

UNIVERSITY OF ENGINEERING AND TECHNOLOGY, LAHORE

ACADEMIC BRANCH



Dated: 05.09.2023

NOTIFICATION

Subject:

<u>APPROVAL OF THE RECOMMENDATIONS OF THE BOARD</u> FACULTY OF CIVIL ENGINEERING REGARDING:

- a. <u>REVISION OF ALUMNI AND EMPLOYER SURVEY FORMS FOR</u> SESSION-2023 & ONWARD
- b. <u>APPROVAL OF REVISED ENVIRONMENTAL, HEALTH AND SAFETY (EHS) POLICY FOR SESISON-2023 & ONWARD</u>
- c. <u>APPROVAL OF KPI ENHANCEMENT OF PEOS & PLOS AT</u> <u>COHORT LEVEL</u>

No.Univ./Acad/M-75/Civil/2023/485. It is hereby notified for the information of all concerned that the Academic Council in its 232nd meeting held on 31.07.2023 has approved the following recommendations of the Board Faculty of Civil Engineering made in its meeting held on 02.05.2023:

a. Revision of alumni and employer survey forms for session-2023 & onward

Alumni and Employer Survey Forms for Session-2023 & onward with a minor correction in the revised Employer Survey Form as given below (copy attached).

No. of Civil Engineers in your organization:

1) < 10 2) 10-19

3) 20-29

4) 30-50

5) > 50

No. of Civil Engineers of UET Lahore (Main Campus) in your organization:

1) < 10 2) 10-19

3) 20-29

4) 30-50

5) > 50

b. Approval of revised Environmental, Health and Safety (EHS) Policy for sesison-2023 & onward

The Academic Council approved revised Environmental, Health and Safety (EGS) Policy for sesison-2023 & onward (copy attached).

c. Approval of KPI Enhancement of PEOs & PLOs at Cohort Level

The Academic Council approved enhancement of KPI level from 3.0 to

3.5 for PEOs and from 60% to 70% for direct assessment of PLOs.

(Ch. Abdul Hameed)
Deputy Registrar (Academic)
for Registrar

Encl: As above.

C.C. to: -

- 1. The Dean, Faculty of Civil Engineering
- 2. The Chairman, Civil Engineering Department
- 3. The Chairman, Civil Engineering Department, Narowal Campus
- 4. The Convener Admission Committee
- 5. The Director Studies
- 6. The Director ORIC
- 7. The Director OEC
- 6. The Controller of Examinations
- 9. Secretary to Vice-Chancellor
- 10. The Director, NFC Faisalabad
- 11. The Principal, Quaid-e-Azam College of Technology, Sahiwal
- 12. The Principal, Swedish College of Engineering and Technology, Rahim Yar Khan

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Department of Civil Engineering





Environment, Health and Safety (EHS) Policy

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1. PEC's Requirement

HEI must ensure that all facilities are maintained and adhered to best practices related to Environment, Health and Safety (EHS). There should be an effective Institute policy on EHS and it should be ensured that all students, staff, contractors, temporary workers and visitors are made aware of their individual responsibilities. In particular, Safety should be observed being practiced; for example, a functional safety management system put in place, safety signage are visible, safety markings are clear and according to standards, fire extinguishers meet the intended function, safety items (eye wash, shower, hazardous disposal place/containers, ventilation, Zero Discharge Policy, etc.) are available and maintained, and exits are accessible during learning sessions. The periodic safety audit of EHS policies/practices shall be conducted on annual basis for appropriate remedial actions. The institute shall promote Green Campus initiatives in line with the environment friendly and sustainable development policies. (PEC Manual, 2019)

2. EHSP Statement

University of Engineering & Technology, Lahore in general and Civil Engineering Department in particular is committed to provide a healthy and safe working and learning environment, and to supporting environmentally sound practices in the conduct of universities activities. It is University policy to comply with all applicable regulations and requirement related to research and teaching in laboratories. All university activities are to be conducted in a manner that ensures the protection of students, faculty, staff and visitors. Health and safety at the work place mean that being safe during working hours is important. It is core responsibility of everyone to adhere the guidelines/ SOP's in order to maintain the healthy environment. Following reasons leads to establish health and safety policies.

• To protect health and safety of employees, students, the local community and the environment.

- To comply with the applicable environmental regulations, as well as institutional policies and procedures.
- To reduce the risk of injury and illness, environmental incidents, property damage and learning interruption.

The EHSP has been developed to comply in general and specifically for laboratories.

3. EHSP Regulations

While every research and teaching laboratory may have different specific requirements for what is needed to ensure a safe and healthy working and learning environment, there are some common requirements for all laboratories. The EHSP include following general requirements

- Training, seminars and workshops for the working group
- Effective planning and regular inspection
- Provision of requires protective tools during work
- Proper waste management disposing of hazardous materials appropriately
- Guideline and policy to report incident and emergency

Specific requirement depend on the materials, equipment and environmental factors unique to each laboratory. Employees must report to their supervisors or relevant laboratory director and correct if possible all safety and environmental concern. Concerned supervisor/ director will make sure that ESHP is that effectively followed. Failure to comply with ESHP policy will lead to disciplinary action.

4. Laboratory Safety Rules and Guidelines

4.1. General Laboratory Safety Rules for Students

- Ensure you are fully aware of your building evacuation procedure.
- Make sure you know where your lab safety equipment including first aid kit, fire extinguishers and safety showers is located and how to use it properly.
- Always work in properly ventilated areas.

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- Open flame should never be used in the laboratory unless you have permission from a qualified supervisor.
- Never eat, drink or smoke while working in Laboratory.
- Read all the safety labels carefully.
- Never use mobile phones in the laboratory. Keep them off or silent.
- Do not use equipment unless you are trained and approved as a user by your instructor.
- Wear safety glasses or face shields when working with hazardous materials and/or equipment.
- Wear safety gloves when using any hazardous or toxic agent.
- Clothing-when handling dangerous substances, wear gloves, laboratory coats/overalls and safety shield or glasses. Shorts and sandals/open shoes should not be worn in the laboratory at any time. Closed shoes are required when working with the equipment.
- If you have long hairs or loose clothes, make sure it is tied back or confined.
- Keep the work area clear of all materials except those needed for your work. Laboratory
 overalls should be hung in the hall or placed in a locker or bag. Extra books, purses, etc.
 should be kept away from equipment.
- Disposal-students are responsible for the proper disposal of used material if any in appropriate containers.
- Equipment Failure-if a piece of equipment fails while being used, press emergency stop,
 report it immediately to your laboratory assistant or instructor. Never try to fix the
 problem yourself because you could harm yourself and others.
- If leaving a laboratory unattended, turn off all ignition source (fuel valves and electrical switches etc.) and lock the door.
- Never pipette anything by mouth.
- If you are the last person to leave the lab, make sure to lock all the doors and turn off all ignition sources.
- Never leave an ongoing experiment unattended.
- Clean up your work area before leaving.
- Always keep the entry/exit of laboratory unlock and clear while working.

- Wash hands before leaving the lab and before eating.
- If you have noticed any unsafe condition in the laboratory, let your supervisor know as soon as possible.

4.2. Dress Code Safety Rules

- Laboratory dress codes set a clear policy for the clothing, Student should avoid wearing in order to prevent accidents/ injuries in laboratories.
- Wear closed toed shoes. Never wear sandals or other open-toed shoes in the laboratory. Foot wear should cover the whole foot.
- Always tie back hairs that is chin-length or longer
- Never wear shorts in the laboratory.
- Make sure that loose clothing/ dangling jewelry is secured or avoid wearing it in first place.

4.3. Personal Protection Safety Rules

- Unlike laboratory dress code policies, rules for personal protection cover what student should be wearing in the laboratory to protect themselves from various hazards as well as basic hygiene rules to avoid any sort of contamination.
- When working with equipments, hazardous materials, glassware, heat and/or chemicals, always wear face shields or safety glasses.
- When handling any toxic or hazardous agent, always wear the appropriate gloves.
- When performing experiments, you should always wear the lab coat.
- Before leaving or eating, always wash your hands with soap and water.
- When using lab equipment and chemicals, be sure to keep your hands away from your body, mouth, eyes and face.

4.4. Practice good Housekeeping and Personal Hygiene

- Avoid direct contact with any chemicals
- Never smell, inhale or taste laboratory chemicals

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- Always wash hands and arms with soap and water after removing gloves and before leaving the work area.
- Never eat, drink, chew gum or tobacco, smoke or apply cosmetics in the laboratory.
- Do not pick up broken glasses with your hands. Use tong or other mechanical means.
- Remove personal protective equipment (PPE) such as gloves and lab coats before leaving the lab.
- Remove glasses before handling common items like phones, instruments, door, knobs
- Keep all work areas clean and uncluttered. Wipe down the benches with cleaners or disinfectants regularly.

4.5. Rules for handling solvents/ chemicals/ hazardous materials

- Since almost every laboratory uses chemicals of some sort, chemical safety rules are
 must. Following these policies help employees avoid spills and other accidents as well as
 damage to the environment outside to laboratory. These rules set a clear procedure for the
 employees to follow in the event that a spill does occur in order to ensure it is cleaned up
 properly and injuries are avoided.
- Every chemical should be treated as though it is very dangerous.
- Do not allow any solvent to come in contact with your skin.
- All chemical should always be clearly labeled with the name of substance, its concentration, the date it was received and the name of person responsible for it.
- Before removing any of the contents from a chemical bottle, read the label twice.
- Never take more chemical from a bottle then you need for your work.
- Do not put unused chemicals back in their original containers
- Chemicals or other materials should never be taken out of the laboratory.
- Chemicals should never be mixed in sink drains
- Flammable and volatile chemicals should only be used in a fume hud.
- If a chemical spill occurs, clean it up right away.
- Ensure that all chemical waste is disposed of properly.

4.6. Rules for Handling Electrical Equipment's/ Units

- Every laboratory contain electronic equipment. Electric safety rules help to prevent the
 misuse of electronic instruments, electric shocks and other injuries and ensure that any
 damaged equipment, cords or plugs are reported to be appropriate so that they can be
 repaired or replaced.
- Before using any high voltage equipment (voltage above 50Vrms ac or 50V dc) make sure you get permission from lab supervisor.
- High voltage equipment should never be charged or modified in any way.
- Always turnoff high voltage power supply when you are attaching it.
- Use only one hand if you need to adjust any high voltage equipment. It's safest to place your other hand either behind your back or pocket.
- Make sure all electric panels are unobstructed and easily accessible.
- Avoid using extension cords whenever you can.

4.7. Handling Waste Material

- Follow the defined policies for disposing hazard and non-hazard wastes.
- Use proper bins for plastic, tins, rubber and organic materials
- Do not drain hazards substances directly in to drain
- Hazard chemicals/ substances must be kept in closed containers in ventilated areas.

4.8. Report Dangerous Activities or Situations

- Report all accidents, no matter how minor to your laboratory incharge.
- Never perform unauthorized work, preparations or experiments
- Never engage in horseplay, prank or other acts of mischief in laboratories
- Never remove chemicals from the facility without prior authorization
- Report suspicious people or activities in lab areas to your lab supervisor

5. SOPs for Safety

5.1. In Case of Injury

Following procedure must be followed in case of injury to a person working in the lab:

- Assess the nature/extent of injury.
- If the injury is small which can be handled using the first aid box provide the first aid to the victim on the spot.
- Do not forget to check the expiry date on the medicines provided in the first aid box.
- If the injury is serious, immediately call the University Health Clinic (UHC) and ask for an ambulance. The phone number of UHC is provided in the Safety Poster.
- Till the time ambulance arrives, try to comfort the patient. You may open the door for fresh air.
- Try not to leave the patient alone.
- When the ambulance arrives, help the paramedics to board the patient, if requested by them.
- Accompany the patient to the hospital.
- Inform the lab supervisor as soon as possible.

5.2. In Case of Fire

- Assess the extent and cause of fire from a safe distance.
- Do not enter in a smoke-filled room.
- If the fire is small, look for the fire extinguisher.
- Test the fire extinguisher before approaching the fire.
- Aim the fire extinguisher at the source of fire, not at the flames.
- Do not use water to put off fire lit due to short circuit.
- If the fire is wide-spread or the area is filled with hazardous chemical or falling debris, leave the place right away.
- Immediately call the FIRE BRIGADE at 16.

5.3. SOPs for Laboratory Supervisor:

- Know all applicable safety rules and regulations, reporting requirements and standard operating procedures associated with laboratory operation and safety.
- Ensure that the laboratory staff under his supervision are practicing the appropriate laboratory safety instructions.
- Prepare the list of consumable items for the laboratory experiments regarding safety and procure the same, before the start of every semester.
- Requisition of consumables shall be submitted to the Director of the relevant laboratory, who in turn shall verify the same and forward these to the Head of Division/Chairman of the Department for necessary action.
- Maintain the permanent and consumable stock registers.
- Report the matter in writing immediately to the Director of the relevant laboratory as soon as he comes to know about the missing/damaged item in the laboratory.
- Any other duty as may be assigned by the Director/Head of Division/Chairman from time to time.

5.4. SOPs for Laboratory Assistant:

- Know all applicable safety rules and regulations, reporting requirements and standard operating procedures associated with laboratory operation and safety.
- Make arrangements for the performance of experiments and assist the teacher during experimentation. Ensure all the students are taking all the safety measures before and during the performance of the experiments.
- Organize the laboratory for oral and practical examinations.
- Report the matter in writing immediately to the Laboratory Supervisor/Deputy Director /Director of the relevant laboratory as soon as he comes to know about the missing/damaged item in the laboratory.
- Any other duty as may be assigned by the Laboratory Supervisor/Director/Head of Division/Chairman from time to time.

5.5. SOPs for Laboratory Attendant

- Know all applicable safety rules and regulations, reporting requirements and standard operating procedures associated with laboratory operation and safety.
- Ensure the cleanliness of the lab and switch off all equipment after use.
- Keep the work areas safe and uncluttered.
- Prepare specimens and samples for testing.
- Take care of the equipment/apparatus of the laboratory.
- Report the matter in writing immediately to the Laboratory Supervisor/Deputy Director
 /Director of the relevant laboratory as soon as he come to know about the
 missing/damaged item in the laboratory.
- Any other duty as may be assigned by the Laboratory Supervisor/Director/Head of Division/Chairman from time to time.

5.6. SOPs for Students performing Experiments

- Make sure that all the safety measures has been taken when crossing the red line to work on machine
- Never work alone: supervisor or lab assistant should be present all the time
- No loose clothing may be worn while working on machines
- Students should be well familiar with exits and access to emergency equipment and approach to them must be clear all the time.
- Every student must be trained on individual machines before they are allowed to work on them.
- Do not work on damaged equipment and report this issue to supervisor

6. Environment, Health and Safety (EHS) Induction Acknowledgement form for Students

- Must be completed and signed before any work is carried out in the Civil Engineering Laboratories
- Access to the laboratory equipment will not be considered if the form is not completed and submitted to the Lab Supervisor/ Lab Director.
- 1. I have read and understood this document. I agree to follow the guidelines/SOPs set out in this document.
- 2. I agree to complete a risk assessment before any experiment is undertaken.

This form is to be signed by the each Student and submit to the concerned Lab Instructor before the performance of any experiment at the start of every semester.

Student Name:	Reg. #	
Student Signature	Date	

7. Environment, Health and Safety (EHS) Induction Acknowledgement form for Lab Instructor/ Lab Staff

- Must be completed and signed before any work is carried out in the Civil Engineering Laboratories
- Access to the laboratory equipment will not be considered if the form is not completed and signed.
- 3. I have read and understood this document. I agree to follow the guidelines/SOPs set out in this document.
- 4. I agree to complete a risk assessment before any experiment is undertaken.

This form is to be signed by the Lab Instructor/Teacher and designated Lab Staff and submit to the Lab Supervisor/ Lab Director before the performance of any experiment at the start of every semester.

Lab Instructor's Name:	
Lab Instructor's Signature	Date
Lab Staff's Name:	-
Lab staff's Signature	Date