

## CASPP025- Health and Safety Policy Procedures

### 1. Purpose

The purpose of these procedures is to provide occupational health and safety for both individuals and property. Moreover, they aim to secure the work environment to ensure the prevention of various risks (physical, chemical, biological, mechanical).

### 2. Abbreviations/ Definitions

For the purposes of these procedures, unless otherwise stated, the following abbreviation shall apply:

**CAS:** Colleges of Applied Sciences

**LRC:** The Learning Resource Centre

### 3. Procedures

These procedures aim to ensure the availability of regulations and instructions to meet the health and safety requirements of all the persons engaged in CAS. Moreover, these procedures also seek to create a safe environment on all CAS premises and operating sites. To achieve this, the colleges must take into consideration the following:

#### **First: Health and safety regulations in laboratories of science, biotechnology, and chemical engineering**

1. The Department follows the following safety and health procedures and policies while carrying out work involving the use of hazardous chemicals in laboratories:
  - a) The laboratory area shall be suitable for the intended work as well as for the number of students who will take part in it.
  - b) There will be more than one door in all laboratories.
  - c) The ventilation system in the laboratories shall be suitable for the purpose and be operating efficiently.
  - d) Personal protective equipment shall be provided and utilized, including laboratory suits, gloves, and goggles.
  - e) The laboratories shall be equipped with biosafety cabinets to protect laboratory personnel dealing with samples containing micro-organisms.
  - f) The laboratories shall be fitted with fire extinguishers suitable for the materials, which are to be used for the experiments.



- g) Primary safety guidance shall be provided in regard to each chemical substance.
  - h) Both the staff and students shall be trained in procedures to report chemical injuries and deal with them.
  - i) The operational efficiency of laboratory equipment shall be periodically ascertained, and records shall be kept of the devices which have been checked, to determine the appropriateness of their use.
  - j) The access to the laboratories shall be restricted to authorized persons only, or to instructors or laboratory specialists.
  - k) Labels shall be placed on all containers and cans, indicating at least the contents and risks, which they pose if not adequately dealt with.
    - l) Chemicals that produce odors or vapours are placed under the odor control devices and vapours are removed when used
  - m) Organic solutions, which may not be mixed with water shall never be disposed of in the sewage.
  - n) All containers and cans where the content is not indicated on a label, shall be disposed of at the end of each working day.
  - o) All devices shall be fitted with electric heating controllers to cut off the power supply in the event of the device overheating.
  - p) Students may not wear shoes that exposes their toes or part of their feet in the lab.
2. The Department shall train the students on the use of the equipment and the application of laboratory safety rules at the start of each academic year. The newly appointed specialists shall be trained on the use of the equipment and implementation of laboratory safety rules at the beginning of their appointment.
  3. The Department shall periodically review the laboratory safety plan and constantly update it to keep abreast of changes in laboratory processes and procedures.
  4. When chemicals are stored, used or circulated, the Department shall take into consideration the following:
    - a) Every flammable liquid and chemical shall be stored in containers or cabinets taking into account its physical and chemical properties and in accordance with safety rules and specifications.
    - b) Acid, alkaline, and radioactive materials shall be kept separate.
    - c) Inorganic hydroxide solutions shall be stored in containers made of polyethylene.
    - d) Self-ignition materials shall be kept in cool, dry places.



- e) Chemicals that are affected by light shall be stored in dark-coloured bottles and in cool, dry places.
- f) Poisonous chemicals shall be kept in closed cabinets that may be accessed by authorized persons only.

## **Second: Safety regulations in workshops and laboratories pertaining to the Design and Mechanical Engineering majors**

1. The design of the workshop shall take into account the following:
  - a) All workshop components must be non-flammable.
  - b) All floors must be made from poured-in-place concrete to prevent their being contaminated with petroleum or oil.
  - c) All electrical connections must be secured.
  - d) Workshops must be equipped with a circuit breaker to disconnect the power supply after daily work or in case of emergency.
  - e) Workshops must be equipped with a water supply, wash basin, and drainage system.
2. During workshops, the Department shall take into consideration the following:
  - a) Whatever the reasons, additional electrical connections shall not be installed except by a technician.
  - b) A suitable place shall be allocated in each workshop equipped with metal cupboards to keep the workers' clothes; the clothes shall be for the personal use of the same person and not be shared with others.
  - c) A suitable place shall be allocated for the manual equipment, to maintain, preserve their safe use and to return them after use.
  - d) Free space of at least one meter, shall be provided on each side around any equipment which is being repaired or under maintenance.
  - e) Petroleum substances shall be stored inside the workshop.
  - f) Oil, kerosene, tanner etc. may not be used to wash hands.
  - g) Workers shall be fitted with protective equipment or wear, which is appropriate to each type of work carried out in the workshop.
  - h) The lifting machines which are used in the workshop shall periodically be tested by specialized technicians.
  - i) All the equipment present in the workshops shall be fitted with protective devices which are specially designed to prevent hazards resulting from the use of the said equipment.



- j) Smoking is prohibited inside the workshops, and this shall be indicated with a non-smoking sign.
  - k) All floors shall always be clean and completely free of debris and obstructions; thus no equipment shall be left on the ground.
  - l) Fire extinguishers shall be provided in accordance with the capacities, types and numbers, which are suitable for the size of each workshop.
  - m) Instructions of what to do in the event of fire, including emergency contact numbers, shall be displayed in all workshops.
  - n) Safety valves, counters and indicators of air compressors shall always be checked.
  - o) First aid boxes shall be available in all workshops.
  - p) The Department shall train the students on the use of the equipment and the application of the safety rules in mechanical workshops at the start of each academic year. The newly appointed workshop technicians shall be trained at the beginning of their appointment.
  - q) The Department shall review the workshop safety plan periodically and constantly update it in keeping with standard laboratory processes and procedures.
3. The Department shall abide by the following safety rules:
- a) All equipment must be operated under the supervision of a technician.
  - b) All equipment, tools and furniture must be arranged to enable quick exit in case of emergency.
  - c) First aid boxes must be available in all workshops.
  - d) Protective clothing must be worn.
  - e) Students must be given safety instructions before using any equipment.
  - f) Warning signs must be posted to draw attention to themselves in the working area according to the nature of the laboratory.
  - g) Fire extinguishers must be available in all laboratories with a clear indication of the last service and expiry dates.
  - h) Instructions and procedures in case of fire must be displayed in all workshops, including emergency contact numbers.

### Third: Safety regulations in electrical engineering laboratories

1. In electrical connections, especially of the grounding system, avoid using two-prong outlets (two-hole sockets) and use three-prong ones instead.



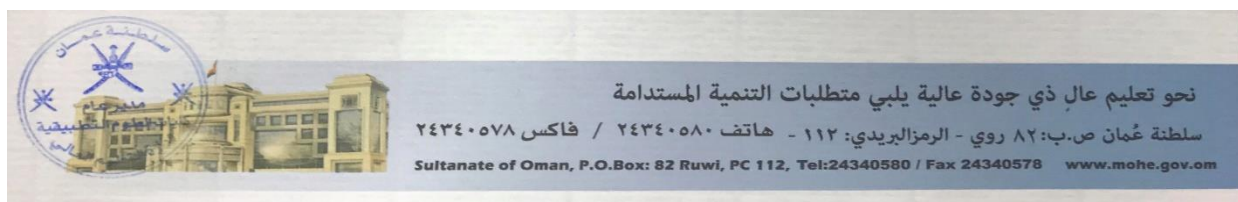
2. Avoid adding any extra voltage to the electric circuits and multipurpose plugs as this could not be guaranteed and may result in negative consequences.
3. Before connecting any equipment to the electrical circuit, it is necessary to ensure that the operating switch/dial of these devices and equipment is in a complete “off” position.
4. Use low voltage to test the soundness/the safety of electrical connections during the experiment in the laboratory and then increase the voltage gradually if the expected result of the experiment is deemed to be accurate.
5. Should the plugs, outlets or cables connected to any equipment be hot before or during use, notify the person or administrator in charge immediately, so that accidents may be prevented.
6. Do not use metal pencils or wear rings when dealing with any electrical equipment.

#### **Fourth: Health and Safety Regulations in the Computer Laboratories and Mass Communication Studios**

1. The Learning Resource Centre (LRC) warns users of laboratories and studios about any malfunction or electric short-circuit in the appliances or the cables.
2. The LRC reports to the Administrative Affairs Section regarding the malfunction of appliances and equipment in laboratories and studios; and in order to do this, coordination with maintenance companies may be required.
3. The computer and educational technologies specialist must make sure that all electronic appliances are switched off before leaving the lab.
4. The LRC is committed to safely discarding used equipment.
5. The computer and educational technologies specialist must monitor the installation of cables, ensuring the ease of movement in labs and studios.
6. The computer and educational technologies specialist must arrange the distribution of equipment and the seating of students in a way that ensures the ease of movement and evacuation in emergency cases.
7. Students must be warned against the dangers of eating or drinking in the labs and studios.
8. Students must be warned against the dangers of attempting to disconnect or install appliances and cables on their own.

#### **Fifth: Health and Safety Regulations in the facilities**

1. The Administrative Affairs Section must periodically inspect the drinking water system in the following ways:





- a) That water tanks are made of stainless materials, are periodically cleaned, and are placed far from any causes or sources of pollution.
  - b) The number of water coolers installed must be proportionate to the number of students in order to provide adequate drinking water to all of them.
  - c) Water coolers must be maintained and cleaned periodically. They must be sealed tight to prevent pollution or abuse, and be kept in clean, shaded places.
2. The Administrative Affairs Section should manage the cleaning services in the following ways:
- a) Making sure that toilets are timely cleaned, using disinfectants, regular provision of soap and tissues, as well as ensuring that air ventilators are working properly.
  - b) Making sure that the toilets are in good working condition and are periodically inspected by maintenance workers.
  - c) Using only one amount and one type of detergents and under the supervision of an expert, ensuring that the cleaning staff use personal, protective equipment mentioned in the approved agreement.
  - d) Using safe organic solvents in the appropriate concentration and following the correct protocol for removing spots and deposits.
  - e) Total avoidance of using petrol or carbon tetrachloride in cleaning.
  - f) Total avoidance of mixing detergents with each other in order to prevent emission of gases or dangerous interactions.
  - g) Posting informative labels on all different types of waste and disposing of them safely.
  - h) Using insecticides to combat insects, rodents, and parasites under the supervision of an expert.
  - i) Placing a “wet area” sign when wiping floors in order to warn people (against the danger of slipping).
3. The Administrative Affairs Section should manage the nutrition services in the following ways:
- a) The staff preparing the food must have valid health certificates.
  - b) Staff who are wounded or suffering from infectious diseases are not allowed to touch or prepare food.
  - c) The staff must commit to abiding by all work instructions and procedures concerning clothes, gloves, and headdresses.
  - d) The relevant officials must be informed about gas leakages.

- e) In order to prevent fires, the relevant staff shall ensure that no grease or fat accumulate on frying pans, boilers, ovens, and stoves.
  - f) The staff shall be trained on how to use fire extinguishers and follow safety regulations at work.
  - g) Cabinets and fridges in the restaurant must be placed and maintained in a manner to prevent food and other stuff from spoiling, being contaminated, or collecting dust.
  - h) In order to avoid congestion and to guarantee ease of movement, the restaurant shall be fitted with multiple selling points or counters.
4. The College's Nutrition Committee shall be chaired by the Assistant Dean for Academic Support Affairs and other members should include the Head of the Student Services Centre, the Head of the Administrative Affairs Section, two male students, and two female students for the purposes of monitoring the nutrition services provided at the College restaurant.
  5. The Nutrition Committee conducts weekly visits to the restaurant and its facilities to ensure that the correct health and safety conditions are in place, and completes the evaluation forms for this purpose.
  6. The Administrative Affairs Section coordinates with the Student Services Centre in regard to posting the safety regulations on the College campus [including court and fields] in the following ways:
    - a) The College court shall be free of sources of danger, which can cause injury, such as uneven or wet (and slippery) surfaces.
    - b) All emergency as well as normal doors shall be unlocked and free of obstacles or barriers as long as students are present.
    - c) Instructions and notices shall be posted advising students to prevent injuries and accidents at miscellaneous places.
    - d) Solid poles in the playgrounds and common areas must be wrapped with sponge to prevent students from injuring themselves.
  7. The College Dean forms a Health and Safety Committee chaired by the Assistant Dean for Academic Support Affairs and includes the Head of the Administrative Affairs Section, the College Safety Official, and a representative from each academic department and center of the College.
  8. The Health and Safety Committee is responsible of the following:
    - a) Giving directives concerning practices to prevent accidents, and determines the need for fire extinguishing equipment and first-aid kits.



- b) Giving directives of safety instructions in laboratories, classrooms, the use of electric outlets, etc., and monitors their implementation as well as the provision of a healthy environment within the college.
- c) Producing a list of safety materials, tools, and equipment, and checks their availability.
- d) Organizing two workshops each semester to raise awareness of health and safety issues (one for students and the other for the staff).
- e) Coordinating with relevant external authorities to organize awareness-raising workshops and the inspection of buildings.
- f) Coordinating with Civil Defence to verify that all buildings meet national safety specifications and requirements.
- g) Studying and reviewing the College's emergency and evacuation plans.

#### 4. Supporting Documents

CAS Executive Bylaws

Guidance and safety manuals in the laboratories

#### 5. The procedure sponsor

The CAS Board of Trustees

#### 6. Approval Dates

In relation to the revision and development of the current policy procedures of CAS's Bylaws, and the regulations and circulars, which govern the work of CAS, the following dates shall be observed:

These procedures were originally approved on: 18/ 10/ 2018

This version takes effect from: 18/ 10/ 2018

These procedures will be reviewed by: 18/ 10/ 2020

#### 7. Procedures' sponsor

The CAS Director General

#### 8. Contact person/office

The Assistant Dean for Academic Support Affairs