispose of chemical waste and biological waste
- Return tools, equipment, chemicals, and biological samples to their original location.
- Placing a sign on the trashcan indicating the type of waste contained in it.
- Keeping damaged devices.
- Locking electrical devices and the electrical source after finishing.
- Leaving the coat and personal protective equipment in the laboratory.
- Washing hands with soap.
- Turning off the water tap.

#### **Requirements for achieving safety and security in laboratories**


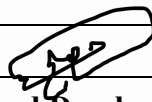

- Determining the location and how to use safety and emergency equipment.
- Determining safety and security procedures in the event of accidents or emergencies.
- Determining the locations of electricity, water, and gas valves in the laboratory.
- Eye wash and first aid locations.
- Identify the location of fire blankets, fire extinguishers, mercury leaks.
- Identify emergency phone numbers.
- Appropriate evacuation plan drills on an organized basis in the event of an emergency.

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المعيار الخامس

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