

SCHOOL OF ENGINEERING

Health & Safety Handbook

www.abdn.ac.uk/engineering/about/safety-281.php

Updated July 2023

STATEMENT FROM THE HEAD OF SCHOOL

The University Health, Safety and Wellbeing Policy is set out in the document of this name approved by the University Court in 2020. The following Policy supplements the University Policy.

The School of Engineering is committed to the achievement of excellence in all our activities. Accidents are disruptive, they use up resources which could be put to better use and they can hinder the achievement of our objectives as well as threatening the well-being of staff and students. Our commitment to excellence therefore includes a commitment to the effective management of health and safety.

The School has to satisfy the requirements of Health and Safety legislation as well as the requirements of the University Court (as set out in the University Health and Safety Policy). This handbook describes our arrangements for doing this. Your attention is drawn, in particular, to the section of the Handbook describing our organisational arrangements. In the School, Health and Safety is a line management responsibility. This means that all members of staff who have people working for them and/or who control activities in the School, have responsibilities for ensuring health and safety in all matters under their control. I also draw your attention to a statement from the University's Health, Safety & Resilience Policy:

"We are fully committed to the health, safety and wellbeing of our staff and students and we will do all that is reasonable to make good our commitment."

Risk assessment is fundamental to the way in which we manage health and safety. This process of systematically identifying areas of significant risk and determining what risk reduction measures are required form an integral part of all our activities.

Staff and students must acquire the skills necessary to enable them to work safely and to satisfy the requirements of the School's Health and Safety Policy. We will therefore provide staff and students with necessary health and safety training.

At least twice each year, inspections of our activities will be undertaken to evaluate the extent of compliance with the arrangements described in this handbook. The findings of the inspections will be reviewed at each meeting of the School of Engineering's Health and Safety Committee and by the School Executive Committee, and any recommendations implemented.

Our systems and procedures can always be improved and I encourage any student or member of staff who has suggestions for making our health and safety arrangements more effective to contact the Local Safety Coordinator with their ideas.

F. Par/lorkhaia

Professor Ekaterina Pavlovskaia Head of School 20 July 2023

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A. POLICY AND GENERAL ARRANGEMENTS

1. HEALTH AND SAFETY ORGANISATION

The Head of School is responsible for ensuring that all activities under their control are conducted in compliance with the relevant statutory provisions and in accordance with the <u>University's Health, Safety & Resilience Policy</u>.

Appropriate delegation via the line management chain will, however, be undertaken. As a result, individuals in the School who manage staff, organise work, or have a supervisory role will be responsible for doing so in a safe manner.

The Local Safety Coordinator (LSC) provides advice and assistance on health and safety matters to the Head of School, line managers/supervisors, staff and students and to liaise with the University Health, Safety & Resilience Team.

Health and Safety Organisation



1.1 Responsibilities of Staff in a Supervisory Role

Individuals with managerial and supervisory duties are responsible for the health and safety of those under their care or control. In particular, they must ensure that staff and students under their control are aware of the dangers in the tasks which they undertake and are able to implement appropriate precautions. They must ensure that staff and students are provided with the necessary training and supervision.

This is achieved by:

• Ensuring that staff and students understand their responsibilities for health, safety, and wellbeing.

- Ensuring that staff are trained to an appropriate level to enable them to conduct their work safely.
- Allocating work to only those who are competent and capable of conducting that work safely.
- Ensuring that work areas are maintained in a safe, clean and tidy condition and that emergency equipment and escape routes are kept clear and free of obstructions.
- Maintaining equipment and facilities to a safe operational standard in line with our legal requirements, University policy and the manufacturer's guidelines.
- Taking appropriate precautions for the purchase, use and disposal of equipment or substances to prevent injury or damage to health.
- Reporting and investigating, with support where required, near misses and accidents and ensuring that any corrective actions are implemented and that any modifications to working practices are brought to the attention of those that may be affected.
- Involving staff and students in maintaining and improving safety performance.
- Promoting a high level of safety awareness and setting a clear example of health and safety leadership.

1.2 Responsibilities of all Staff and Students

All staff and students must:

- Cooperate and comply with the health and safety arrangements put in place by the School.
- Do what they can to make sure that their activities do not cause harm to others.
- If they see or become aware of something which they believe is unsafe, either take immediate steps to make it safe or alternatively bring it to the attention of their immediate supervisor or the LSC who will affect the necessary action.
- If they become aware of any deficiencies in the School's health and safety arrangements, bring those deficiencies to the attention of their immediate supervisor.
- Not interfere with, or misuse, anything which is provided for reasons of health and safety.

1.3 Local Safety Coordinator

The LSC will provide advice to the Head of School, and all members of the School, on health and safety matters. The LSC is a member of the School of Engineering's Health and Safety Committee.

The role of the LSC is to:

- Set a clear leadership example and actively promote a high degree of health and safety awareness throughout the School.
- Assist and advise the Head of School on health and safety matters.
- Liaise with the Health, Safety & Resilience (HS&R) Team on all health and safety matters and to provide a focus for health and safety in the School.
- Deal with straightforward requests for health and safety advice and resolve simple health and safety enquiries and issues at local level.
- Assist in coordinating audits, inspections, investigations and other health and safety initiatives.
- Monitor compliance with safety policies and plans.
- Assist in coordinating implementation of University requirements and assist in ongoing management of these requirements pursuant to implementation.
- Attend any Health and Safety committee meetings where required.

Where required, the LSC will receive training appropriate to their role and the risk profile of their School or Directorate.

In the School the Technical Resources Officer (TRO) undertakes the role of LSC and throughout this document the terms TRO and LSC are interchangeable.

1.4 Arrangements for Dealing with Health and Safety Concerns

It is expected that health and safety problems will be resolved by discussions within the School. An individual member of staff or student with a concern about a health and safety matter should discuss it initially with their line manager or supervisor or with the LSC. If the matter is not resolved in this way it should be brought to the attention of the Head of School.

1.5 Arrangements for Dealing with Wellbeing Concerns

Wellbeing refers to the state of being comfortable, healthy and happy. Wellbeing can encompass various areas of life including health, safety, having a healthy nutrition and exercising as well as mental health.

The University has in place a number of resources to support the health and wellbeing of <u>staff</u> and <u>students</u>, including access to counselling services.

1.6 Discussion of Health and Safety Matters

Health and safety matters will be discussed and addressed as and when necessary. In addition to the School's Health & Safety Committee, health and safety is a standing item on the agenda at meetings of the School Executive Committee and at staff meetings.

If any student or member of staff has a health and safety concern that they believe should be discussed at a meeting, they should contact the LSC or any <u>member of the committee</u>.

1.7 Health and Safety Inspections

The School will undertake a health and safety inspection of its activities at least twice each year. The inspection team will produce a report for the Committee which will include:

- Positive findings, as well as details of the location and significance of any failings discovered.
- Recommendations for remedial action (including timescale and priorities).
- Suggestions as to who should carry out particular remedial actions.

The reporting process should not delay remedial measures or prevent immediate action during the inspection if there is a risk of serious injury or ill health. The Head of School will confirm the suggested remedial action if necessary.

Follow up inspections will be arranged specifically to ensure that any necessary remedial action has been taken and is effective.

The University <u>Guidance on Health and Safety Inspection</u> provides an example report and checklists for both office and laboratory environments.

1.8 Review of the Health and Safety Handbook

This handbook will be reviewed at least annually and where necessary reissued.

1.9 School Health & Safety Website

The School maintains a <u>Health & Safety Website</u> which contains the information necessary to be able to conduct work in laboratories and workshops safety. This is a key resource which is updated regularly.

2. HEALTH AND SAFETY TRAINING

Staff and students new to the School will receive a general induction and training in our health and safety procedures. Staff and postgraduates will also be required to undertake mandatory <u>BeOnline modules</u>. This training would normally be staggered over the first few days with some essential training being given on day one. An individual's immediate supervisor or line manager is responsible for ensuring that training is provided and that <u>records are kept</u> for the duration of their contract. This training will cover (where appropriate):

- School safety policy.
- Who does what and where?
- Fire safety arrangements.
- Access to heights.
- Accident reporting.
- Use of computer workstations.
- Electrical safety.
- First aid arrangements.
- Restrictions on lone working.
- Manual handling.

Other, more specific courses on safety matters are organised by the HS&R Team. These are arranged when appropriate, and staff are encouraged to attend courses that are appropriate. Staff must attend those courses deemed necessary for the safe undertaking of their work.

Training courses for topics that are not mandatory may nevertheless be of great value.

2.1 Laboratory Inductions

For staff and students working in laboratories or workshop a specific local safety induction should be conducted for each laboratory or workshop prior to commencing work and/or requesting swipe card access, and a formal record maintained.

All persons who wish to work in a particular laboratory, area or facility must first:

- Read and understand any Local Safety Rules document and accept the working protocols prescribed by the Laboratory Coordinator or the Technician for the laboratory in question.
- Undergo laboratory-specific induction arranged by the individuals supervisor or line manager.

2.2 Health and Safety Lecture

A general health & safety lecture is held annually in May requiring attendance of all staff, research students, and taught MSc project students who undertake laboratory or workshopbased activities in Fraser Noble. Staff who supervise such individuals are required to attend. A recording is posted on the *MyAberdeen site for PGR students in the School of Engineering* shortly after the lecture.

Visitors and research assistants who will be working in FN research labs but were unable to attend the lecture should e-mail the Chair of the School H&S Committee for the recording.

2.3 Activity-specific training

PIs and supervisors must provide staff, research students, project students, and visitors with, or arrange the provision of, suitable and sufficient information, instruction, and training. If training is required that is not routinely arranged by the university or the school, PIs and supervisors should discuss their requirements with the Local Safety Coordinator.

3. ACCIDENT INVESTIGATION AND REPORTING

Students and staff should <u>report an accident or a near miss</u> as soon as possible to their immediate supervisor. The following must be reported:

- **Accident:** Any incident in which anyone is hurt (regardless of how minor the injury might appear at the time and regardless of whether they need medical treatment).
- **Near Miss:** Any incident which did not result in injury or ill health but which might have done so if the circumstances had been slightly different (e.g., chance or 'good luck' prevented injury).

There are several reasons for reporting an accident or near miss. The most important is to enable us to take action to prevent a similar accident happening in the future (perhaps with more severe consequences). We may also need to report the incident to the Health and Safety Executive (HSE) or to our insurers.

Procedure:

- 1) The injured person, the immediate supervisor of the injured person, the person responsible for the area where the incident happened, or the first aider involved in attending to the incident may complete an <u>accident or near-miss report form</u>. The completed form should be submitted within 48 hours of the incident.
- 2) Serious accidents should be reported to the HS&R Team immediately by telephone. The HS&R Team will ensure that:
 - a) Necessary reports are submitted to the HSE.
 - b) Serious accidents are reported to the HSE immediately by telephone.
- 3) The member of staff responsible for the injured person should:
 - a) Inform the LSC of the accident as soon as possible.
 - b) Initiate an investigation into the accident to discover its cause, where necessary, requesting assistance with the investigation from the LSC or HS&R Team.

The form should be completed with as much detail as is available at the time of writing. However, please do not delay submitting the report because you want to make sure that you have gathered all the facts surrounding the accident. A second report can always be made at a later date with any additional information.

4. RISK ASSESSMENT

The carrying out of risk assessments is fundamental to the effective management of Health and Safety in the School. It is important to identify how people might be hurt before taking steps to prevent them being hurt. The School is required by <u>Health and Safety Law</u> to ensure that risk assessments are carried out.

It is incumbent on every member of staff, academic, technical or administrative, to ensure that they (and those they supervise or manage) are working in a safe environment and adopting sensible working practices in performing their duties. To this end staff should carry out and document risk assessments, as outlined below, to maintain safe working practices and implement control of hazards.

It is important that staff, whether supervising students or not, should not lose sight of the purpose of the risk assessment. Its purpose is not to produce a completed 'form' which then can be placed on one side and forgotten about. It is to reduce the potential for injury in the laboratory and in the field. The work should be discussed in sufficient detail and sufficient time committed to writing to achieve this purpose.

Risk assessment is the process of:

- Identifying where there is a significant risk (i.e. danger) in an activity and
- Determining how that risk can be reduced to an acceptable level (i.e. working out how the activity can be carried out safely).

A satisfactory risk assessment is one which concentrates on the main hazards (and ignores the trivial ones) and records the significant findings in a way which will help those involved in the work to carry it out safely. We all learn from each other so communication and dissemination of decisions made while undertaking risk assessment is encouraged. The nature of our activities changes with time so assessments must be able to respond in real time to these challenges.

4.1 Our Approach to Risk Assessment and Hazard Control

We approach risk assessment and hazard control in the School on three different levels:

- 1) The significant findings of risk assessments for frequently repeated tasks which form part of the routine operation of our laboratories, workshops, and other facilities are already recorded in either this handbook or in 'Local Rules' documents. It is the responsibility of laboratory/work area coordinators to ensure that sections relating to their work are accurate and up-to-date. Any changes should be communicated in writing to the LSC.
- 2) Where written procedures exist for particular scientific/engineering processes or operations, the significant findings of the risk assessments will be recorded as part of those written procedures and made available where necessary/as required. For example:
 - a. Procedures for an analytical process should include details of how the task should be carried out safely if, without those details, the people carrying out the task would not be certain of the health and safety precautions they should take.
 - b. Procedures for the operation of a piece of scientific equipment, machine or test rig/facility should include details of how to operate it safely if, without those details, the people operating the equipment might not know how to do so safely.

These procedures should be displayed prominently in the laboratory or work area to which they refer and discussed with anyone expecting to undertake the tasks. If they relate to equipment operation then they should be close to the equipment. The laboratory/work area coordinators should ensure that these procedures are accurate and up-to-date and that personnel using the facility are aware of the procedures. Any changes to procedures should be discussed with the LSC.

3) For those activities not covered by 2a or 2b above, a separate risk assessment should be carried out. The findings of the assessment should be recorded in writing.

4.2 Who Should Carry Out a Risk Assessment

Line managers and supervisors are responsible for ensuring that risk assessments are carried out for all activities and situations under their control.

Academic supervisors may obtain guidance and assistance from technical staff however it is the academic supervisors' responsibility for agreeing procedures used.

Where significant amendment to existing risk assessment is required, work is **only** to be undertaken following discussion, documentation and approval of the academic supervisor and after discussion with the members of staff or students engaged in the work.

4.3 Documenting a Risk Assessment

There is a legal requirement to record the significant findings of risk assessment in writing. The significant findings are the precautions which need to be taken when carrying out particular activities. It is the responsibility of all members of staff and students to carry through these processes where appropriate.

Risk assessment templates, together with guidance on their completion, is available on the <u>School of Engineering's Health and Safety</u> website.

Risk Assessments are subject to inspection as part of the safety management process. Spot checks are used to ensure compliance with policy.

4.4 Reviewing a Risk Assessment

Once a risk assessment has been carried out and the findings recorded, it is not the end of the matter. Risk Assessment should be a dynamic process and should be continually ongoing. Legislation says that a risk assessment should be reviewed if:

• There is a reason to suspect that it is no longer valid (e.g. if an investigation into an accident finds that current precautions are inadequate)

OR

• There has been a significant change to the matters to which it relates (e.g. if new equipment is introduced into the procedure or if part of the school moves into new accommodation).

4.5 Risk Assessment in Undergraduate and MSc Practical Work part of taught courses

Written procedures for practical work that form a part of a taught course should always begin by identifying the hazards and main dangers associated with the work and the precautions which are to be employed. Details of the precautions should be included at the appropriate stage in the method. If the practical has been devised such that there are no significant dangers associated with it, a statement to that effect should be made at the start of the method. A risk assessment of taught practical work is required to be undertaken to inform the written procedures.

4.6 Risk Assessment in Postgraduate Research and Undergraduate and MSc Projects

Risk assessments for research work in the laboratory or in the field involving postgraduate or undergraduate students must follow this method for risk assessment. Supervisors of students are responsible for ensuring it is followed. The purpose is to ensure that students:

- Appreciate where the hazards and possible dangers lie in the work they are about to undertake.
- Understand in sufficient detail the precautions which will need to be taken to ensure that the work is carried out safely.

Supervisors are responsible for deciding to what extent necessary precautions should be committed to writing. For example, it is likely that more detail will need to be recorded for work to be carried out by a new postgraduate compared with that which will be needed for similar work which is to be carried out by a third-year postgraduate.

- Student and supervisor should meet before the work begins and systematically examine the hazards and possible dangers associated with the work and discuss the techniques available to enable the work to be carried out safely. The School's risk assessment template, guidelines and checklist for risk assessment should be used as the basis of this discussion. The supervisor should ensure that the student is aware of the sections of the School Safety Handbook which are appropriate to the work as well as any other documents with relevant health and safety content.
- The supervisor should provide guidance on the level of detail required commensurate with the experience and skill of the student and the complexity and likely hazards associated with the work.
- The student should prepare an appropriate risk assessment based on the template. This assessment should incorporate a summary of the hazards and potential dangers of the work and the precautions or control measures which are deemed to be necessary to enable the work to be carried out safely. These are the so-called 'significant findings' of the risk assessment.
- In preparing the risk assessment the student may obtain information from the technician in the laboratory in which they will be working to further inform their assessment.
- Prior to submitting the risk assessment to their supervisor, the student should send it to the LSC for comment.
- The supervisor should review the written record of the assessment. When satisfied with the detail, accuracy and relevance of the assessment, the supervisor should sign the record before the work can begin.
- A copy of the assessment should be retained:
 - By the supervisor.
 - By the student.
 - In the laboratory in which the work is being undertaken.
 - With the LSC.
- The record must be retained for as long as the work to which it relates continues. The record must be produced if required during health and safety inspections.
- The student must understand that significant alterations in the agreed procedure must not be introduced without the supervisor's knowledge. Student and supervisor should meet regularly to confirm that the risk assessment is still valid. If there are

significant changes to the work, the written assessment must be revised and the record of the revised assessment must be reviewed and signed by the supervisor.

4.7 Risk assessment when work involves primarily staff

For work involving mainly staff (academic, technical and administrative), those involved (or the most senior in terms of line management) should carry out appropriate risk assessments and implement suitable control and precautionary methods. Depending on the level of risk and nature of the hazards, the supervisor should decide whether informal action and recording is sufficient or a full documented assessment needs to be carried out.

4.8 Risk Assessments for New and Expectant Mothers

While individuals do not have to inform the University that they are pregnant or breastfeeding, they are encouraged to let their supervisor or line manager know as early as possible so that steps can be taken to protect the individual and the child's health. Any disclosure will be done in confidence and you will contribute to a working plan to mitigate risk.

University and HSE guidance for <u>New and Expectant Mothers</u> includes a risk assessment template.

5. WORKING HOURS

The normal working hours of the School are between 8:00 and 18:00 hours, Monday to Friday.

5.1 Out of Hours Working

There may be some activities which take place <u>outwith normal working hours</u> (for example, certain laboratory procedures) and consideration must be given to making additional arrangements for first aid and other emergency cover. Line managers or supervisors are responsible for identifying any such activities and for ensuring that risks have been assessed and necessary emergency arrangements are made.

The School's procedures for <u>obtaining permission for Out of Hours laboratory work</u> provides guidance on the procedures to be followed.

If out of hours working is necessary the worker must comply with any risk assessments and instructions from their supervisor in relation to the work.

Outwith normal working hours, University Security staff may be able to assist in response to an emergency. Their 24-hour emergency number is listed in the appendices.

5.2 SafeZone

SafeZone is an app for staff and students that connects you to the University security team if you ever need urgent help, first aid or if you have an emergency while on campus.

SafeZone is free, easily accessible, and privacy protected, and offers staff and students the ability to call for help via their smartphone while on campus at any time of the day or night, seven days a week.

Out of Hours and lone workers in particular can benefit from the service, as SafeZone will allow you to notify security of your presence on site, providing an additional level of reassurance.

Staff and students are urged to download this app to their phones and use it. Details for both <u>staff</u> and <u>students</u> can be found on the University webpages. Further information and a video on SafeZone can be found here <u>SafeZone | University Services and Schools |</u> <u>Toolkit | The University of Aberdeen (abdn.ac.uk)</u>.



5.3 Out of Hours Running of Equipment

Equipment should not be left to run unattended overnight unless absolutely necessary.

When it is unavoidable, all reasonable precautions must be taken to prevent fire, flood, explosion or the emission of toxic materials.

Switching off apparatus is always the responsibility of the user. A thorough check must be made on gas, electricity and water supplies. Doors should be kept locked when the rooms are empty. If water supplies are connected, it is imperative that all hose connections are secure and that waste pipes are fixed well down into drains so they cannot jump out and cause flooding. Care must be taken to ensure that combustible material is kept well away from hot ovens.

The School's procedure for out of hours working can be found at <u>School Policies</u>, <u>Guidance</u> <u>& Resources | School of Engineering | The University of Aberdeen (abdn.ac.uk)</u>

6. LONE WORKING

The University's <u>Policy on Lone Working</u> defines a lone worker 'as someone who is working in circumstances where there is not someone else within calling distance who would be able to provide assistance if there were to be an accident'.

In general, lone working should be limited to carrying out relatively simple, low risk activities. Apart from activities which are clearly low-risk (e.g., office work, routine use of computers), lone working must not be undertaken without express permission from the line manager or supervisor. This applies whether the lone working is within or outside the normal working hours specified elsewhere in this document. Risk assessments must always address lone working.

Before giving permission, line managers and supervisors should consider the:

- Nature of the activities to be carried out.
- Likelihood and consequences of something going wrong.
- The experience and proven abilities of the individual who will be carrying out the work.

If permission is given for lone working the lone worker must comply with any risk assessments and instructions from their supervisor in relation to the work.

7. FIRE SAFETY

From July 2023 the Fire & Rescue Services will not attend an alarm unless it is confirmed as a fire. These arrangements have been revised to cover the University's new procedures for dealing with a fire alarm.

Reference should also be made to the Fraser Noble Building Fire Action Plan.

Fire is probably the greatest single safety-related threat to members of the of the School. Even if everyone were to escape safely from the building, a fire could destroy our facilities and all our documents and data. It is important therefore that we do as much as we can to prevent a fire starting. If a fire should start, a fast and effective response can help save lives and property.

Action 'In Event of Fire' notices are posted throughout the buildings to provide instruction for staff and visitors. Knowledge of these procedures is essential for each of the buildings in which you are working.

7.1 Fire Safety Training

New staff and students will receive an induction which includes Fire Safety. In addition staff are required to undertake the mandatory <u>BeOnline Fire Safety Module</u>.

The University also organizes Fire Extinguisher training courses for staff at regular intervals.

7.2 Fire Safety for Visitors

Staff should ensure that all visitors are given a Fire Induction on their arrival. This induction should include what to do in the event of an alarm activation, position of the nearest exit route and the position of the Assembly Point.

7.3 Fire Safety for Contractors

Contractors under the control of Estates & Facilities section are informed of fire safety maters before starting work.

Contractors under the control of the School must be informed of fire safety matters before starting work.

7.4 Fire Prevention

Legislation (The Smoking Health and Social Care (Scotland) Act 2005) banning smoking in buildings eliminates a major way fires can start. Additionally, our system of inspecting electrical equipment reduces the chances of faulty electrical equipment being a source of fire.

Other important precautions are:

- Avoid accumulations of clutter or surplus material, which might easily burn (e.g. waste paper, cardboard, plastics).
- Do not obstruct the ventilation of electrical equipment e.g. laboratory ovens or incubators or place inappropriate material in such apparatus.
- All electrical equipment should have appropriate testing conducted in accordance with regulations this reduces the risk of faulty electrical equipment being a source of fire.

brought in from home without obtaining permission and having the equipment

Use of personal heaters is restricted to those issued through Estates.

- inspected and tested. Contact the Local safety coordinator for advice.
- Do not use multiway block adapters and do not 'daisy chain' extension leads together. Fixed electrical sockets should always be used when possible. See University's <u>Guidance on Electrical Extensions</u>.

• No personal electrical equipment such as heaters, kettles, microwaves are to be

• Doors marked 'Fire Door Keep Closed' are meant to control the spread of smoke and to contain fires. These doors should be kept shut and not propped open.

7.5 Response of Security and Estates to a Fire Alarm Activation

From July 2023 University Security will take charge of a fire alarm investigation and take the necessary actions.

A Fire Alarm activation will automatically alert Security Control at Old Aberdeen who will attend the scene and determine whether there it is a Fire or a false alarm. If it is a real fire they will contact the Scottish Fire and Rescue Service (SFRS) and await their response.

If it is a false alarm they will then silence the alarm and authorise a return to the building.

7.6 On Discovering a Fire

If you discover a fire, it is important to take the following steps **in the order** given:

- Sound the alarm (No fire is so small that the alarm does not need to be sounded. A fire extinguisher should not be discharged onto a fire until the alarm has been sounded)
- Call the Fire and Rescue Service by dialling 9-999 (or 112 if using a mobile phone)
- Warn others in the area (Shout 'fire' and bang on doors! Some people do not always respond immediately to fire alarms)
- Only if you are trained and can do so without putting your own safety at risk, attempt to fight the fire with a suitable extinguisher.
- Otherwise, close the door to the area where the fire is (to contain the fire) and leave the building and await the arrival of the Fire and Rescue Service.

At the assembly point report to the person in charge, the Fire Marshall, who will be at the Assembly Point. Provide them with information about what has happened.

7.7 On Hearing the Fire Alarm

If you hear the fire alarm:

- Leave the building immediately by the nearest safe exit.
- **Do not use the lifts** during an emergency evacuation.
- **Do not** return to your office.
- Obey all instructions given to you by the Fire Marshall and/or by the Floor Checker.
- On exit all staff, students and visitors must be directed to the designated Emergency Assembly Points.
- Any drivers should go to assembly areas but **only** move vehicles if instructed to do so.
- Do not leave the assembly areas until told to do so.





• Do not re-enter the building until the fire alarm has been silenced and are instructed to do so either by Security or the SFRS.

7.8 Assembly Point

For both the Fraser Noble Building and the Meston Building, the assembly point is the ramp leading up to the Sir Duncan Rice Library.



7.9 Fire Marshals

Fire Marshals are identifiable by their Orange fluorescent jackets.

The primary function of the Fire Marshal is to coordinate the evacuation and liaising with Floor Checkers, Security and the SFRS. The Fire marshal has no responsibility for the investigation of the cause of the alarm however they may ned to be ready to provide advice and information on request. The Fire marshal must on exit take the contents of the Fire Information box with them. This details specific risks within the building such as compressed gas sources.



Until such time as a Security representative arrives on site, the Fire Marshal will follow the evacuation protocol for the building. Once the Security representative arrives, the Fire Marshal shall inform them of the state of the evacuation along with any other pertinent information e.g. accidental activation, burnt toast, any smoke or flames, etc. The Security person will then take charge of the incident investigating and liaising as necessary.

Fire Marshal's duties are:

- Avoid putting yourself in any danger.
- On exit take the Fire Information from the box located at the entrance.
- Direct evacuees to designated assembly point.
- Delegate a member of staff to each entrance to prevent re-entry.
- If necessary, delegate qualified First Aiders to look after casualties.
- Consult with evacuation team and members of staff to confirm their building area was emptying.
- Await response from Security and liaise as necessary.
- Ensure emergency services have easy and fast access.

7.10 Floor Checkers/Fire Wardens

Floor Checkers are identifiable by their Yellow fluorescent jackets.

The Floor Checkers will check that all occupants of the building have heard the alarm and have left the building. They will assemble at the information post and inform the Fire Marshal that all occupants have left the building or that they have not checked their designated area. Any pets left in the building should also be reported. Each Floor Checker should clearly understand their 'areas of responsibility'.



In the event of other emergency situations e.g. power failure, gas leak, and risk of explosion, major chemical spill, and structural problems, the Floor Checkers are expected to take a key role in any planned evacuation of the building.

Under no circumstances should a Floor Checker risk their own safety in order to check their designated area. Floor checkers should only do so if they are already in their designated area at the time. Any areas not checked will be marked with a cross on the check board and can be checked by the Fire and Rescue Service. If possible, rooms checked should be left with the windows and doors closed and any naked flame put out.

If there is no Fire Marshall at the Assembly Point, it is expected that a Floor Checker will take up this role and conduct the duties of the Fire Marshal in their absence. This would normally be expected to be the first Floor Checker at the scene.

Floor Checker Duties:

- Avoid putting yourself in any danger.
- Working towards an exit you should check rooms and corridors in your designated area and instruct people to leave by the nearest exit.
- You should then leave by the nearest exit and liaise with the Fire Marshal at the main entrances reporting the status of the evacuation in your designated area. Report if there are any disabled persons that require assistance. If someone refuses to leave or if you cannot be sure that an area is clear, you should inform the Fire Marshal.
- You may then be asked to stand at an outside door to prevent anyone from entering the building.

7.11 Evacuation Lift Operators

There are times when staff, students or visitors with mobility issues will be working above ground floor. In the event of a fire, they must have a way of evacuating the building.



The Fraser Noble Building is equipped with Evacuation Lift and

operators trained in how to use them. At the time



of writing only the West Wing lift and refuge points are in operation pending the building of protected refuge areas in the East Wing.

When the fire alarm is activated, all lifts will descend to the ground floor, their doors will open, and their control become disabled.

On each floor, within a protected zone, there are Fire Refuge communications panels to where persons with mobility issues will assemble and activate the button to call for help.

In the event of a fire emergency trained evacuation lift operators should report to the communication panel for the building located at the main entrance. If a refuge point is activated, they should talk to the person and carryout the appropriate evacuation.

If a refuge point is activated and they have to carry out a recovery or provide assistance the refuge officers should inform the fire marshal at the assembly point.

7.12 Escape Routes

Corridors and escape routes must be kept clear. Combustible materials should not be stored in corridors or on escape routes where they could become a source of fire and smoke.

Furniture and other items should not be placed so they partially block escape routes. Narrowing of escape routes will reduce the rate at which people can leave the building in an emergency. In a corridor filled with smoke, furniture can create a serious obstacle for someone who is trying to find their way out.

Fire doors will help prevent the spread of smoke and fire through a building and make it easier for people to escape. Fire doors should therefore be kept closed and not wedged open.

7.13 Fire Extinguishers

Staff should make sure they know the exact location of all fire extinguishers and have read the instructions. Only staff trained in their use should use an extinguisher and only if it is safe to do so.

There are four main types of extinguisher used in the University. All extinguishers are checked monthly with an annual service by an approved contractor who records the date of inspection. The applications for which they are suited are summarised below.



Notes:

- Water must **never** be used on burning liquids or electrical equipment.
- Normal foam is not effective on fires involving alcohols. Special types of foam are needed.
- Special extinguishers are required for fires involving a burning metal. The type of extinguisher depends on the metal involved.
- Dry Powder will **severely damage laser equipment** and should not be used in the vicinity. Where lasers are used or stored Dry Powder extinguishers should be replaced by an alternative.

7.14 Use of Extinguishers

Individuals should only use an extinguisher if they have been trained and feel confident to do so.

- Before starting to fight a fire (however small), ensure that the alarm is activated.
- Extinguishers are only for dealing with small fires if in any doubt withdraw from the room, closing all windows and doors behind you.
- Know which extinguishers can be used on the different types of fire.
- Away from the fire, pull out the pin and do a brief test jet of the extinguisher.
- Always position yourself on the side of the fire closest to a safe exit.
- Only ever use one fire extinguisher, if you need to use two, then the fire is too big for you to fight.
- Do not use carbon dioxide extinguishers in small, closed cupboards and avoid holding the horn which will get very cold.
- Do not use an extinguisher on a fire involving burning gas turn off gas supply if it is safe to do so or leave for the Fire and Rescue Service.
- Fire blankets in laboratory areas can often be useful for fires to personal clothing. Lay the victim horizontal, to avoid the flames spreading up to the face. Wrap the blanket firmly around the affected area to completely smother the flames. Avoid setting fire to yourself by keeping behind the blanket.

7.15 Fire Drills and Alarm Tests

Fire drills are held at least twice each year to test the efficiency of our fire evacuation arrangements.

The alarms are tested every Wednesday at around 7:30 in the Meston Building and at 10:15 am in the Fraser Noble Building.

If the alarm is heard at any other time, or if it rings continuously at these times, it must be assumed that a fire has occurred and you must evacuate the building.

8. EVACUATION IN THE EVENT OF AN EMERGENCY OTHER THAN FIRE

In the event of other emergency situations (e.g. power failure, major chemical spill) the fire alarm will not be activated. Floor Checkers are expected to take a key role in any planned evacuation of the building.

If the building has to be evacuated in circumstances other than a fire Instead 'Building Managers' will be:

• Contacted by Security or a Senior Estates Manager should your building require to be evacuated.

- Advised of routes to take or any other instructions you need to follow and pass to your floor checkers.
- Advised as to where the building staff and visitors are to assemble.
- Required to instigate a building evacuation procedure passing on any relevant information.
- Required to complete the evacuation check list which will be asked for by a Senior Estates Manager.

9. FIRST AID

A <u>list of University-recognised first-aiders</u> is posted throughout each building. Many University-recognised first-aiders are also trained in operating the <u>Automated External</u> <u>Defibrillators</u> (AED), located at the main entrance. A First-Aid Room, FN068, is located in the ground floor east corridor of Fraser Noble.

The School, with the advice of the University HS&R Team, will ensure that:

- Adequate numbers of qualified first aiders are present for staff and students in the and that notices are posted stating who they are and keep them up-to-date.
- Qualified first aiders receive a refresher course within three years of their previous training.

The LSC will arrange for a University recognised first-aider or member of the technical staff designated to ensure that:

- Adequate first aid materials are available and maintained in a satisfactory condition.
- That eye-washing facilities are properly maintained. (Note: eye-wash units are not sufficient on their own because the contents cannot flush the eye for long enough and, if supplied, their expiry date should be monitored.)
- The defibrillator is operational.

9.1 Minor Injuries

Minor injuries are non-life threatening but painful injuries, like cuts, minor burns, sprains and strains, and suspected broken bones and fractures.

Staff and students should ensure that they are aware of the location of first aid supplies. A first aider should be contacted and asked to assist with any injury except for minor scratches and cuts. Even minor scratches should be washed thoroughly in cold running water before applying a plaster. The assistance of a first aider is particularly important if you are injured while working with substances, which could cause harm if they enter the body through a break in the skin.

Use of any first aid equipment (for anything other than plasters for covering very minor cuts) must be reported to a University-recognised first aider immediately and an accident report filed.

9.2 Major Injuries

Major injuries are injuries or sudden ill health that are life-threatening and could be life changing because it may result in long-term disability. They require prompt identification and effective treatment to save lives, prevent complications, speed recovery and allow an earlier return to active life.

The following are examples of major injuries:

• Loss of consciousness.

- Cardiac arrest.
- Heart attack.
- Stroke.
- An acute confused state.
- Chest pains.
- Breathing difficulties.
- Severe bleeding that cannot be stopped.
- Severe allergic reactions.
- Severe burns or scalds.
- Major trauma, such as a road traffic accident or fall from a height.

An ambulance should be called by dialling 9-999 (or from an internal phone) or from a mobile dial 999 or 112. Do not attempt to call an ambulance by calling the University switchboard.

Someone should be sent to the front door of the building to look out for and direct the ambulance. A University-recognised first aider should be contacted to administer first aid to the casualty while waiting for the ambulance to arrive.

Information signs are posted near all First Aid boxes advising of the following procedure when calling the emergency services:

- Dial 9-999 (from an internal phone) or from a mobile dial 999 or 112.
- Know the Address you are calling from.
- Know the Phone Number you are calling from.
- Know what has happened.
- Additional Information.
 - Patient's age, gender and medical history.
 - Whether or not the patient is conscious, breathing and if there is any chest pains or bleeding.
 - Details of the injury and how it happened.

9.3 Position of Automated External Defibrillators (AED)

An Automated External Defibrillators (AED) is located at the entrance to the Fraser Noble building. There is a key held within a break glass box for accessing the defibrillator.

The AED is maintained by the Health, Safety and Resilience Team who will schedule the replacement of batteries and electrodes. A local firstaider, or member of the technical staff, will be delegated to undertake

weekly checks to confirm that the defibrillator is in working order as indicated by status LEDs.

Other nearby AEDs can be found at the following locations:

- Sir Duncan Rice Library reception.
- Student Union Building (The Hub). This is kept behind the Bar.



10. COMPUTER WORKSTATIONS

Using computer display screens and keyboards for prolonged periods can be a health hazard. The principal hazard relates to the arms, where work related upper limb disorders can develop repetitive strain injuries (RSIs). Eye strain can also develop leading to headaches.

The risks are controlled by applying ergonomic principles to the design, selection and installation of computer equipment; the design of the workplace and the organisation of the task. Consult the LSC for advice and a list of trained local workstation assessors (LWAs).



The risk is only significant for those using computer workstations intensively for a large part of each working day. However, as this applies to many staff, all computer users should be aware of the associated health risks.

10.1 BeOnline DSE Module

All staff and postgraduates must complete the **BeOnline DSE module**.

In this module the user is informed of the hazards and risk factors associated with computer workstations and is guided through a self-assessment. Any issues identified relating to this assessment will be monitored and actioned via the HS&R Team who will liaise with LSC if the LWA is unable to resolve the issue.

If at any time there is concern in respect of your workstation help and advice is available from trained local workstation assessors. Check the appendices for a list of trained Local Workstation Assessors (LWA) or contact the LSC.

Completed assessments (BeOnline and/or assessment by a trained local workstation assessor) will need to be reviewed when:

- Major changes to the display screen equipment, furniture, or software are made.
- New users start work or changes to workstations.
- Workstations are re-located.
- A member of staff is pregnant.
- Staff will be invited for a refresher every 3 years.

Assessments undertaken by an LWA should be signed, dated and passed to the LSC who will retain it on file.

Please refer to the University Health and Safety webpage on <u>Computer Workstations</u> for further guidance.

11. ELECTRICAL SAFETY

The main hazards arising from the use of electrical equipment are:

- Electric shock
- Fire caused by overheated conductors.
- Explosion due to a spark in a flammable atmosphere.

To prevent electricity becoming a source of harm, electrical equipment should be:

- Installed correctly and be suitable for the application.
- Used correctly.
- Maintained in good condition.

11.1 Fixed Electrical Installations

The electrical installation in the building up to and including the electrical sockets or other point of supply is the responsibility of the University's Estates section. No one other than Estates electricians or their contractors should interfere with the electrical installation or attempt to carry out repairs.

Anyone who needs changes made to the installation or believes part of it may be faulty should contact the LSC / TRO who will arrange for Estates to carry out any necessary work.

11.2 Portable Electrical Equipment

All portable electrical equipment must be regularly inspected and tested appropriately in accordance with University Policy. The process of testing and inspecting portable electrical appliances for safety is normally termed PAT testing. The frequency of PAT testing is generally every two years however more frequent inspection may be necessary depending on the type of equipment and the environment it is exposed to.

The TRO will schedule and coordinate the programme for PAT testing of portable electrical equipment. Equipment passing the inspection and testing will be clearly labelled, while equipment failing will be removed for either repair and further testing, or disposal through the University WEEE (Waste Electrical and Electronic Equipment) uplifts.

11.3 Personal Electrical Equipment

Personal electrical equipment (e.g. heaters, kettles, microwave ovens) should not be brought into the University. Anyone considering taking in electrical equipment must first obtain the approval of the School and have the equipment inspected and tested for safety prior to use. The LSC can provide the necessary advice and information to ensure electrical safety is being maintained.

On **no account** are persons permitted to bring heaters of any type in from home as these are a potential fire risk.

11.4 Correct use of electrical equipment

Carry out a visual inspection of any electrical equipment before connecting it to the electrical supply. Look for any obvious damage such as frayed cables or damaged plugs. Check that it has valid in-date label indicating that it has passed a PAT test.

If any equipment is found to be faulty in any way, disconnect it from the supply and take steps to prevent anyone else using it. (Place a notice on both the equipment and on the plug). Make arrangements to have the equipment repaired by contacting a technician or the LSC.

Always replace a blown fuse by a fuse of the correct rating (a 13 amp fuse will be too large for most items of equipment). If the replacement fuse should subsequently blow, the equipment should be regarded as faulty and not reconnected to the power supply until the fault has been repaired.

11.5 Multiway Block Adapters and Trailing Lead Sockets

Do not use multiway block-type plug-in adapters with electrical equipment. They can lead to overloading of sockets. Power only one piece of equipment from each socket. If there are not enough sockets available, arrange to get an approved extension lead.



Ensure that all cabling is properly routed and does not cross walkways or areas where the cable may be damaged or cause a trip hazard.

Do not join trailing sockets together (daisy chain) as this could result in an overload risking fire or other injury. Instead obtain a single one with a longer cable.



Only attempt to repair electrical equipment if you are competent to do so and having been given authority by a line manager/supervisor. When carrying out repairs always disconnect the equipment from the supply by switching off at the wall and pulling out the plug. Take steps to prevent anyone plugging it in again while you are carrying out the repair.

12. MANUAL HANDLING

Back injury resulting from manual handling is a common cause of lost time accidents. Injury to the lower back, caused by a momentary lapse of good practice, may never recover fully and can be prone to relapse. It is not only injuries to the back which can result from manual handling operations. Cuts, bruising of hands and feet are injuries which can occur when manual handling is not done correctly.

Members of the School with line management or supervisory responsibilities must ensure that people under their control are not expected to carry out manual handling operations which are likely to cause injuries.

Before attempting to lift anything, size up the job. Do not hesitate to seek help with heavy or awkwardly shaped loads. Always look at the possibility of moving the load in an easier way (e.g. by using a trolley or some other form of mechanical assistance).

In manual lifting it is the leg muscles that should be used and NEVER the back. Lifting an item from the floor should always require bending at the knees.

Anyone with any doubts about their ability to lift or carry a particular item, should discuss it with their immediate supervisor. It will usually be possible to work out a different way to move the load.

12.1 Manual Handling Training

Basic manual handling training can be undertaken as part of <u>BeOnline modules</u>. Where manual handling is a significant part of your role full training is required by an approved instructor.

In both cases contact the LSC for further information.

13. ACCESS TO HEIGHTS

Every year several people in the University are injured after falling while using an unsuitable means of access to reach storage above head height. The 'unsuitable means of access' is often a chair or a table. It is particularly important in a laboratory, where the consequences of a fall can be severe, that a suitable means of access is used. Access to storage above head height should normally be by a stepladder or a 'kick stool'. Chairs (and particularly swivel chairs) should never be used. Step Ladders are available within the School.



Formal scheduled inspections should pick up any problems however steps and ladders should be checked before use and if faulty taken immediately out of service.

13.1 Working at Heights

If work activity poses a hazard at height it is important to devise a way of preventing a fall.

Anyone needing to work at heights they should discuss the matter first with the LSC so arrangements can be made to provide a safe system of access and equipment to prevent a fall.

Access to the roof areas of buildings may be obtained only with the permission of Estates who will issue a work permit and agreement with the LSC. Contractors may not carry out work on the roof unless they have a written permit issued by Estates.

In some areas access is required to satellite dishes and other electronic equipment mounted on roofs. Only authorised personnel are allowed access to the roof and must stay within the fenced areas. Extreme care must be exercised during inclement weather. If access is necessary in **potentially icy, snowy, or slushy conditions** the following must be done:

- Ensure you have a mobile phone with you
- Inform security control or a colleague immediately before accessing the roof giving them an indication of how long you are likely to be on the roof.
- Wear the shoe grips you have been issued with (these must not be the studded type or they will cause damage to the roof covering)
- Carefully make your way onto the Sarnafil walkways and treat them with fine salt (note granular/coarse salt must not be used as this will cause damage to the roof covering) supplies of salt, buckets and scoops are kept at the Bedford road store.
- Keep to the Sarnafil walkways, avoid walking on the roof membrane itself or the supports of the roof edge protection system both of these will be very slippery in icy or snowy conditions.

• Inform Security Control or your colleague when you leave the roof. Security control telephone number is 01224 273327 (for non-emergencies) or 01224 273939 (in the event of an emergency).

14. DRIVING ON UNIVERSITY BUSINESS

Persons driving on University business must do so in compliance with the University's <u>Management of Occupational Road Risk Policy</u> (MORR) and be appropriately qualified, licensed and insured.

All University employees (including undergraduate and Postgraduate students where appropriate), agency workers or contracted persons, who are authorised to drive University Vehicles under the University's insurance policy while carrying out their duties for the University must have completed the <u>Drivers Declaration Form</u> obtained from the University's insurance section. It is the responsibility of the University driver to ensure the Driver Declaration Form is completed annually.

Staff driving their own vehicle must also possess the correct insurance cover. Any journey undertaken for work, however trivial, requires vehicle insurance that covers business use. This is a legal requirement. If in doubt as to whether a journey constitutes business use, staff should consult their insurance company for clarification.

14.1 Vehicle Hire of 10 days or more

The University's insurers require vehicle details for any hire period over 10 days in duration, failure to provide the required details means the vehicle is uninsured and the insurer will not cover the costs of any repairs.

When hiring for 10 days or more the following information must be provided:

- Vehicle registration number
- Make
- Model
- Hire start date
- Hire end date (if known)

If these details cannot be provided at the time of arranging the hire, the driver is responsible for providing this information as soon as the details are known, along with photographs of the vehicle, before they drive the vehicle.

Send these details to <u>finance@abdn.ac.uk</u> and the University Insurance Team will arrange for the appropriate cover.

15. LABORATORY AND WORKSHOP ARRANGEMENTS

15. 1 Policies Guidance & Resources

Documentation relating to specific laboratory and workshop activities is hosted on the Schools Health & Safety website. <u>School Policies, Guidance</u> <u>& Resources | School of Engineering | The University of Aberdeen</u> (abdn.ac.uk)

Examples of online content include:

- Personal Protective Equipment (PPE)
- Laboratory and workshop waste
- Chemical safety



- Nanomaterials
- Compressed gas
- Pressure systems and equipment (inc. autoclaves)
- Laser equipment
- Machine safety
- Electrical safety
- Lifting equipment and accessories
- Centrifuges
- Aerial drones
- Ionising radiation (CT scanners, XRF devices)
- Biological and genetically modified organisms
- Inspection and maintenance of equipment

15.2. Local Laboratory Rules

Local rules for working in laboratories and workshops can be found here: <u>Local Rules |</u> <u>School of Engineering</u>.

16. FIELDWORK

On Fieldwork trips, the Fieldwork Leader is responsible for the health and safety of the group. They should leave details of the destination, travel arrangements, and list of participants with the School Office. They should ensure that the activities on the trip are covered by the University Insurance Policy.

The person in charge should be aware if any member of the party suffers from a medical condition e.g. heart problems, fits etc, which may occur during the trip and what action to take should this occur. Sufficient and appropriate first aid materials should be available for the duration of the trip.

Authorised drivers must comply with University Policy on <u>Management of Occupational Road</u> <u>Risk Policy</u> and be appropriately qualified, licensed and insured.

Further information is available in the School of Engineering's Fieldwork Safety Handbook.

17. VISITORS, CHILDREN AND PETS

The nature of our work is such that it receives a large number of visitors, some of whom stay for only a few hours and others that stay longer, sometimes for many months. Staff should ensure that their visitors are aware of School safety procedures. Short stay visitors should, as a minimum, receive instruction on actions in the event of a fire alarm. Visitors staying for a longer period of time should be given a more extensive safety induction.

Visitors are the responsibility of the member of staff inviting them in and staff should ensure that guests are not allowed unauthorised access to offices and laboratories within the School.

17.1 Children under 16

Children under 16 years of age must be supervised by an adult at all times during a visit to the School and must not enter laboratories or other hazardous areas unaccompanied. Exceptions to these restrictions are made for supervised educational visits and Open Days. The University has prepared <u>Guidance on bringing children on to University premises</u>.

17.2 Pets

Persons wishing to take a pet in to work should discuss it with their line manager in the first instance.

18. WORK EXPERIENCE PLACEMENTS

School pupils and others participating in work experience in the University are, for health and safety purposes, regarded as employees. An assessment of possible risks to their health and safety with particular attention to their age and lack of experience is required.

There are special restrictions on the following types of work:

- Working with machinery.
- Working with electricity.
- Working with lasers.
- Working with chemicals, toxic material or radiation.

They are only allowed to do the work above under the following circumstances:

- Where a written risk assessment exists.
- Any risk is reduced to the lowest level that is reasonable.
- They have been given necessary training.
- Where an experienced person is supervising.

The University has prepared Guidance Notes for both <u>Work Experience</u> pupils and <u>Children</u> visiting the University.

19. PLACEMENT OF STUDENTS FROM THE UNIVERSITY OF ABERDEEN WITH OTHER ORGANIZATIONS

Anyone who arranges placements with other organisations for University of Aberdeen students must consider how health and safety aspects of the placement will be managed. The University has prepared Guidance on <u>the placement of students with other</u> <u>organisations</u>.

20. BUILDING WORKS AND ASBESTOS

The fabric of the building occupied by the School and the installed services (electricity, water, gas, etc.) are the responsibility of Estates.

- Anyone who notices any parts of the building which are unsafe and need to be repaired should contact the LSC / TRO who will contact Estates. Any urgent matters should be notified directly to Estates on their 24 hour emergency telephone number.
- Any alterations to the building or to the installed services must be carried out by Estates. This is essential to ensure:
 - Compliance with building regulations and fire regulations.
 - Installed services are not disturbed.
 - Any asbestos in the building is not disturbed. (Many buildings in the University contain asbestos it is perfectly safe as long as it is not disturbed.)

Anyone wishing to carry out any work which might affect the fabric of the building (e.g. running cables, fixing items to the walls) should contact the TRO who will then contact Estates and discuss how best to proceed.

21. CONTRACTORS

Contractors must never undertake any work in the School without first obtaining the permission of the LSC / TRO. This is to ensure that contractors meet the University's <u>Health</u> and <u>Safety Standards for Contractors</u> and do not endanger:

- Their own health and safety by entering laboratories or workshops without taking necessary precautions.
- The health and safety of School staff and students by carrying out works in an inappropriate manner.

This applies both to contractors working directly for the School and to contractors brought in by Estates to carry out works on the fabric of the building.

Anyone planning to bring contractors into the School should contact the LSC / TRO in advance to agree any precautions which might be required.

22. WASTE MANAGEMENT

Nearly all processes in the School will generate waste of some sort. Some of the waste will be hazardous in nature. We have a duty to ensure that hazardous waste:

- Does not harm those who have to handle it between the point where it is generated and the point of ultimate disposal (consider, e.g., cleaners, porters, staff of waste disposal contractors).
- Does not harm those who might come into contact with the waste at its point of ultimate disposal (e.g. chemicals sent by mistake to a landfill site for domestic waste could harm workers at the site as well as children who might play there and people who live near the site).

Staff and students must ensure that waste is removed promptly and not allowed to accumulate. Waste generated should be disposed of through the proper route.

Further information on waste management is available from the University <u>Waste and</u> <u>Recycling</u> website and in the <u>Access to Laboratories and Laboratory Waste Disposal Policy</u> <u>and Guidance</u> document.

22.1 General Waste

General waste, often termed 'black bag' waste, is for domestic type waste (e.g. paper towels, food and wrappings) only. It is handled by cleaners and porters before being skipped and sent to landfill. Care needs to be taken to prevent sharp objects (e.g. broken glass) or other objects or materials (e.g. chemicals) from being put into domestic waste.

22.2 Broken glass

Broken glass and other sharp items must never be put in general ('black bag') waste bins. Uncontaminated broken glass should be placed in a specifically designed, lined, puncture proof glass waste box. A strong cardboard box is a suitable substitute. In all cases the box should be sealed and disposed of directly to the general waste skip.

APPENDICES

1. LOCAL INFORMATION

Address	Fraser Noble Building Kings College Aberdeen AB24 3UE	
First Aid Room	Room 068	
Automatic External Defibrillator (AED)	Fraser Noble Main Entrance.	
Local Safety Coordinator (LSC)	Mr Grant Cordiner <u>g.cordiner@abdn.ac.uk</u>	2788

2. KEY PERSONNEL

This list is maintained at Useful names | School of Engineering (abdn.ac.uk)

3. SCHOOL OF ENGINEERING HEALTH AND SAFETY COMMITTEE

This list is maintained at <u>School Health & Safety Committee (abdn.ac.uk)</u>

4. REVISION RECORD

Issue	Who	Date	Reason for Review
-	ES	19/6/19	Revision - first draft
-	ES	7/7/20	Updated: Organizational chart, added 1.3.3 hand surveillance, Fire marshal jacket colour (orange).
-	ES	12/5/21	Updated appendix C
-	ES	15/10/21	Minor edits following review by HS&R & HoS
1.0	ES	15/11/21	First published
	ES	16/02/22	Updated list of Workstation Assessors
	ÉS	14/03/22	Added sections for Centrifuges, Drones, Ionising Radiation and Biological/GM.
	ÉS	06/04/22	Add XRF
2.0	ES	19/07/23	New issue which relocates detailed information on laboratory and workshop safety to the School web pages. Fire Action Plan revised to align with new procedures brought in as result of changes by the Scottish Fire & Rescue Service to the way in which they will response to a fire alarm.