

Health & Safety Technical Guidelines

HS-TG-05

Offices and Classrooms Safety

Produced by

HSS – Facilities & GS Department

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1 Purpose

The purpose of this document is to protect the health and well-being of all Qatar University (**QU**) staff, students, and visitors, and to prevent damage to property, equipment, facilities, and the environment associated with office, classroom and administrative activities.

This document provides guidelines on the application of the requirements and principles of QU Environment Health Safety Management System (**HSMS**) to activities associated with these QU workplaces.

2 Scope

This HS Technical Guideline applies to all operations and activities associated with QU offices, classroom and administration workplaces to enable the effective management of HS aspects and risks within these workplaces.

This HS Technical Guideline also applies to the office and administrative functions of QU workplaces that have additional functions, such as laboratory and warehouse activities. Separate HS Technical Guidelines apply for the non-office activities of such workplaces.

3 Responsibilities

3.1.1 Top Management

QU top management shall allocate sufficient resources for the effective implementation of the HSMS, including the application of this HS Technical Guideline, and ensure that QU employees, students, contractors and visitors are aware of their responsibilities through appropriate regulation, delegation and communication.

QU Top Management is also accountable for monitoring and reporting HS performance and appropriate programs and actions to ensure compliance with QU HS Policy.

3.1.2 Other Accountabilities

QU Health and Safety Section (HS) and the HS Committee are accountable to QU Top Management for the implementation of this HS Technical Guideline.

Vice President (VPs), Deans, Directors, Managers, Head Sections/Units and Project Managers are accountable to QU Top Management for the application of this HS Technical Guideline in areas under their supervision.

All QU staff is responsible for performing their duties by complying with the requirements of this HS Technical Guideline as it applies to their activities and workplaces, observing and obeying safety postings and rules, and promptly reporting all incidents and accidents to their supervisors.

4 Guidelines

4.1 Hazard Identification and Risk Management

4.1.1 Identification, assessment, control, and monitoring of HS risks will be applied in accordance with QU HSMS Section 6.0 – Risk Management Procedure.

4.1.2 HS Hazards and Risks related to office, classroom and administration-related activities are detailed in the Occupational Health and Safety Risk Register, and the Environmental Impacts Register for specific facilities.

4.1.3 Any emerging HS hazards will be reported to supervisors and the HS in accordance with QU HSMS Section 12.0 – Hazard, Near-Miss, Incident Reporting and Investigation.

4.2 Work Stations

4.2.1 Work Station Physical Set-up

Setting up an office – the placement of equipment and furniture, the choice of office furnishings, lighting and so on – is not only important for your comfort. It also has a direct bearing on your safety and efficiency.

There are many things we take for granted when working in a typical office: a moderate to high level of background noise; lightings; communication facilities and regulated temperatures and power. These things should address when setting up an office.

The following features and fixtures shall be available in the office:

- Lighting should have 300-500 lux.
- Room temperature at 20 °C 25 °C.
- > Maximum of four (4) pieces electrical outlet.
- Minimum of one (1) telephone line.
- Adequate heating, cooling and ventilation. A relative humidity of 30 60 % is recommended.
- Internet connection for computer.
- Desks deep enough to provide adequate distance between the front of the screen and your eyes (around 51 to 66 cm, 20"-26") with ample room for the keyboard and mouse pad.
- Adjustable chair that provides good lumbar support and arm support. Set it up so that your feet are flat on the floor (get a foot rest if necessary), with thighs horizontal to the floor, forearms parallel to the keyboard, and wrists in a neutral position.
- Garbage bin for disposal of office waste. A fully integrated QU HSMS has been developed to accompany this HS Policy.

4.2.2 Working postures

Office jobs usually involve long periods of sitting, writing, reading, operating computers, etc. Improper working postures create various physical problems such as neck and back pains and other musculoskeletal problems etc. These types of health problems are commonly associated with office sedentary workers.

The following guidelines should help to reduce these problems:

- > The workstation should be properly laid out so as to minimize the physical stresses that will be imposed on the worker.
- Chairs should be comfortable to sit in for extended periods, and should be adjustable to fit the user. The following are guidelines for properly adjusting chairs:

- Normally be adjusted to such a height that the thighs of the user are parallel to the floor.
- The backrest of the chair should be firmly padded to provide good lumbar support.
- The backrest should be set neither too far back nor too far forward, and it should not be so large as to restrict movements of arms and shoulders.
- The seat and the front edge of the seat should be well padded so that it will not press uncomfortably on the buttocks or thighs of the worker.
- The distance between the seat and working height (desktop, workbench, keyboard, etc.) should be between 210 mm and 300 mm.
- The underside of the worktop should clear the seat by at least 170 mm, and have sufficient leg room in order to facilitate postural change.
- A suitable work routine should be planned so that essential relaxation can be provided to the worker by physical movement away from the desk. Periodic stretching exercises during the day's work should also be encouraged.

4.2.3 Workstation Exercises

The following exercises should help to relieve some of the physical complaints/ discomfort associated with sedentary work:

Visual exercises can help reduce eye strain. Try the following:

- At least every 15 to 20 minutes change your focus away from the terminal for a few seconds, and look at something at least 20 feet away. Repeat several times.
- Try palming at the same time. Form shallow cups with the palms of your hands and place them over your closed eyes for a few seconds. Repeat several times.
- > Blink often. But slowly, to allow your eyes to moisten.

And when you take a break, opt for non-visually demanding diversions. Keep in mind that reading your favorite novel or doing close work may contribute to eye fatigue, so try to rest your eyes on your time off.

While working when you cannot walk away from your terminal, there are exercises you can do in place. For the most benefit you should do these exercises frequently throughout the day. Try each of the following several times:

- Begin with deep breathing and shoulder shrugs. Bring your shoulders up, breathe in, release.
- Stretch your chin forward towards the screen and bring it back. Then tuck your chin down, and slowly drop your head to stretch the back of your neck. Come up slowly. Gently roll your head from side to side.
- Do shoulder rolls. Raise your shoulders up towards your ears and rotate them back, then rotate forward.
- > Do elbow squeezes. Squeeze your elbows together behind your back, release.
- Do arm stretches. Stretch your right arm up, left arm down, stretch and hold. Reverse, left arm up, right arm down, stretch and hold.
- Stretch your legs forward and flex your feet up and down. Move your legs like you're walking in place.
- If you can stand by your workstation, put your hands at the small of your back and slowly arch back. Don't do a gymnastic back bend, just a small stretch.

Office jobs usually involve long periods of sitting, writing, reading, operating computers, etc.

4.2.4 Working with Computers

Working with computers has become a major part of office works. Besides the problems associated with prolonged sitting as described above, other potential health problems have been identified among computer users, such as eye strain and injuries of the muscles, tendons and nerves of the wrists, arms, shoulders, neck and back. Injuries of this sort are often called "Repetitive Strain Injuries" (RSI).

4.2.5 Eye Strain Problems

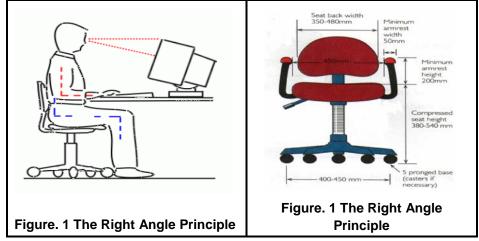
Visual problems such as eyestrain and irritation are among the most frequently reported complaints by computer operators. These visual symptoms can result from improper lighting, glare from the screen, poor positioning of the screen itself, or copy material that is difficult to read. These problems usually can be corrected by adjusting the physical and environmental setting where the computer users work. The following guidelines for work station layout can help in reducing eye strain problems:

- Workstations and lighting should be arranged so as to avoid direct and reflected glare in the field of sight, from the display screen, or surrounding surfaces.
- The screen should be properly adjusted to obtain a readable and stable image. The contrast on the screen should also be adjusted to a comfortable level.
- Background illumination for computer operation should be lower than that for general office work since a high illumination level will promote glare and reduce the contrast and visibility of the screen image. It is suggested that the illumination level for screenbased work should be reduced to 500 lux or less.
- To prevent visual overload caused by alternate light and dark areas, the difference in illumination between the display screen, horizontal work surface, and surrounding areas should be minimized.
- The display screen should be placed directly in front of the operator, at a height that is slightly below eye-level and about 500 mm away from the operator.
- The source document (if any) should be placed next to the screen. The document distance from the operator should be the same as that for the screen so that the operator does not have to change focus frequently between the two surfaces which can aggravate the eyestrain problem.

4.2.6 Setting up and working at Computer Workstation

The Chair Height

An important requirement for an ergonomic chair is that it has to be adjustable (Fig 1a). The seat of the chair should be adjusted to a height such as Fig. 1b.



Features of an ergonomically designed chair:

- Right dimensions to suit the body size of the user.
- Height adjustable.
- > Back rest easily adjustable in height, angle and depth.
- Preferably cloth covered seat and back
- Curved edge seat.
- > Armrest (if provided) not obstructing work- preferably adjustable.
- > Five pronged base (castors if necessary) to provide a stable base.

<u>Seat</u>

If the seat pan can be tilted, tilt the seat pan to get your thighs slightly higher than your knees. This straightens your spine and helps support your head and arms.

The depth of the seat pan is also important. The depth is proper if the seat pan can accommodate all of your thighs without touching the back of your knees, and with your back firmly supported by the back rest. The seat pan is too deep if the back of your knees are pressed by the edge of the seat. This condition will impede the blood circulation in your legs. For some chair types, the depth of the seat pan can be adjusted by adjusting the position of the back rest.

Back Support

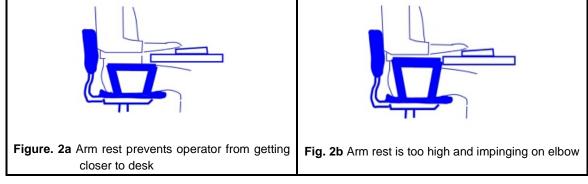
Adjust the back rest so that it fits the curve of your lower back. You may need to repeat the adjustment until the most comfortable fit is found.

The forward/ backward position of the back rest should also be adjusted so that a comfortable pressure will be exerted on the low back area while seated in the usual working posture at the desk. The back rest position should not feel as if it pushes you out of the seat or that you have to lean back too far to reach it.

Arm Rests

Arm rests can improve workstation ergonomics only if they are properly designed. Otherwise, they will do more harm than good.

They should be designed to allow you to get as close to the desk as you require (Fig. 2a) and not impinge on your elbows while you are working (Fig. 2b).



The Desk (Work Surface)

General

The work surface should be large enough to accommodate the monitor, keyboard, mouse and the documents you need to look at.

The requirements for work surfaces are different between normal office desk work and computer work. If your keyboard is placed on a standard desk or table, it is probably too high. A keyboard tray or drawer set at a lower level is necessary so as to allow the user to work with a comfortable posture.

If the keyboard tray is adjustable, adjust it to a height so that you can operate the keyboard with your elbows at a right angle. For a non-adjustable keyboard tray, you may need to adjust your chair to fit. If your feet are off the ground as a result of raising the chair, you may need to use a <u>foot rest</u> to compensate the difference (refer to Figure 3).



Figure 3 Foot rest

Clearance under the desk

It is also very important that you have sufficient leg space under the desk which will allow you to maintain a proper posture (refer to Figure 4).



Figure 4 Insufficient leg space leads to improper posture

4.2.7 Fatigue and Musculoskeletal Problems

Work performed at computers may require sitting still for considerable time and usually involves frequent movements of the eyes, head, arms, and fingers which may result in fatigue.

Computer users are also subject to a potential risk of developing various musculoskeletal and nerve disorders. Carpal tunnel syndrome (CTS) is one commonly recognized cumulative trauma disorder among computer users caused by repetitive wrist-hand movement and exertion.

To eliminate or reduce these problems, the following should be observed:

- > Proper seating should be arranged as described above.
- Document holders should be used to allow the operator to position and view material without straining the eyes, neck, shoulder and back muscles.
- To alleviate the problem of CTS, the arms of the operator should be parallel to the floor when operating the keyboard. Wrist and forearm support will be very helpful for prolonged operation.
- > Exercise breaks.

4.3 Classrooms

Classroom arrangement can have a big effect on the ability of professors to effectively manage his/ her class. Physical setting sends messages about authority, about ownership, dictates interaction and safety. Arrange Classroom arrangement shall in a way that accurately portrays educational philosophy and ensures that students can move around and interact the way professor's like.

The following features and fixtures shall be available in the classroom:

- Lightings: 200-250 lux.
- > Maximum of 4 pieces electrical outlet.
- Adequate heating, cooling and ventilation. 20 °C +/- 2 and a relative humidity of 40 60 % is recommended.
- Internet connection for computer.
- First aid kit for 10-20 persons.
- > Chair that provides good lumbar support and arm support.

Also, the following basic space guidelines are recommended:

- Materials students use should be visibly stored and accessible.
- > There should be no dead space which promotes random or illegitimate activity.
- > Arrange the room so that the professor can monitor quickly and easily (no blind spots).
- Use vertical space for display and learning enrichments.
- > Keep active areas distinctly separate from quiet spaces.
- > Keep two active areas distinctly separate to avoid distraction and interference.
- > Have clear and safe traffic paths no matter how your room is arranged.

4.4 Fire Safety

General fire safety management requirements applicable to all QU facilities and activities will be applied in accordance with QU HSMS Section 8.2 - Fire and Safety Response Procedure, and Section 8.0 – Emergency Management Procedure.

Additionally, some specific fire safety precautions to be observed in QU office, classroom and administration workplaces are:

- > Smoking is prohibited in all offices, classrooms and administration workplaces.
- Access key custody of offices and classrooms should be assigned to the Security incharge at respective buildings. Users should maintain a duplicate key.
- Flammable fluids may sometimes be used in the office. These must be properly stored in safety cans and approved safety cabinets as required according to Quantity kept.
- ➢ The use of electric space heaters in the office is prohibited. If used, they should be located at a safe distance from combustible materials.
- > To prevent over-heating, vents for heat generating office and classroom equipment such as, multimedia projectors, copying machines, etc. not been blocked.
- Overloading of power sockets can lead to overheating and fire. The use of adaptors should be avoided to prevent overloading. If unavoidable, make sure that the adaptors and extension boards to be used must be up to the required safety standards.
- Office and classroom electrical equipment, tools, cords, and usage are to be in full compliance with National Fire Protection Association (NFPA) 70E.
- Before leaving office and classroom:
 - Switch off the light.
 - Turn off/ close water faucet.
 - Except for equipment that must always be turned on, (e.g. fax machines, refrigerators), all other equipment (e.g. computers, radio, water heaters) should be switched off.

4.5 Movement in the Office and Classroom

Many accidents in the office and classroom occur simply when people are moving around. These are normally the result of an unsafe environment, unsafe personal factors, or both. The following are some recommended precautions:

- Running in the office or classroom can cause a serious fall or collision. Walking is far safer as falls and collisions can be avoided more easily.
- Reading while walking is very dangerous and should be avoided.
- Handrails must be used when ascending and descending stairs. Never have both hands occupied for carrying things or in the pockets when using the stairs.
- Never carry things in such a way that your vision is obscured.
- Walk cautiously and slowly when approaching blind corners, especially when carrying objects.
- Doors at common areas should be constructed with viewing panels so that any person on the other side of a door can be seen.
- Transparent glass doors can be dangerous when people are unaware of their existence. They should be marked by some means so that they can be noticed.
- Self-closing doors having too much spring tension can sometimes cause problem. This should be reported to Campus Facilities Department – CSU Control Room at telephone number 4403 3600 for appropriate adjustments.

4.6 Lifting and Carrying

Back injuries can be caused by improper lifting and carrying things in the office or classroom. The potential for injury caused by manual material handling should be minimized by applying both administrative and engineering control measures.

4.6.1 Controls

Administrative controls

These refer mainly to issues such as assessment of lifting tasks, training, provision of personal protection equipment, and proper job assignment.

Risk assessments should be conducted to identify lifting tasks which may pose significant risk of injury to staff. It is in fact a requirement by the Occupational Health and Safety Standard for conducting such risk assessments.

The provision of proper training is very important in reducing injuries resulting from manual material handling. Training should include the recognition of dangers in manual material handling, and use of proper lifting practices to avoid unnecessary stress to the body. The University is responsible for ensuring that staffs, faculties are properly trained to perform assignments safely. Assistance is available from HS in conducting training on material handling and how to conduct risk assessments.

To avoid physical injuries such as punctures, crushes, lacerations, etc., appropriate protective equipment such as gloves, safety shoes, work clothes and/or safety helmets should be provided to and used by workers performing heavy manual materials handling operations. The University is responsible for ensuring that workers properly use the protective equipment provided to them.

The University is also responsible for ensuring that staff, faculties are physically capable of performing the tasks assigned to them.

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Engineering controls

Engineering controls refer to measures including:

- Deployment of appropriate mechanical aids such as use of mechanical lifting devices, trolleys, forklift trucks, etc. for moving and handling heavy objects.
- > Improvement on visual and thermal environments such as lighting, color, labeling etc.
- Proper workstation designs so that workers can adopt best working postures without the need for excessive bending and over-reaching.

4.6.2 Good Practice in Manual Lifting

Some proper lifting practices are recommended below:

- Get a firm footing. Make sure that the floor is not slippery. Spread the feet for a stable stance.
- Size up the load. Determine how heavy it is. If the load is too large or too heavy for one person to carry, ask somebody to help or employ a suitable lifting device.
- > Get a firm grip. Use handles, gripping or other lifting tools that will help.
- > Make sure the load is free, not locked down or stuck.
- > Keep the back straight. Keeping the chin tucked in will help keep the back straight.
- Lift the load with the legs, and NEVER with the back.
- > Tighten the stomach muscles when lifting.
- Lift the load slowly. Do not jerk.
- Position the load close to the body before and during lifting and lowering.
- Watch out for the fingers and hands when carrying a load so that they will not be struck against other objects.
- > Do not twist during lifting. Turn with the feet, not with the back.
- Set the load down gently. Use the legs. Keep the back straight.
- For Team Lifting, lifting partners should be of similar height and build and should be trained together to enable load sharing. There should be a person nominated as team leader to co-ordinate the lift.

4.7 Use of Electrical Equipment and Machines

Equipment systems must conform to the National Electric Code, National Fire Protection Association (NFPA) 70E and KAHRAMAA requirements. Compliance must be adjudicated by licensed electrician or duly trained personnel.

The misuse of electrical equipment can lead to a wide variety of potential hazards, including slips and trips over trailing cables, ill-placed floor sockets, and fans; cuts and lacerations by dangerous machine parts. In more serious cases, electric shocks and burns can also result from faulty installations and damaged electrical parts. The following precautions should be observed:

- Do not tamper with electrical equipment and electrical installations. Contact Central Service Unit (CSU) Control Room at telephone number 4403 3600 if such work is required. Damaged electrical cords and faulty electrical equipment must be reported promptly to CSU Control Room for appropriate actions.
- All electrical equipment should be maintained and repaired by qualified persons from Campus Facilities Department through work request.
- All electrical equipment should be of safe design and construction and operated in accordance with manufacturer's instructions.
- All electrical equipment must be properly connected to power sources by proper plugs and connections.
- Power supply for electrical equipment via trailing cables or extension cords should be minimized as much as possible. Permanent wiring should be arranged by fixing

additional power outlets near the equipment, or laying suitable conduits for equipment which are to be used for extended periods of time.

- Except for equipment that must always be turned on, (e.g. fax machines, refrigerators, etc.), all other equipment should be switched off at night when nobody is working in the office.
- Many office machines and equipment such as electric typewriters, shredding machines, stapling machines, letter opening machines, etc., have moving parts which can be dangerous and result in serious injuries to personnel. These machines and equipment must be equipped with proper safety devices and guards. Staff required to operate these machines should receive proper training.
- Only use machines that you know how to operate. Never attempt to operate an unfamiliar machine without reading the machine instructions or receiving directions from a qualified staff. In addition, follow these guidelines to ensure machine safety:
 - Secure machines that tend to move during operation.
 - Do not place machines near the edge of a table or desk.
 - Ensure that machines with moving parts are guarded to prevent accidents. Do not remove these guards.
 - Unplug defective machines and have them repaired immediately.
 - Do not use any machine that smokes, sparks, shocks, or appears defective in any way.
 - Close hand-operated paper cutters after each use and activate the guard.
 - Take care when working with copy machines. If you have to open the machine for maintenance, repair, or troubleshooting, remember that some parts may be hot. Always follow the manufacturer's instructions for troubleshooting.
 - Unplug paper shredders before conducting maintenance, repair, or troubleshooting.
- Avoid wearing loose-fitting clothing, dangling bracelets, rings, ties or even long hair when you need to operate or work around power-driven office machines e.g. paper shredder.
- Safety and control of all office and classroom equipment emitting substances that would affect the users should be the responsibility of equipment owners/ suppliers

4.8 Use of Other Equipment

4.8.1 File Cabinets and Shelves

- Shelves must be securely fixed to prevent them from tipping over. When storing materials on shelves, heavier items should always be stored at lower levels.
- When filling a filing cabinet for the first time, ensure that it is properly balanced. Do not fill from the top down. Do not place heavy objects on top of cabinets. Be aware that anything on top of a cabinet may fall off if a drawer is opened suddenly. Keep the bottom drawer full. This will help stabilize the entire cabinet.
- All drawers of desks and cabinets must be closed as soon as things have been put in or taken out in order to prevent people from walking into them.
- Only one drawer of a file cabinet should be pulled out at any one time to avoid the cabinet from tipping over.
- Close drawers slowly using the handle to avoid pinched fingers.
- Close drawers when they are not in use and locked properly.
- > Do not block ventilation grates with file cabinets.

4.8.2 Desks

- ▶ Keep desks in good condition (i.e., free from sharp edges, nails, etc.).
- Ensure that desks do not block exits, power and communication outlets, passageways and AC air return facilities
- > Ensure that glass-top desks do not have sharp edges.
- Ensure that desks with spring-loaded tables function properly. The table should not spring forth with enough force to cause an injury.
- > Do not climb on desks. Use an approved ladder.
- > Keep desk drawers closed when not in use.
- > Repair or report any desk damage that could be hazardous.

4.8.3 Chairs

- > Do not lean back in office chairs, particularly swivel chairs with rollers.
- Do not climb on any office chair. Use an approved ladder.
- Office desk chairs should have adjustable back supports and seat height. Make sure that your chair's back support position and seat height are comfortable.
- Take care when sitting in a chair with rollers. Make sure it does not roll out from under you when you sit down.
- > Repair or report any chair damage that could be hazardous.
- > Do not roll chairs over electrical cords.

4.8.4 Ladders

Proper ladders or steps should be used for reaching high places. The use of chairs (especially swivel chairs on castors), boxes, drawers or other make-shift objects can result in serious falls is prohibited. Follow these guidelines when using ladders:

- > Do not load a ladder above its intended weight capacity.
- > Place ladders on slip-free surfaces even if they have slip-resistant feet.
- > Secure the ladder if a slip-free surface is not available.
- > Avoid placing ladders in walkways. Secure a ladder if its location risky .
- Keep areas around ladders clean and free of debris. Do not use a ladder in front of a door unless the door is locked and barricaded.

4.8.5 Photocopier Machines

- > Photocopier machines must be sited where sufficient ventilation is provided.
- Comply with all caution and warning labels in order to avoid potentially hazardous conditions.
- > Machines must be connected to a properly grounded electrical service outlet.
- Some covers are interlocked to ensure removal of hazardous conditions when covers are opened. Interlocks must not be bypassed or defeated.
- Covers or guards held in place by fasteners that require tools to be removed are not to be removed except by trained service personnel.
- Use only photocopier approved maintenance procedures and materials, both inside and outside the machine.
- If unusual noises, odors or smoke are noticed, the machine should be stopped immediately, disconnected from its power supply, and serviced before next use.
- Spent materials and products should be disposed of according to instructions provided on Material Safety Data Sheets.
- To avoid nuisance or discomfort effects, it is best to avoid staring at the machine's light sources.

4.8.6 Paper Shredders

General safety practices:

- Maintain labels and nameplates on the paper shredder. These carry important information. If unreadable or missing, contact the supplier for a replacement.
- > Always keep the extension cord away from moving parts on the shredder.
- Avoid unintentional starting. Make sure you are prepared to begin work before turning on the Paper Shredder.
- Do not force the paper shredder. Also, observe the one sheet maximum. Overloading may damage the unit.
- Never leave the Paper Shredder unattended when it is plugged into an electrical outlet. Turn off the Shredder, and unplug it from its electrical outlet before leaving.
- Do not put paper with paperclips, staples, or folds through the Paper Shredder. Doing so will damage the unit.
- Keep the cooling vents on the bottom of the paper shredder clear and uncovered. Covering the cooling vents will cause the unit to overheat.
- Stay alert. Watch what you are doing, and use common sense when operating a paper shredder.
- Do not wear loose clothing or jewelry. Contain long hair.
- Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- Avoid accidental starting. Be sure the power switch is off before plugging in. Plugging in paper shredders with the power switch on may cause accidents.

4.8.7 Fax Machines

- Do not disassemble the machine or attempt any procedures not described in the manual. Contact supplier for servicing the equipment.
- > Take care not to spill any liquids on the machine.
- Unplug the machine from the power outlet and telephone jack and consult a qualified service representative if any of the following situations occur:
 - Liquid has been spilled into the machine or the machine has been exposed to water.
 - The machine produces odours, smoke, or unusual noises.
 - The power cord is frayed or damaged.
 - The machine has been dropped or the housing damaged.
- Do not allow anything to rest on the power cord, and do not install the machine where people may walk on the power cord.
- > This machine must only be connected to a 240 V, 50 Hz, grounded (3-prong) outlet.
- Never insert objects of any kind into slots or openings on the machine. This could create a risk of fire or electric shock. If an object falls into the machine that you cannot remove, unplug the machine and consult a qualified service representative.
- Do not place the machine on an unstable cart, stand or table. The machine could be seriously damaged if it falls.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch bare telephone wires or terminals unless the telephone line has been disconnected at the network interface.

4.9 Preventing Cuts and Punctures by Sharp Objects

- Sharp objects such as pencils, ball point pens, letter openers, scissors, razor blades, etc. can cause serious injury. These items must be properly placed inside drawers. When they are put inside a pen holder, the sharp ends must not be allowed to point upwards.
- > Pins should not be placed casually on the desk, but should be properly contained.
- > When sealing envelopes, use a liquid dispenser, not your tongue.
- Avoid picking up broken glass with your bare hands. Wear gloves and use a broom and a dust pan.
- Place used blades or broken glass in a rigid container, such as a box, before disposing in a wastebasket.

4.10 Preventing Burns and Scalds

This kind of injury can happen when handling hot drinks and hot food, especially in the pantry. The temperature of certain parts of some office equipment and machines (e.g. printer head, some parts of photocopying machines, etc.) is high enough to cause burns. Burns and scolds can be prevented by:

- Ensure that the pots and stoves used in the pantry are of the appropriate size and type so that there is no risk for the pot to tip over. Pots should be properly placed on the stoves.
- All heating surfaces (stoves) and pots in the pantry should be regarded as hot if uncertain. Pots holding hot substances must not be placed in public areas.
- Avoid congestion inside the pantry.
- Improper use of microwave ovens may also cause burns and scald injuries. Never heat food stuff inside air-tight containers. The manufacturer's operating instructions must be strictly followed.
- Never put hot drinks in places where they can be easily knocked over. Sufficient warnings should be given to other persons who are nearby when hot substances are being moved or handled.
- Never touch any hot machine parts (which are normally labeled).

4.11 Use of Chemicals

The wide range of equipment being used, and activities being carried out in an office setting today have greatly extended the number of chemicals used daily in cleaning, lubricating, printing, developing, copying, toning and other activities. Many of these chemicals irritate skin, eyes and mucous membranes and may cause drowsiness, or intoxication. Some even present fire risks. Staff using these chemicals should be fully aware of their hazards. Manufacturer's instructions for use must be explicitly followed.

4.12 Housekeeping

One of the most significant contributions to safety in the workplace is good housekeeping practices. Good housekeeping means careful planning and establishment of workplace layout, combined with continued vigilance, maintenance and cleanliness. On the other hand, poor housekeeping is the root cause of most accidents in the office, such as fire, slipping, tripping and falling, etc.

To avoid collisions, trips and slips, all internal access area routes should be clearly signed, outlined, free from obstructions, surface defects and litter. Proper attention should be given to the following:

- Spills should be dealt with immediately. They should be cleaned up or cordoned off immediately.
- Wet areas must be adequately cordoned off with warning signs posted, such as during floor cleaning or waxing operations.
- Damaged floor surfaces such as chipped concrete floors, warping tiles, or worn spots in the carpet, etc., should be reported to Campus Facilities Department immediately for repair. The damaged areas should be effectively cordoned off.
- Aisles, walkways and stairs must be kept free from boxes, wastebaskets, chairs, and other obstacles that impede traffic.
- Electric and telephone cables should not be trailed across aisles and walkways, and should be arranged so that they do not pose a tripping hazard.
- Desks should be kept tidy. Drinks should be placed in spots where they cannot be knocked over easily. They should not be placed near computers and other electrical equipment. Materials should be stacked properly to prevent falling.
- Before leaving office and classroom:
 - Dispose refuse properly.
 - Lock drawers/ cabinets.
 - Ensure documents are not left in the table and properly safe keep.

<u>5'S</u>

"5'S" stands for 5 Japanese words all starting with S, this was translated into 5 English words also starting with S, (SEISO- Sweep, SEIRI- Sort, SEITON- Systematize, SEIKETSU-Standardize, SHITSUKE-Self-discipline)

"5'S" is not only a matter of good housekeeping. It is a process to create more productive people and more productive University through motivation, education and practice of 5 S. It is a creation of a strong corporate filled with spirit of high productivity.

- SEIRI / SORT is an action to identify and eliminate all unnecessary items from your workplace. Take out unnecessary items and dispose.
- SEITON / SYSTEMATIZE is an action to put every necessary items in good order. Arrange necessary items in good order for use.
- > SEISO / SWEEP is also an action to clean your workplace thoroughly.
- SEIKETSU / STANDARDIZE Is a condition were high standard of good housekeeping is maintained so that there is no dust and rust anywhere. Maintain high standard of housekeeping.
- SHITSUKE / SELF-DISCIPLINE is a condition where all members practice the above 4'S spontaneously and willingly as a way of life. Accordingly, it is a Culture. -Do things spontaneously without being told.

Maintain the 5'S as follows:

Desks/Worktables

- Clear your desk every after work. (SEISO- Sweep)
- > Dispose unnecessary items in your desk drawers. (SEIRI- Sort)
- > Do not place anything under your desks. (SEITON- Systematize)
- > Arrange items in your desk drawers neatly for easy retrieval. (SEITON- Systematize)
- Do not place your personal belonging on your desk/table. (SEITON- Systematize)

Chairs

- > Place your chair under the desks after work. (SEITON-Systematize)
- > Return chair under table every after meeting. (SEITON-Systematize)
- > Do not hang coats, bags, etc. on your chair. (SEITON-Systematize)
- > Clean your chair regularly. (SEISO-Sweep)
- > Have your chair fixed when it is unstable or noisy. (SHITSUKE-Self-discipline)

Cabinets

- Label contents in each cabinet at front side space. (SEITON- Systematize)
- > Divide cabinet drawers by partition for smaller items. (SEITON-Systematize)
- Label each file for easy retrieval. (SEITON- Systematize)
- Unless specified or necessary, do not place anything on top of cabinets. (SEIKETSU-Standardize)

Telephones

- Have your telephone body and dial regularly clean with soft detergent. (SEISO-Sweep)
- > Set telephone wires neatly around your desk. (SEITON- Systematize)
- > Place your telephone at most convenient location for easy use. (SEITON Systematize)

Office equipment

- > Have your office machines with clean regularly soft detergent. (SEISO- Sweep)
- > Neatly set electric wiring for safety and good appearance. (SEITON- Systematize)
- Place expendable papers neatly at designated locations by type and size. (SEITON-Systematize)
- Inspect machines regularly and take actions for required services. (SHITSUKE- Selfdiscipline)
- > Assign ownership/accountability to each office equipment. (SEIKETSU- Standardize)

Notice Board (Bulletin Board)

- > Ensure that notices or information's that are out of date are removed. (SEIRI- Sort)
- Ensure that all information, data and graphs are regularly updated. (SHITSUKE- Selfdiscipline)
- > Items should be neatly arranged and properly secured. (SEITON- Systematize)
- > Pins must be readily available. (SEITON- Systematize)
- > Check that location of notice board is appropriate. (SEIKETSU- Standardize)

Book Shelves

- Classify books by category for easy retrieval. (SEITON- Systematize)
- Always return books to their designated locations after use. (SHITSUKE- Selfdiscipline)
- > Keep books shelves clean and tidy. (SEISO- Sweep / SEIKETSU- Standardize)
- Do not place anything other than books and reference materials in book shelves. (SEITON- Systematize/ SHITSUKE- Self-discipline)
- > Dispose outdated books and reference materials. (SEIRI- Sort)

Blackboards/ Whiteboards

- Always clean the blackboards/whiteboards completely after each use. (SEISO-Sweep)
- > Check chalks or markers for replenishment. (SEIRI- Sort / SEITON- Systematize)
- Clean erasers from time to time. (SEISO- Sweep)

Storage

Sort files, office equipment by frequency of use. Decide which of the items you use frequently and those you use infrequently, and then find appropriate storage places for them.

FREQUENCY OF USE	HOW TO STORE
Less than once a year	Store within premises but outside work area
Once every 2 – 6 months	Store within work area
Once a month	Store within work area
Once a week	Store within work area
Once a day	Store within work area

4.13 Emergency Preparedness and Response

Emergency preparedness and response will be managed in accordance with **QU HSMS** Section 8.0 – Emergency Management Procedure, and subordinate procedures, i.e.:

- QU HSMS Section 8.1 First Aid and Medical Emergency Plan
- QU HSMS Section 8.2 Fire Safety and Response Plan
- QU HSMS Section 8.3 Earthquake Response Plan
- QU HSMS Section 8.4 Spill Response Plan
- QU HSMS Section 8.5 Power Outage Response Plan

4.14 Incidents and Accidents

Incidents, accidents and near-misses, and associated incident investigations will be reported and managed in accordance with QU HSMS Section 12.0 - Hazard, Near Miss, Incident Reporting and Investigation.

4.15 HS Training and Induction

HS-related induction and training for QU staff, students, contractors and visitors will be planned and conducted in accordance with QU HSMS Section 11.0 – Training and competency Procedure.

4.16 HS Inspections and Audits

HSMS compliance audits and inspections of offices, classrooms and administration work areas will be performed in accordance with QU HSMS Section 14.0 – Inspection and Audit Procedure. Any non-conformances identified during inspections and audits will be recorded and managed via the Corrective Action Request process presented in this procedure.

5 Document Control

This Technical Guideline is a controlled document. The controlled version of this guideline is located on QU Electronic Documentation Management System.

Any printed copies of this controlled document are reference copies only. It is the responsibility of all of those with printed copies to ensure their copy is kept up to date.

Refer to QU HSMS Section 16.0 – Document Control and Record Retention.