



Sir Syed University
of Engineering & Technology

Health and Safety Environment (HSE) MANUAL 2019-2020

Sir Syed University of Engineering and Technology will provide and maintain a safe and healthy environment at all locations and will establish operating practices designed to assure the safety of all

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*“Health and
Safety is our First
Priority”*

Health and Safety Environment (HSE)

Highlights

SSUET is committed to providing a safe environment for its staff, students and legal visitors. Part of this responsibility is the provision and management of fire safety, earthquake evacuation and prevention during terrorist attack systems and procedures. SSUET is also committed to implementing a safety management system on campus that will ensure compliance with the international safety legislation.

1. Fire Safety

Fire safety guidelines and precautions.

2. Earth Quake Evacuation

Safety measures during earthquake and evacuation guideline

3. Criminal or Violent Behavior

Safety techniques and emergency procedure to handle Criminal or Violent Behavior

4. Lab Safety Instructions

Emergency Procedure - Hazardous Materials

5. Everyday Elevator Safety Rules

Emergency Procedure – do’s and don’ts

6. Building Evacuation

General guideline for building evacuation.

7. Health Policy

SSUET health and wellbeing policy

1. Fire Safety

1.1. Purpose

The purpose of this document is to set out the procedure to be followed in the event of a fire alarm activation in **SSUET**. This procedure is designed to ensure the safety of people in buildings during fire by coordinating and controlling building evacuations until the appropriate emergency services arrive.

1.2. Scope

This policy applies to all Block **A, B, C, D, E, F** and **G**:

- all buildings and areas occupied by the University and campus companies,
- all staff,
- all students;
- and, all legal visitors.

1.3. Never Ignore a Fire Alarm (Fire Safety Management in SSUET)

Your first reaction should be to grab your room keys, alert the people around you, and go.

- Act immediately but try to stay calm.
- Stay low in case of smoke or fumes.
- If you're in bed, roll off the bed and crawl to the door.
- Don't waste time getting dressed or searching for valuables.
- Do not attempt to extinguish a fire unless you are trained to do so. Leave firefighting to the professionals.
- To waken anyone who may be asleep, shout, "Fire! Everyone out!"
- Feel the door knob or higher on the door with the back of your hand. If it feels hot, fire may be on the other side of the door, so keep it shut. Stuff clothing, towels, or newspapers in the door's cracks to keep smoke out.

- Even if the door is cool, open it slowly. Stand low and to one side of the door, in case smoke or fumes seep around it.
- If heat and smoke come in, slam the door tightly, stuff clothing, towels, or newspapers in the door's cracks to keep smoke out, and use your alternate way out.
- If you will open a window for your escape, be sure the other windows and door(s) in the room are closed tightly.
- Otherwise, the draft from the open window may draw smoke and fire into the room.
- If the hallway is clear of smoke, walk in a calm manner to the nearest fire exit and evacuate the building.
- Use the stairs – **NEVER** use elevators. Elevators are normally tied to a fire detection system and are not available to occupants once the alarm sounds.
- Stay low to avoid smoke, fumes, and super-heated gases that may have entered.
- Close doors as you leave to confine fire as much as possible.
- If the alarm is not already sounding, pull the fire alarm on your way out of the building. If there is no alarm to activate, yell "fire" as you leave. Move quickly to an open area, away from buildings, trees, power lines, and roadways.
- If your building has a designated assembly area and it is safe, head there. If trapped in a room Retreat. Close as many doors as possible between you and the fire.
- Seal cracks around the door to prevent smoke from entering. If you have a working phone, dial 911 or Virginia Tech Police and report the name of your building or address, the room number, and the fact that you are trapped and need to be rescued.
- Stay on the phone until the fire department arrives at your room. Be prepared to signal from a window but **DO NOT BREAK THE GLASS** unless absolutely necessary (outside smoke may be drawn in). Open the window a few inches for

fresh air and hang a brightly colored cloth or bed sheet out the window to alert the Fire Department to your location. If you have a flashlight, use it to signal at night. If you are trapped on the upper floors of a tall building:

- Put a wet cloth under closed doors to help prevent the spread of smoke.
- If you have a working phone, dial 021-3488000 and report the name of your building or address, the room number, and the fact that you are trapped and need to be rescued.
- Stay on the phone until the fire department arrives at your room. If you must escape through a window and there is no adjoining roof or fire escape, hang from the window by your hands and drop to the ground to shorten the height of the fall.
- If you must break a window to crawl out, use a chair, a drawer, or a similar object.
- Throw a blanket over the windowsill to help protect you from broken glass while crawling out.
- If caught in smoke Drop to hands and knees and crawl or crouch low with head 30" to 36" above the floor, watching the base of the wall as you go.
- Avoid crawling on your belly, because heavier toxic gases can settle and form a thin layer on the floor.
- Hold your breath as much as possible and breathe shallowly through your nose using your blouse or shirt as a filter. If you are forced to advance through flames:
- Hold your breath. Move quickly, covering head and hair.
- Keep head down and close eyes as often as possible.
- If clothing catches fire, stop where you are. Drop to the ground, and cover your mouth and face with your hands to protect them from the flames. Then roll over and over to smother the fire.
- Assemble at the area designated in your departmental Emergency Action Plan, if applicable, and remain there until instructed by a public safety officer or the fire department that it is safe to re-enter the building.

- If there is no designated assembly point, maintain a safe distance from the building to allow ample room for emergency personnel and equipment to access the building.
- Dial 021-3488000 from a safe place and report the nature and location of the fire.
- Follow directions of emergency personnel, if present. Do not go back inside the building until instructed by a public safety officer.
- If you encounter a small fire A small fire is defined as wastebasket-size or smaller. Under special conditions, small fires can be extinguished before there is a full evacuation, if you have been trained and feel comfortable using an extinguisher. The fire must be truly small and controllable and you need both the right fire extinguisher and knowledge of how to use it.
- **NEVER ENTER A SMOKE-FILLED ROOM**, even if it looks free of fire.
- In any case, constantly evaluate and be ready to evacuate if the fire cannot be easily controlled.
- Under all circumstances: Alert people in the area.
- Activate the fire alarm.
- Maintain an accessible exit.
- Avoid smoke and fumes.
- Smother the fire or use the correct fire extinguisher. Aim the extinguisher at the base of the fire. Only trained personnel should use fire extinguishers.
- Use fire extinguisher on small fires **ONLY** if it is safe to do so; otherwise **GET OUT**.
- Remain available to answer questions from public safety officers or the fire department. Contact Physical Plant (Dial 021-3488000) or Facilities Services (Dial 021-3488000) to replace the fire extinguisher. Report all fires to a supervisor.
- Know the location of fire alarms, and learn how to use them.

- Post emergency numbers for the fire department (Dial 021-3488000) near all telephones.
- If your building has a public-address system, listen carefully and follow instructions.
- Never take an elevator when leaving a burning building. Instead, go directly to the nearest fire- and smoke-free stairway.
- If you cannot get to a fire stairway, go to a room with an outside window.
- If there is a working phone, Dial 021-3488000 and report where you are.
- Do this even if you can see fire trucks on the street below.
- Stay where rescuers can see you through the window, and wave a light-colored cloth such as a hand towel to attract their attention.
- If possible, open the window at the top and bottom.
- Be ready to shut the window quickly if smoke rushes in.
- You may need to be patient – the rescue of occupants of a high-rise building can take as much as several hours.

1.4. Portable Fire Extinguishers

Portable extinguishers are universal extinguisher that could be used on a wide range of flammable materials. The alternatives may not be suitable for all hazards in a particular location and it may be necessary to select more than one type. It is, therefore, essential that staff are trained properly to identify different types of extinguisher and to use them.

Professional advice should be sought where metal fires or fires involving gases may be a hazard.

1.4.1. Water Extinguishers

Straight water is suitable for uses on fires of potentially smouldering materials such as wood, paper and fabrics which may leave glowing embers. Water is very efficient at cooling and so re-ignition is unlikely. The extinguishers have a long water jet that can be used to penetrate deep-seated fires.

This type of extinguisher is unsuitable for use on fires involving liquids or gases and in fact could spread a flammable liquid fuel. They should not be used on live electrical equipment, although some water extinguisher nozzles create a spray that will not conduct electricity.

1.4.2. 'Dry' Water Mist Extinguishers

Water mist extinguishers are suitable for use on fires of wood, paper and fabrics, as well as burning liquids, kitchen fat and oil fires and gas fires. They are less effective than traditional water extinguishers on deep-seated fires.

'Dry' water mist extinguishers have been tested to 35kV and can be safely used on electrical equipment as the mist does not conduct electricity and the mist does not tend to form puddles.

1.4.3. Foam Spray Extinguishers

Aqueous Film Forming Foam (AFFF) spray is a general purpose extinguisher which may be used, with appropriate training, on a wide range of materials and flammable liquids.

Foam spray extinguishers are relatively light and can be considered as a replacement for halon 1211 extinguishers in vehicles. They are also suitable, with the correct fire rating, for public service vehicles. If certified with 35kV dielectrically test, foam extinguishers are safe on electrical fires (keep 1m safety distance).

1.4.4. Carbon Dioxide Extinguishers

Carbon dioxide (CO₂) may be used safely on a wide range of flammable liquids and materials including live electrical equipment. Care must be taken, however, to avoid contact with the discharge tube and horn to avoid frostbite because these parts get extremely cold in operation. Choose frost-free horns to avoid the risk of frostbite.

CO₂ is inexpensive but the containers are relatively heavy and the noise of the discharging gas can be alarming to the untrained user. Once the gas has dispersed re-ignition is a possibility. Use of CO₂ is particularly recommended in telecommunication rooms, server rooms and similar applications on board ships.

1.4.5. Powder Extinguishers

General-purpose (ABC) dry powder is an extremely effective extinguisher giving rapid knockdown on flammable liquids. It may also be used on potentially smouldering materials and gas fires. The amount of clean up necessary after use is significant and there is a risk of inhalation and loss of visibility when used in a building.

1.4.6. Training

Staff must be provided with such training in the use of firefighting equipment as appears necessary according to the role they may be expected to play in a fire emergency situation. Training should be provided by a competent person.

1.4.7. Maintenance

Portable fire extinguishers should be maintained at regular intervals and in accordance with the requirements of BS5306 Part 3. Excluded are the P50 maintenance-free extinguishers which only require a visual inspection by the owner.

1.4.8. Fire Extinguisher Instructions

-  P – PULL safety pin from handle.
-  A – AIM (nozzle, cone, and horn) at base of the fire.
-  S – SQUEEZE the trigger handle.
-  S – SWEEP from side to side (watch for re-flash).



Symbols found on fire extinguishers & what they mean

					
	Water	Foam spray	ABC powder	Carbon dioxide	Wet chemical
Wood, paper & textiles 	✓	✓	✓	✗	✓
Flammable liquids 	✗	✓	✓	✓	✗
Flammable gases 	✗	✗	✓	✗	✗
Electrical contact 	✗	✗	✓	✓	✗
Cooking oils & fats 	✗	✗	✗	✗	✓

Type of extinguisher		Type of Fire, Class and Suitability							Comments
Colour scheme	Extinguishant	A Wood, paper, plastics, etc	B Flammable liquids	C Flammable gases	E Energized electrical equipment	F Cooking oils and fats	D** Metal fires		
AS/NZS 1841 -1997 AS1841 -1992	Water							Dangerous if used on flammable liquid, energized electrical equipment and cooking oil/fat fires	
	Wet Chemical							Dangerous if used on energized electrical equipment	
	Foam***					LIMITED*		Dangerous if used on energized electrical equipment.	
	Powder	ABE 						Special powders are available specifically for various types of metal fires (see **).	
		BE 							
	Carbon Dioxide	LIMITED*	LIMITED*					Generally not suitable for outdoor use. Suitable only for small fires.	
	Vaporizing Liquid		LIMITED*	LIMITED*				Check the characteristics of the specific extinguishant.	
	Fire Blanket	Human torch 							

Limited indicates that the extinguishant is not the agent of choice for the class of fire, but that it will have a limited extinguishing capability.
 * Class D fires (involving combustible metals). Use only special purpose extinguishers and seek expert advice.
 ** Solvents which may mix with water, e.g. alcohol and acetone, are known as polar solvents and require special foam. These solvents break down conventional AFFF.

KNOW YOUR FIRE EXTINGUISHER COLOUR CODES B.S.EN3

WATER	FOAM	POWDER	CO ₂ CARBON DIOXIDE	WET CHEMICAL
 Use on Wood, Paper or Textile fires	 Use on Wood, Paper or Textile fires Use on Flammable Liquid fires	 Use on Wood, Paper and Textile fires Use on Flammable Liquid fires Use on Gaseous fires Use on Electrical fires	 Use on Flammable Liquid fires Use on Electrical fires Ventilate after use	 Use on Wood, Paper or Textile fires Use on Cooking Oils and Deep Fat fires
 Do not use on electrical fires Do not use on flammable liquid fires	 Do not use on live electrical equipment Do not use on metal fires	 Use on Gaseous fires Use on Electrical fires	 Do not use on wood, paper or textile fires Do not use on flammable liquid fires Avoid use in a confined space as it will build up when operating	 Do not use on electrical fires Do not use on flammable liquid fires Do not use on gases

1.5. Fire Emergency Evacuation Plan (FEPP) and the Fire Procedure

A fire emergency evacuation plan (FEPP) is a written document which includes the action to be taken by all staff and Student in the event of fire and the arrangements for calling the fire brigade. It can include any relevant information in relation to the FEPP.

1.5.1. General Fire Notice

For small premises this could take the form of a simple fire action sign posted in positions where staff and relevant persons can read it and become familiar with its contents.

1.5.2. Staff Fire Notice

High fire risks or large premises will need more detailed emergency (such as Block A & B) evacuation plan which takes account of the findings of the [fire risk assessment](#), e.g. the staff significantly at risk and their location. In addition notices giving clear and concise instructions of the routine to be followed in case of fire should be prominently displayed.

In certain cases you should nominate persons to implement the fire action plan and give them adequate training in firefighting and evacuation procedures. The following items should be considered where appropriate:

- Fire evacuation strategy
- Action on discovering a fire
- Action on hearing the fire alarm
- Calling the fire brigade
- Power/process isolation
- Identification of key escape routes
- Fire wardens/marshals
- Places of assembly and roll call
- Firefighting equipment provided
- Training required
- Personal Emergency Evacuation Plan
- Liaison with emergency services

1.5.3. Fire Evacuation Strategy

You need to consider how you will arrange the evacuation of the premises in the light of your risk assessment and the other fire precautions you have or intend to put in place.

1.5.4. Simultaneous Evacuation

In most premises, the evacuation in case of fire will simply be by means of everyone reacting to the warning signal given when a fire is discovered, then making their way, by the means of escape, to a place of safety away from the premises. This is known as a simultaneous evacuation and will normally be initiated by the sounding of the general alarm over the fire warning system.

1.5.5. Vertical Phased Evacuation

In some Blocks premises, the emergency arrangements are designed to allow people who are not at immediate risk from a fire to delay starting their evacuation. It may be appropriate to start the evacuation by initially evacuating only the area closest to the fire and warning other people to stand by. This is normally done by immediately evacuating the floor where the fire is located and the floor above. The other floors are then evacuated one by one to avoid congestion on the escape routes. The rest of the people are then evacuated if it is necessary to do so. The fire warning system should be capable of giving two distinctly different signals (warning and evacuation) or give appropriate voice messages. Horizontal phased evacuation in hospitals and care homes: the floor maybe divided into a number of fire resisting compartments and the occupants are moved from the compartment involved in fire to the adjacent compartment and if necessary moved again. Depending onto the fire situation it may eventually be necessary to consider vertical evacuation. Because of the extra time this type of evacuation takes, other fire precautions maybe be required. These include:

- voice alarm systems
- fire control points
- compartmentation of the premises using fire-resisting construction
- sprinklers in buildings where the top floor is 30 metres or more above ground level

1.5.6. Staff Alarm Evacuation (Silent Alarm)

In some cases it may not be appropriate for a general alarm to start immediate evacuation (Seminar rooms). This could be because of the number of members of the public present and the need for the staff to put pre-arranged plans for the safe evacuation of the premises into action. In such circumstances a staff alarm can be given (by fire records, personal pagers, discreet sounders or a coded phrase on a public address system etc). Following the staff alarm, a more general alarm signal can be given and a simultaneous or phased evacuation started. The general alarm may be activated automatically if manual initiation has not taken place within a pre-determined time.

1.6. Action on Hearing the Fire Alarm

On discovering a fire, it is the duty of every person to sound the nearest fire alarm immediately. The plan should include the method of raising the alarm in the case of fire.

The plan should instruct all personnel upon hearing the fire alarm to act in accordance with the agreed FEEP strategy and if a fire warden's scheme is in force, they, on hearing the alarm, should proceed to pre-determined positions to assist members of the public and staff to leave the building by the nearest safe route.

Lifts and escalators should not be used due to possible electrical failure unless they are part of a Personal Emergency Evacuation Plan.

Personnel should not re-enter the building with the possible exception of the Fire Team.

1.6.1. Calling the fire brigade

The Fire Service should also be informed immediately, either by switchboard operator or person discovering fire, dependant on conditions:

- Work Time – Switchboard operator to be familiar with the emergency evacuation plan, also should ensure necessary extensions switched through when switchboard is unattended.
- Other Times – Remainder of Staff (Cleaners, caretakers etc) also to be familiar with procedure. In any case the most senior official should ensure that Fire Service has been called.

1.6.2. Power/process isolation

Close Down Procedure – Adopt your own ‘Close Down’ procedure as appropriate

1.6.3. Identification of key escape routes

In premises where members of the public or persons unfamiliar with layout of the premises are present there should be means available to identify the key escape routes. They could include schematic drawings and most importantly emergency escape and [exit signs](#).

1.6.4. An Example Fire Escape Plan

The following fire escape plan was provided by silver bear fire.



1.6.5. Fire Wardens/Marshals

The Responsible Person should nominate employees to implement certain fire safety measures which will include the fire evacuation. The general term used for these people are fire wardens or fire marshals.

The need for fire wardens depends on the size and complexity of the premises. You may require one on each floor or department with a chief fire warden coordinating their actions to make sure all persons are accounted for in the event of a fire. They also require [special training](#) above the needs of the normal employee, this training could be in house or by an external fire training organisation. They should be competent in the use of fire extinguishers and be capable of extinguishing small fires. They should have some knowledge of fire prevention and be able to identify possible fire hazards to prevent fire from occurring. Finally they should have an in depth knowledge of the FEPP and their role in implementing it.

1.6.6. The duties and responsibilities of Fire Wardens/Marshals

A senior official in each building [Chief Fire Warden/security] should be given the responsibility of maintaining a high standard of fire precautions and the overall responsibility for the action in the event of fire. He/she should have a nominated deputy.

Evacuation fire wardens should be appointed for each room/department/floor as applicable and each warden should have a nominated deputy.

Fire Wardens/Marshals should be responsible for

- Fire routine and evacuation drill procedure
- Ensuring personnel know location of fire alarm points.
- Ensuring regular use of primary and secondary escape routes.
- The close down procedure
- Procedure for nominated staff to assist employees and members of the public to nearest exits.

A senior fire warden/marshall should be made responsible for ensuring that notices are correctly sited the fire emergency evacuation plan is properly distributed and understood by all.

1.6.7. Assembly Points and Roll Call

Personnel should assemble at a pre-determined assembly point.

1. Pre-determined assembly points should be arranged and a roll call of staff to be taken. The person who is in charge of the assembly point should report to the

- person who has been nominated the fire service liaison person indicating all persons accounted for or who's missing and where they were last seen.
2. Another consideration when selecting the location for an assembly point is to fully understand the fire emergence evacuation plan. Calculate the number of staff that would need to assemble and if it was a multi-occupied building you would need to co-operate with the other occupants.
 3. It is also very important to be familiar with the surrounding topography.
 4. The assemble point should be far enough away from the building not to put staff in danger of radiated heat and falling debris. Give ample room so you do not interfere with firefighting operations and do not jeopardize the actions of the fire service.
 5. Be close enough to ensure that the nominated person who is in charge of the assembly point can communicate with the nominated fire liaison person who should be located near the main entrance. This could be simple talking to him direct or the use of runners or electronic communications (pack sets, mobile phone)
 6. The area chosen should be larger enough to accommodate all the staff, if this cannot be found you may have to consider additional sites. Open areas are ideal like pedestrian areas, car parks could also be considered but be aware of the dangers.
 7. The assembly point should not be in an enclosed area and the staff should be able to disperse without the need to pass close to the premises on fire.
 8. Inclement weather needs to be considered and some form of shelter or other weather protection may be necessary as the staff are most likely to have evacuated without collecting their out of doors clothing.
 9. Use appropriate signs where this is feasible as it leaves no doubts in the minds of staff

1.7. Firefighting Equipment Provided

A nominated fire team, if available, or any trained competent person should, where possible, attack fire with appropriate equipment, however, firefighting is always secondary to life safety. **DO NOT PUT ANY PERSONS AT RISK.**

1.7.1. Training required

The emergency evacuation plan should be the subject of frequent training so that all employees are familiar with its contents and there should be regular evacuation drills. You are required to carry out this fire training and it is recommended that you keep a

record of the results of that training. This will assist you if you are ever required to prove your actions in the future.

Drills should be carried out using varying escape routes assuming the normal evacuation route is not available.

1.7.2. Personal Emergency Evacuation Plan (PEEP)

In order to assist disabled or sensory-impaired people to escape from fire it may be necessary for staff to be trained in the correct procedures to cope with this eventuality. Advice on the specific needs of disabled and sensory-impaired people can be obtained from organisations representing the various groups. The address and telephone number of these organisations can be found in the telephone directory, listed under the appropriate disability. You must take account not only of the people in your premises (employed or otherwise) who may be able to make their own escape, but also those who may need assistance to escape, e.g. by having adequate staffing levels, especially in premises providing treatment or care.

1.7.3. Liaison with emergency services

You should prepare all the necessary contacts with external emergency services and make them familiar with your fire action plan.

As mentioned earlier there should be a senior person nominated to meet the fire and rescue service when they arrived to provide them with any information they require. She/he should have an intimate knowledge of the premises and be in contact with the person conducting the roll call at the assembly point.

2. Earth Quake

2.1. Purpose

The purpose of this section is to set out the procedure to be followed in the event of an earthquake in SSUET. This procedure is designed to ensure the safety of the student/staff in campus.

2.2. What to do

1. Earthquake Tips for People with Disabilities and Other Access and Functional Needs
2. Seven Steps for Earthquake Safety - For University Students
3. Great Shake Out Poster
4. Emergency Preparedness List
5. Seven Steps to a Disaster Resilient Workspace
6. Putting Down Roots in Earthquake Country

2.3. If You Are Inside a Building

1. Duck under the nearest sturdy object and hold onto it until the shaking stops. If you are not near a sturdy object, make yourself as small as possible and cover your head and neck.
2. If you stand in a doorway, brace yourself against the frame and watch out for a swinging door or other people.
3. Avoid windows, filing cabinets, bookcases and other heavy objects that could fall or shatter.
4. Stay under cover until the shaking stops, and then leave the building.
5. If it is safe to do so, stabilize any laboratory procedure that could lead to further damage, such as turning off burners or electrical equipment.
6. Evacuate the building if told to do so by building staff or emergency responders.

2.4. If You Are Outside a Building:

1. Move away from trees, signs, buildings, electrical poles and wires.
2. Protect your head with your arms from falling bricks, glass, plaster or other debris.
3. Move away from fire and smoke.
4. Proceed to your designated evacuation meeting point if safe to do so.
5. Stay alert for further instructions.

2.5.If there is a Disaster such as Earth Quake

- Elevators should be equipped on the inside with devices for manually opening doors, similar to the emergency doors on trains, so that people can escape safely.”
- Evacuate using the stairs, not the elevators.
- (In the event of an earthquake, the University’s elevators are programmed to stop automatically.)
- If you are trapped in an elevator, use the emergency numbers to call for assistance. All campus elevators have emergency numbers which connects directly to University Dispatch.
- If the elevator emergency number is not responding, turn on the emergency alarm (located on the control panel) to signal your need for help.
- Try to obtain accurate information and avoid doing things alone when possible.
- Work together to provide first-aid to injured persons and extinguish fires.
- Confirm that family members are safe and notify the University of your own safety
- Move away from things that fall over easily and watch out for falling objects.
- Don’t move unnecessarily and confirm safety.
- Open emergency exits and doors and maintain the evacuation exit.
- Evacuate on foot, taking as few personal effects as you can.
- If you are handling fire, move away from the flame. Once the shaking has stopped, remain calm and proceed to extinguish the fire.

2.6.Immediately after an earthquake

- Move away from windows and shelves where the glass may shatter or the contents might jump out.
- Either crawl under a desk or cover your head with a bag or a piece of clothing to protect your head, arms and legs from falling objects.
- If possible, persons near doors should open the door and secure the exit.
- When handling fire, such as during an experiment, make your own safety your top priority and step away from the fire for the moment. Similarly, when using chemicals, step away from the chemicals for the moment.
- When you are in a place where there are no falling objects, such as a courtyard or sports field, sit down and wait for the shaking to stop.
- Carefully check conditions and give first priority to your safety.
- Stay away from electrical poles and vending machines, and watch out for falling objects.

2.7. When the shaking stops

- Remain calm and maintain composure.
- When using fire, put out the flame without panicking.
- Is there a fire? If there is a fire, extinguish the fire with the help of others while maintaining a safe distance. If you determine that it will be difficult to extinguish the fire, move away from the fire.
- Is anyone injured? If someone is injured, provide first-aid with the help of others while maintaining a safe distance, and notify the administration office.
- Check building slants and cracks in the walls.
- In case of aftershock, observe the situation for a while without panicking.

2.8. When things calm down

- As a general rule, do not try to go home unreasonably but rather, remain at the University and/or evacuation sites until the aftershock has subsided and it has been confirmed that it is safe to go home.
- A safe distance to walk home if you are in the middle of your commute is set at within 10 km. You should confirm the distance between your home and the University and what route you take beforehand.
- When trying to gather information, do not be confused by chain mails or rumors. Instead obtain accurate information from the University, public agencies, television, or the radio.
- If everyone rushes home at the same time, there will be traffic jams everywhere. It is important to remain calm. Ensure your safety first, and then make your way home.
- Walking speed during disasters is approx. 2.5 km/h. It takes 4 hours to walk 10 km
- It is dangerous to move around after sunset. Do not go out alone at night to protect yourself from potential injury or crime.

Emergency Contact Details

Block E:

Block F:

Block G:

3. Criminal or Violent Behavior

3.1. Purpose

The purpose of this section is to set out the procedure to be followed in the event of a fire alarm activation in SSUET. This procedure is designed to ensure the safety and peace in campus. SSUET, owned, or controlled property; from crime reports received in response to written requests sent to non-police campus security authorities; and from reports received through established reporting guidelines. The report also includes disciplinary referrals to Student Conduct for drug, alcohol, weapons, and other crimes not otherwise reported as an arrest or crime.

3.2. Types of Crimes

The types of crimes or incidents collected include the following:

- Homicide
- Aggravated Assault
- Sexual Assault
- Robbery
- Burglary
- Motor Vehicle Theft (Stolen vehicles, damaged, painting)
- Arson
- Weapon Violations (e.g. Possession, Brandishing)
- Alcohol Violation (e.g. Minor in possession)
- Drug Violations
- Hate Crimes

Immediately call Campus Security if you are the victim of or witness to any of the following:

- Assault
- Verbal or other threat of bodily harm
- Suspicious activity
- Crimes in progress
- Weapons violations

- Activities presenting a serious risk to the individual or others

To report non-emergency crimes (such as vandalism, parking violations, etc.) or for general questions, call University Police at **021-3488000**, 24 hours a day.

When reporting a crime, be sure to provide the following information to the dispatcher:

- Nature of the incident.
- Location of the incident.
- Description of the person(s) involved. Be specific (features, clothing, etc.)
- Description of the property involved.
- If the suspect has left the scene, their last known path and means of travel.

3.3.If There Is an Explosion:

Take cover under sturdy furniture, or leave the building if directed to do so by emergency responders.

- Stay away from windows.
- Do not light matches.
- Move well away from the site of the hazard to a safe location.
- Use stairs only; do not use elevators.
- If You Receive A Bomb Threat:
 - Stay calm and try to keep your voice calm.
 - Pay close attention to details. Talk to the caller to obtain as much information as possible.

3.4.Take Notes. Ask questions:

Call **021-3488000** and submit your notes from the telephone call or the bomb threat letter or note to University Police. Follow any instructions the Police give you.

If you are told by emergency responders to evacuate the building, follow the evacuation topped above with the following additional steps:

- Check your work area for unfamiliar items. Do not touch suspicious items; report them to campus authorities.
- Take personal belongings when you leave.
- Leave doors and windows open; do not turn light switches on or off.
- Use stairs only; do not use elevators.
- Move well away from the building and follow instructions of emergency responders.

3.5. Emergency Procedure - Shooting

In the event of a shooting on campus, immediately take the following steps for your own safety:

- Leave the area as quickly as possible.
- Watch and listen for the suspect to stop shooting and reload.
- Take cover, hide or play dead if you can't escape.
- Take shelter in a secure area with:
 - At least 2 exits.
 - Doors that can be locked to prevent access.
 - Telephone.
- Turn cell phone to vibrate.
- Look for chances to escape.
- Call **021-3488000**.
- Attack the suspect only as a last resort.

4. Lab Safety Instructions

4.1. Purpose

The purpose of this section is to set out the procedure to be followed in the labs in SSUET. The following information is intended to make you better informed; formal training is required for regular access to the laboratories.

4.2. Lab Safety Guide

- Always wear shoes in the laboratory. DO NOT WEAR SANDALS or perforated shoes.
- Always wear long pants. DO NOT WEAR SHORTS in the laboratories.
- DO NOT RUN in the laboratory areas (to avoid collision with people who may carry chemicals).
- DO NOT work alone in the laboratory if you are working with hazardous materials.
- DO NOT drink water from any sources other than drinking fountains or kitchens.
- Do not leave a mess. Always check and wipe down your area.
- Do not cover up accidents—they happen. When they do, post a no admittance sign detailing the hazard. Do not move the problem out of the area.

4.2.1. Plan Your Work

- Before conducting any experiment, you should access the hazards related to the work, including; what are the worst possible things that could go wrong, how to deal with them, and what are the prudent practices, protective facilities and equipment necessary to minimize the risk of exposure to the hazards.
- Always know the hazards of the materials used (e.g., corrosivity, flammability, reactivity, and toxicity).

- Post a sign on the door to notify others of the lab hazards and list emergency contact numbers.
- Inspect equipment and apparatus for weaknesses, cracks or damage before beginning work.
- Inspect electrical equipment and cords for frayed wiring or damage before use. Discard or repair damaged equipment before use.

4.2.2. Follow All Safety Procedures

- Always wear chemical splash goggles for eye protection when working with chemicals.
- When pouring large quantities of hazardous chemicals, in addition to goggles, wear a face shield large enough to protect your ears and neck as well as your face.
- Always wear gloves when handling chemicals. Select the glove material based on compatibility with the chemicals you may contact.
- Always wear appropriate clothing: chemically resistant lab coats or aprons are recommended.
- Do not wear shorts or miniskirts (anything that would leave your legs bare and unprotected). Do not wear high-heeled shoes, open-toed/heel shoes, sandals or shoes made of woven materials. Confine long hair and loose clothing.
- Do not work with hazardous chemicals or processes when alone in the laboratory. An instructor must supervise undergraduate students at all times.
- Always use chemicals with adequate ventilation or in a chemical fume hood. Do not allow the release of toxic substances in cold rooms or warm rooms, since these areas have contained, re-circulated air.
- Use chemicals only as directed and for their intended purpose.
- Never use mouth suction to fill a pipette or siphon. Use a pipette bulb or other suitable device.

- Handle needles, syringes and other sharps carefully. Use self-sheathing needles or needless systems whenever possible. Dispose of all sharps in an appropriate sharps container.
- Do not dispose of chemicals down the drain. Most chemicals must be disposed of as hazardous waste.
- Compressed gas cylinders must be secured to prevent them from being knocked over. Cylinders must be capped when the regulator is removed or not in use.
- Inspect the lab weekly for hazardous conditions.
- Shield or wrap pressurized or evacuated equipment (dewars & vacuum flasks).

4.2.3. Know Emergency Procedures

- Know where the nearest emergency eyewash and showers are, and how to use them.
- Know at least two exits from the laboratory area in case of an emergency.
- In the event of an emergency, pull the nearest "Pull BOX", evacuate the area, and close all doors.

4.2.4. Practice Good Housekeeping and Personal Hygiene

- Avoid direct contact with any chemical.
- Never smell, inhale or taste laboratory chemicals.
- 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 glass with your hands. Use tongs or other mechanical means.
- Remove Personal Protective Equipment (PPE) such as gloves and lab coats before leaving the lab.

- Remove gloves before handling common items like phones, instruments, door knobs, etc.
- Keep all work areas clean and uncluttered. Wipe down benches with cleaners or disinfectants regularly.
- Do not block emergency showers, eye washes, exits or hallways.

4.2.5. Unattended Operations

- Provide for containment of materials in the event of spills or failures.
- Label all containers and process equipment.
- Post emergency numbers on the lab door.
- Keep lab lights on.

4.2.6. Report Dangerous Activities or Situations

- Report all accidents, no matter how minor.
- Never perform unauthorized work, preparations or experiments.
- Never engage in horseplay, pranks or other acts of mischief in laboratories.
- Never remove chemicals from the facility without proper authorization.
- Report suspicious people or activities in lab areas to University Police.

5. Everyday Elevator Safety Rules

In general, it comes down to common sense and courtesy when using an elevator. By being aware of your surroundings and watching out for fellow passengers you can make riding an elevator safe for everyone. You should use the following behaviour to keep safe:

5.1. The Do's:

- Do make sure you know the floor you need to visit before getting on the elevator
- Do pay attention to the call button to make sure you are going in the right direction
- Do stay calm if you are going in the wrong direction. Either push a floor button to step off or remain on the elevator until it reaches its destination, so you can proceed to your floor
- Do take extra caution if you use a cane or walking device to avoid trips
- Do take note of others using a cane or walking device to avoid knocking them when trying to get on or off the elevator
- Do pay attention when getting on or off an elevator so you don't trip, especially when leaving an elevator as it can stop slightly below or above the floor level
- Do hold onto the handrail
- Do stand next to the walls and away from the doors to allow others to get on and off more easily
- Do use common courtesy when getting on and off an elevator to ensure no one is pushed or injured due to your rushing
- Do be patient and allow passengers to completely leave the elevator before you try to step in
- Do ensure you are holding small children and pets, so they don't get crushed
- Do hold the hand of children when exiting to make sure no one gets left behind
- Do make sure large knapsacks and bags are close to you to avoid them getting caught when the doors close
- Do press the door open button if someone is taking longer to get on or off the elevator.

5.2. The Don'ts:

- Don't use an elevator if a fire alarm has gone off; always take the stairs to be safe
- Don't stand near the doors if the elevator is empty to allow other people to board more easily

- Don't push your way into a crowded elevator, just wait for the next one as the elevator is probably at its maximum capacity
- Don't engage in horseplay such as messing with the controls, pushing, shoving, excessive noise, swearing, smoking, etc.
- Don't lean on the doors or push someone into the doors
- Don't put your hand in the doorway to stop the doors from closing
- Don't board a crowded elevator if you are burdened with groceries, a knapsack or anything that will make it uncomfortable for others
- Don't use the close door button to avoid shutting the doors on someone accidentally
- Don't forget to push your floor button so you don't miss your stop

5.3.Elevator Emergencies

As we already mentioned elevators are very safe but because they are mechanical there is always the chance something could interfere with smooth operation. In some cases, their operation can also be affected by weather and blackouts. Regardless of the situation, elevators are still safe even if they stop unexpectedly or get stuck. You should know what to do if you encounter an elevator emergency to make sure you don't endanger yourself or other passengers. Follow these emergency do's and don'ts:

5.3.1. The Elevator Emergency Do's:

- Do stay calm, you are safe and someone will come to help soon
- Do help keep others calm
- Do try to push the door open button and if the doors open, look to see where you are and if you can safely exit the elevator
- Do push the emergency button or use the intercom or phone provided to contact the emergency service, who will let you know what to do and can find you safely and quickly
- Do wait for help if it is not safe to exit
- Do make yourself comfortable and relaxed, as help is on the way

5.3.2. The Elevator Emergency Don'ts:

- Don't panic if the elevator stops between floors or gets stuck
- Don't try to climb out of the stalled elevator unless the doors open, and you can see you are safe to do so

- Don't panic that you will run out of air because it is circulating and will not run out
- Don't panic if you do not hear someone responding to your emergency call via the elevator system because there are some communication systems that only allow you to speak but cannot respond
- Elevator safety is all about using your manners and making sure you are aware of your surroundings. Being courteous will help you avoid hurting others inadvertently, as will staying calm and assisting those who might need more time to get on or off the elevator.
- Follow instructions in lift.

6. Building Evacuation

Building occupants are required by law to evacuate the building when the fire alarm sounds or when directed to do so by emergency responders.

Upon the sounding of a fire alarm or other evacuation alarm, all building occupants shall immediately leave the building and proceed to the area indicated on the posted evacuation directions. Occupants will only be allowed to return when the building has been declared safe by emergency responders.

When Evacuating Your Building or Work Area:

1. Stay calm. Do not rush or panic.
2. Safely stop your work.
3. Gather your personal belongings if it is safe to do so. Take prescription medications, keys, purse, glasses, etc. with you if at all possible as it may be hours before you are allowed back into the building.
4. If safe, close your office door and window, but do not lock them.
5. Use the nearest safe stairs and proceed to the nearest exit. Do not use the elevator.
6. Proceed to the designated evacuation meeting point.
7. Wait for instructions from emergency responders.
8. Do not re-enter the building or work area until you have been instructed to do so by emergency responders.

7. Health Policy

7.1. 'We Care' – Our Health Policy

Employee health is a top priority at SSUET, and under the “We Care” program run by the Medical Department day to day health care of Faculty, Staff and Students the goal is that include but not limited to:

- Ensure access to primary health care.
- Provide a system for dealing with crisis medical situations.
- Provide mandated screening and immunization monitoring.
- Provide systems for identification and solution of students' health and educational problems.
- Provide comprehensive and appropriate health education.
- Provide a healthful and safe university environment that facilitates learning.
- Provide a system of evaluation of the effectiveness of the school health program.

7.2. Awareness Campaigns

Vaccination awareness campaigns are being planned in line with the World Health Organization, National Health Program and Expanded Program for all at SSUET to be aware of the ills of/and for them to take preventive measures for Immunization and protection against Hepatitis-B and other highly infectious diseases.

7.3. Medical Facilities

The Medical Department regularly conducts Awareness sessions on First Aid and Personal Hygiene with an aim to reduce the occurrence of diseases, lowered absenteeism, and increased employee efficiency.

7.4. Other Health and Well-being Policies

This policy statement provides a framework within which the University will encourage and facilitate working practices and services that support employee well-being. It aims to draw upon good practice, recognising existing informal arrangements around campus, and to be flexible rather than prescriptive.

It is vital of course that each employee, regardless of their role or status, makes a full contribution to the University, but it is recognised that flexibility and diversity of working practice derives mutual benefits. There is abundant evidence that a flexible approach to working patterns may have significant organisational benefits, including reduced absenteeism, improved morale and greater productivity.

This policy statement is also applicable to all staff but recognises the diversity of contractual and other working arrangements that exist. The policy statement is complementary to the University values and established policies & procedures including:

- Working Together: A strategy for success
- Values for Working Together and Professional Behaviours
- Code of Good Practice (Valuing Ourselves and Others)
- Diversity & Inclusion
- Disciplinary
- Employee Assistance Programme
- Family Leave
- Flexible retirement
- Flexible working
- Grievance
- Harassment including Harassment Advisers
- Health Advocacy Respect Advisers
- Health and sickness absence reporting procedures
- Mediation
- Occupational Health
- Performance Management
- Restructuring
- Stress at work and associated guidance

8. References

Health and Safety Environment (HSE)

Policies & SOP has been designed based on top ranked International universities practices and current country conditions

- Oxford University, UK (Terrorist Attack)
- Michigan Technological University, US (Evacuation Policy)
- Dublin City University, Ireland (Fire safety)
- University Teknologi PETRONAS, Malaysia (Lab Safety)
- University of Bristol, UK
- UC SANTA CRUZ REGENTS OF The University of California (criminal safety)
- Stony Brook University NY (Lab Safety)
- Others

9. Emergency Contact Numbers

Phone Number Emergency

Police	Phone Number
Emergency Helpline	15
Bomb Disposal Squad	39212690
Fire Brigade	Phone Numbers
Emergency	16
Ambulance	Phone Number
Edhi Ambulance	115
Al-Mustafa Welfare Trust	34820101-7
Services Alamgir Welfare Trust	34852055-60
Chhipa Ambulance	1020
Aman Ambulance Service / Foundation	1021
Fatmid Foundation	32225284- 32258656- 32256036 – 32253323
St.John Ambulance	32250500- 32250600
Red Crescent	35836275 / 35830376
Sui Gas	Phone Number
Central Emergency Center	99231630-4
Help Line	1199
Gulshan Zone	99231576
Nazimabad Zone	36649946-47-48
Hospitals	Phone Numbers
Abbasi Shaheed Hospital	99260403
Aga Khan University Hospital	021-34930051 ext 1091
Dr. Ziauddin Hospital	32851433 32851430 32851431 32851432
Liaquat National Hospital	34939615 34939612 34939613 34939614
Karachi Cardiac & General Hospital	34938241, 43, 47
KESC	Phone Number
Emergency	118

Chief Fire Officer KMC	37773252
Central Fire Station	99215007, 99215008, 37724891, 37724892
Gas Fire Station	34934881, 34934882

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