



UNIVERSITY  
OF ABERDEEN

School of Geosciences

# HEALTH AND SAFETY HANDBOOK

*2015-16*

This document applies to all students, undergraduate and postgraduate, and all staff involved in any programme of teaching or research within the School of Geosciences

[www.abdn.ac.uk/geosciences/resources/safety.php](http://www.abdn.ac.uk/geosciences/resources/safety.php)

<b>STATEMENT OF SCHOOL HEALTH AND SAFETY POLICY.....</b>	<b>1</b>
<b>1. SCHOOL POLICY &amp; ARRANGEMENTS .....</b>	<b>2</b>
1.1 HEALTH AND SAFETY ORGANISATION IN THE SCHOOL.....	2
1.1.2 Responsibilities of the Head of School.....	3
1.1.3 Responsibilities of Line Managers, Supervisors and Coordinators .....	3
1.2.4 Responsibilities of all Staff and Students .....	3
1.1.5 Responsibilities of the School Safety Adviser .....	3
1.1.6 Arrangements for Dealing with Health and Safety Concerns.....	4
1.1.7 School Safety Committee .....	4
1.1.8 Safety Inspections .....	5
1.2 FIRE SAFETY.....	5
1.2.1 Fire Drills and Alarm Tests.....	5
1.2.2 Fire Prevention .....	5
1.2.3 On Discovering a Fire .....	6
1.2.4 Evacuation Procedures.....	6
1.2.5 Extinguishers .....	6
1.2.6 Escape Routes .....	7
1.3 FIRST-AID.....	7
1.4 HEALTH & SAFETY TRAINING .....	7
1.5 ACCIDENT INVESTIGATION AND REPORTING .....	8
1.5.1 General School Procedures.....	8
1.5.2 School Procedures For Reporting Accidents, Injury or Sudden Illness during Fieldwork .....	9
1.6 RISK ASSESSMENT .....	9
1.6.1 Risk Assessment in Fieldwork .....	10
1.7 LONE WORKING.....	10
1.8 ACCESS TO THE SCHOOLS BUILDINGS.....	11
1.8.1 Meston .....	11
1.8.2 St Mary's .....	11
1.8.3 Working Hours .....	11
1.8.4 Visitors .....	11
<b>2. HAZARDS AND CONTROLS.....</b>	<b>12</b>
2.1 TEACHING SPACE.....	12
2.2 RESEARCH SPACE .....	12
2.3 OUT OF HOURS RUNNING OF UNATTENDED EXPERIMENTS AND EQUIPMENT .....	13
2.3.1 Water Supplies .....	13
2.4 FIELDWORK SAFETY.....	14
2.5 VEHICLES .....	14
2.5.1 Legal Licence Requirements by Law.....	14
2.5.2 Legal Licence Requirements from 1 <sup>st</sup> January 1997 .....	14
2.5.3 School Rules .....	15
2.5.4 Vehicle Maintenance.....	15
2.5.5 Hazardous Cargo.....	16
2.6 COMPUTER WORKSTATIONS .....	17
2.7 ACCESS TO HEIGHTS .....	17
2.8 MANUAL HANDLING .....	17
2.9 BUILDING MAINTENANCE .....	18
2.10 CONTRACTORS .....	18
2.11 ELECTRICAL SAFETY .....	18
2.12 MACHINERY .....	19
2.13 HOUSEKEEPING .....	19
2.13.1 Good Laboratory Practice .....	20

<b>APPENDICES.....</b>	<b>21</b>
A.1 SCHOOL SAFETY COMMITTEE .....	21
A.2 WHO DOES WHAT AND WHERE .....	22
<i>Meston Building</i> .....	22
<i>St Mary's Building</i> .....	23
A.3 USEFUL TELEPHONE NUMBERS.....	24
A.4 RESTRICTED AREAS .....	24
<i>Meston Building</i> .....	24
A.5 WHEN A CARDIAC ARREST IS SUSPECTED:- .....	25
A.6 BUILDING EVACUATION MANAGEMENT .....	26
<i>Evacuation Management Team</i> .....	26
<i>Fire Wardens</i> .....	26

# **SCHOOL OF GEOSCIENCES**

## **STATEMENT OF SCHOOL HEALTH AND SAFETY POLICY**

Health and safety is of prime importance to the School of Geosciences. We undertake to do all that is possible to prevent the School's activities causing harm to staff, students and members of the community we interact with.

In this handbook you will find details of what we do in the School to prevent circumstances arising which could cause injury or ill health. It is important that all staff, students and visitors understand these arrangements and their role in enacting them. The co-operation and active involvement of everyone in the department is essential if we are to meet our obligations. Remember that safety is the responsibility of everyone - not just a few.

Our health and safety systems and procedures are under constant review for improvement. I will also commission a formal review of our arrangements every 12 months. Any student or staff member with suggestions for improvement to our health and safety procedures is urged to contact either School Safety Advisor or myself with their ideas.

***PROFESSOR DAVID JOLLEY***

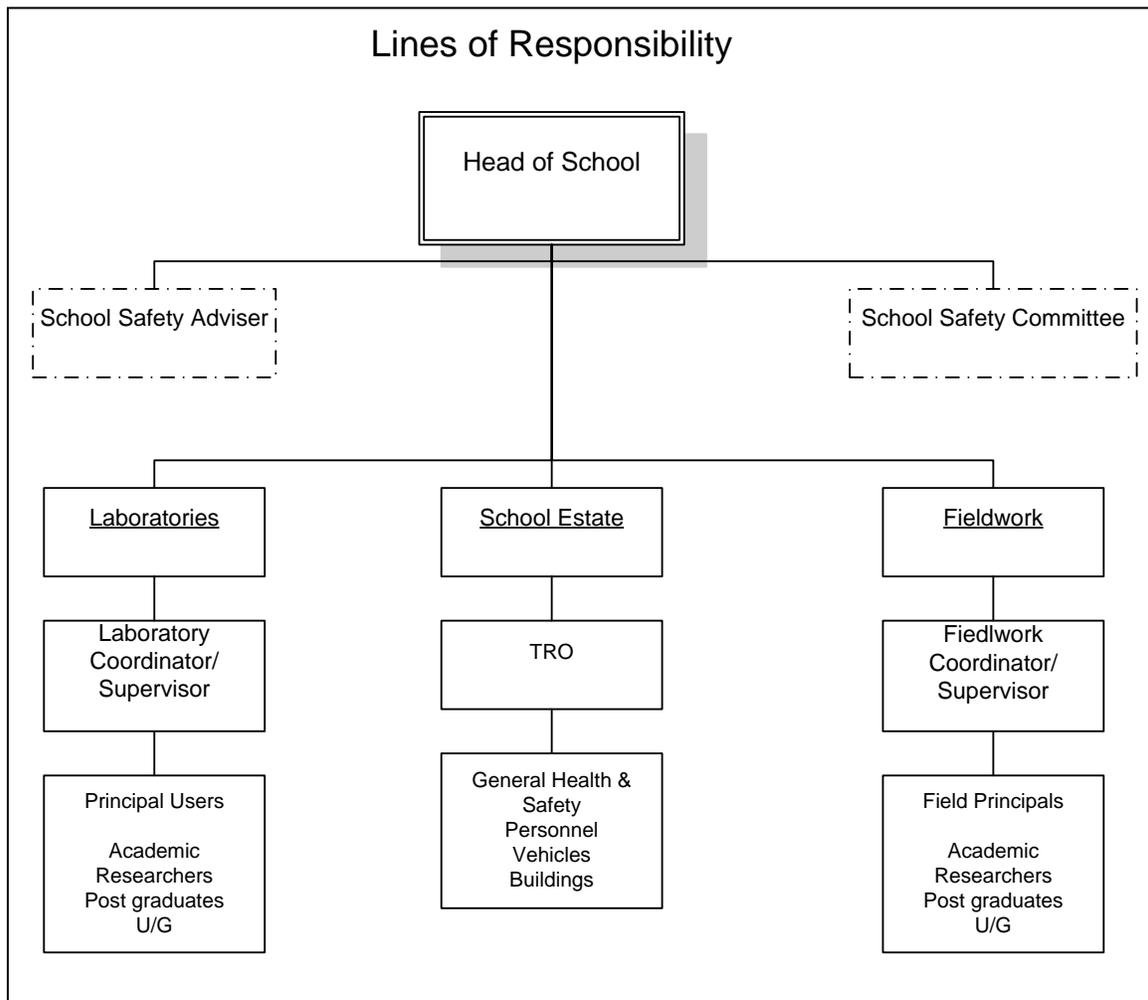
Head of School  
September 2015

# 1. SCHOOL POLICY & ARRANGEMENTS

## 1.1 Health and Safety Organisation in the School

The Head of School has overall responsibility for health and safety in the School. In the School (as everywhere in the University) health and safety is a line management responsibility. Accordingly members of the School with managerial and supervisory duties must take full responsibility for health and safety in all activities under their 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 appropriate training and supervision.

The School Safety Adviser provides advice and assistance on health and safety to the Head of School, line managers/supervisors, staff and students. The School Safety Adviser does not have any direct responsibilities for health and safety in the School.



### **1.1.2 Responsibilities of the Head of School**

The Head of School will:

- Provide an effective Health and Safety Policy for the School
- Ensure the provision of resources necessary to enable the policy to be implemented
- Commission inspections of the School (at least two times per year) to monitor whether the School's health and safety arrangements are being complied with
- Commission reviews (at least one per year) of the effectiveness of the Policy and the arrangements to ensure its implementation.

### **1.1.3 Responsibilities of Line Managers, Supervisors and Coordinators**

Certain members of staff have specific responsibilities for parts of the School. This includes line managers, supervisors and work area coordinators. Many of these are Listed in the appendices under "Who Does What and Where" and are required to:

- Ensure that all hazards creating significant risks are identified and that necessary steps are taken to reduce the risks to acceptable levels
- Ensure that necessary health and safety training is provided for all staff and students in their areas of control
- Ensure that necessary supervision is provided for all staff and students in their areas of control
- Ensure that all equipment in their area of control is maintained in an acceptable condition
- Make arrangements to monitor whether staff and students in their areas of control are complying with the School's health and safety arrangements.

### **1.2.4 Responsibilities of all Staff and Students**

Safety is an individual responsibility and all staff and students must:

- Co-operate and comply with the health and safety arrangements put in place by the School.
- Ensure that their activities do not cause harm to others.
- If they see or becomes 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, Safety Adviser or anyone else who can do something about it.
- 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.

### **1.1.5 Responsibilities of the School Safety Adviser**

The role of the School Safety Adviser is to:

- advise HOS, staff and students on policy and safe working practices;
- be the principal link between the School and the University Safety Adviser;
- refer promptly to the HOS and/or the University Safety Adviser any health and safety problems that cannot be resolved locally in a timescale commensurate with the risk;
- coordinate the carrying out regular safety inspections and reporting to HOS and safety committee;
- investigate accidents or near misses and produce reports on the findings;
- maintain local documentation including: risk register, safety handbooks, risk assessment forms etc;
- carry out such other health and safety duties as may reasonably be assigned by the Head of School.

### **1.1.6 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 his/her line manager/supervisor or with the School Safety Adviser. If the matter is not resolved in this way it should be brought to the attention of the Head of School.

### **1.1.7 School Safety Committee**

The Head of School has set up a Health and Safety Committee. The remit of the Committee is to:

- Keep under review the health and safety arrangements of the School and make recommendations to the Head of School on steps to be taken to ensure the effectiveness of the School's health and safety policy.
- Formally review the School's health and safety management system every 12 months and make recommendations for any changes to the Head of School.
- Provide a forum for discussion of health and safety matters raised by members of the Committee or raised by staff/students through committee members.
- Meet at least once each term and at other times as the convenor of the committee deems appropriate.
- Produce minutes of its meetings in a timely manner and publish them on the School's notice boards.

Particular matters that the Committee should consider include:

- Reports of health and safety inspections of the School
- Reports of all accidents and near misses
- The adequacy of the School's arrangements for risk assessment
- The health and safety content of training for staff and students
- Health and safety information produced for staff and students and how it is communicated

If any other student or member of staff has a matter they wish the Committee to discuss they should contact one of the members of the Committee.

### **1.1.8 Safety Inspections**

Health and Safety inspections are carried out to help evaluate the School's health and safety arrangements are working as intended. Inspections will take place at least twice per year and will be lead buy the School safety Adviser who will report findings to the Head of School and to the School Safety Committee.

## **1.2 FIRE SAFETY**

Fire is probably the greatest single safety related threat to the School and to members of the Disciplines. 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 that we do as much as we can to prevent a fire starting. If despite our best efforts a fire should start, a fast and effective response can help save life and property.

Further information on fire safety is available from the School Safety Adviser or at [www.abdn.ac.uk/safety/resources/environmental/fire](http://www.abdn.ac.uk/safety/resources/environmental/fire) including an instructional video.

### **1.2.1 Fire Drills and Alarm Tests**

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

The alarms are tested every **Wednesday morning at 7.30 a.m. in Meston** and at **11.30 a.m. on Tuesday morning in St Mary's**. 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 the building evacuated.

### **1.2.2 Fire Prevention**

The no smoking policy eliminates one of the main ways in which a fire can start. Our systems for inspecting electrical equipment should reduce the chances of faulty electrical equipment being a source of fire. Other important precautions are:-

- Avoid large accumulations of material which might easily burn (e.g. waste paper, cardboard, plastics).
- Bottles of flammable solvents should not be allowed to accumulate on work surfaces but should be kept in solvent cabinets. Solvents should be cleaned up at once if spilled.
- Do not obstruct the ventilation of electrical equipment or place material immediately above or close to electric heaters.
- Do not overload electrical sockets by connecting too many appliances to a single socket.
- Doors marked "Fire Door Keep Closed" are meant to control the spread of smoke and to contain fires. KEEP THEM SHUT.

### 1.2.3 On Discovering a Fire

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

1. 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).
2. Get someone to call the fire brigade by dialling 9-999.
3. Warn others in the area (Shout fire and bang on doors! Some people do not always respond immediately to fire alarms).
4. Only if you can do so **without putting your own safety** at risk, attempt to fight the fire with a suitable extinguisher.
5. 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 brigade.
6. See Evacuation Procedures for assembly point.

### 1.2.4 Evacuation Procedures

- If it is possible without undue delay, switch off all electrical appliances, especially heating equipment.
- Check the rooms near to yours, if you can, to ensure the occupants have heard the alarm and left.
- Leave the building quickly but without running. NEVER USE LIFTS IN THE EVENT OF AN ALARM. Academic supervisors in the teaching laboratories must check that all undergraduates have left by the nearest exit before they themselves leave the laboratory.
- For Meston, assemble in car park next to Sir Duncan Rice Library.
- For St Mary's, assemble at entrance The Hub on Elphinstone road.
- The person responsible for making the alarm must report to the person in charge immediately and together can consult with the fire brigade. **The person in charge of an incident will be wearing a fluorescent vest.** This will normally be a member of the evacuation team listed in the small Health & Safety booklet.
- Keep all approach roads clear.
- Re-entry to building will not be allowed until told to do so.

### 1.2.5 Extinguishers

There are four main types of extinguisher used in the University. The applications for which they are suited are summarised in the table below.

	Water	Foam	Carbon Dioxide	Dry Powder
<i>Wood, paper textiles etc.</i>	√	√		√
<i>Petrol, oil, fats, paints etc.</i>		√	√	√
<i>Electrical hazards</i>			√	√

Water must **never** be used on burning liquids or electrical equipment.

All extinguishers are checked every 12 months and a colour coded disc the date of last inspection is shown on the extinguisher. Within the School of Geosciences areas, it is normally only Carbon Dioxide or Foam extinguishers.

### **1.2.6 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.

### **1.3 FIRST-AID**

The School actively promotes First-aid training to provide those participating in fieldwork activities with access to first-aid. Where necessary the School will directly fund training independently of central provision.

First-aid arrangements in the School are co-ordinated by the School Safety Adviser who will ensure that there are adequate number of qualified first-aiders among the staff and that notices are posted stating who they are.

A full set of first aid materials is maintained in the First Aid Room. Many laboratories retain boxes of plasters for minor cuts. Kits are present in some labs with contents designed to deal specifically with local hazards.

Some First-aiders are also trained in operating the Automated External Defibrillators (AED). Information on action in the event of a suspected cardiac arrest is contained in the appendices.

The First Aid Room is located in the ground floor room 068.

### **1.4 HEALTH & SAFETY TRAINING**

Health and safety training will be provided for staff and students as follows:

- a) All new staff and post-graduate students will receive induction training during the first few weeks of employment. This will cover (where appropriate):
  - School safety policy
  - Who does what and where
  - Fire safety arrangements including viewing of video
  - Access to heights

- Accident reporting
- Use of computer workstations
- Electrical safety
- First aid arrangements
- Restrictions on lone working
- Manual handling
- Laboratory specific procedures.

An individual's immediate supervisor is responsible for ensuring that training is provided. General induction training will be carried out by the Safety Advisor and the form must be completed both by the Safety Advisor and the individual concerned and returned to the Safety Advisor who will keep it on file.

- b) All postgraduate students carrying out laboratory based research work will receive training in laboratory safety. Academic staff responsible for the laboratory concerned and supervisors are responsible for ensuring that necessary training is given. The training will be carried out by the Senior Laboratory Technician.

Records of postgraduate laboratory health and safety training will be kept by the Senior Laboratory Technician.

- c) Students must not enter or work in laboratories without specific permission by their supervisor. He/she will be issued and will sign for a key to the appropriate lab by the Technical Resources Officer – no interchanging of keys by students is allowed.

## **1.5 ACCIDENT INVESTIGATION AND REPORTING**

Staff and students should report accidents as soon as possible to their immediate supervisor. The following must be reported:-

- 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).
- Any incident in which someone could have been hurt (but in which perhaps chance or "good luck" prevented injury). These incidents are sometimes referred to as near misses.
- Unsafe situations.

There are several reasons for reporting accidents. The most important is to enable us to act 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 or to our insurers.

More information on accident reporting is available from the Technical Resources Officer (TRO) or from [www.abdn.ac.uk/safety/general/accidents](http://www.abdn.ac.uk/safety/general/accidents).

### **1.5.1 General School Procedures**

1. Accident report forms are available from School Safety Advisor. They are also available in the Fieldwork First Aid Kits and on web.

2. The form must be completed by the immediate supervisor of the injured person or the person in charge of the area where the incident happened (and not by the injured person).
3. Completed forms must be sent to the University Safety Adviser within 48 hours of the accident. A copy must also be sent to the School Safety Adviser.
4. Serious accidents must be reported immediately to the University Safety Adviser by telephone (Extension 3894). The University Safety Adviser will ensure that the Health and Safety Executive and our insurers are notified if this is necessary. Any accident involving ionising radiation must be reported by telephone to the University's Radiation Protection Adviser (Extension 53109 – Foresterhill).(01224 553109)
5. The Member of staff responsible for the injured person should initiate an investigation into the accident to discover its cause. They should contact the School Safety Adviser for assistance if required.
6. If the accident is reportable to the Health and Safety Executive (the University Safety Adviser will inform the School if it is), the Head of School must receive a copy of the accident report and the results of the investigation into the accident.

### **1.5.2 School Procedures For Reporting Accidents, Injury or Sudden Illness during Fieldwork**

Once news of accident, injury to or sudden illness involving a student undertaking supervised or unsupervised fieldwork is received, there must be an *immediate* and careful investigation of all relevant circumstances. A full report must be prepared either by the leader/supervisor, the Head of School or his representative and forwarded to the appropriate university authorities. Normally this will involve completion of a standard Accident Report Form either online or hard copy ( a copy is in the First Aid Kit). A check should be carried out to ensure that parents, next-of-kin etc. of the casualty have been fully informed about the accident or illness. No statements concerning the accident or illness should be given to outsiders, or the media, except by an authorised spokesperson.

### **1.6 RISK ASSESSMENT**

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 regular risk assessments, whether these be informal and unrecorded or by the more formal documented procedures (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 enough 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).

The carrying out of risk assessments is fundamental to the effective management of health and safety in the School. If we do not first identify how people might be hurt we cannot then take steps to prevent them being hurt. The School is obliged by law to ensure that risk assessments are carried out. There is also 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.

A good 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.

#### **1.6.1 Risk Assessment in Fieldwork**

The School has prepared forms and templates for Group and Individual fieldwork activities available from [www.abdn.ac.uk/geosciences/resources/safety.php](http://www.abdn.ac.uk/geosciences/resources/safety.php). In addition the Fieldwork Handbook contains extensive risk assessments for common scenarios which significantly reduces the work required to complete a risk assessment for fieldwork.

#### **1.7 LONE WORKING**

“Lone working” is where a member of staff or student is working without a second person nearby who would immediately be aware if the first person were to get into difficulties of any sort. It is important that any second person is not only present near the work area but also knows how to provide an effective response to an emergency.

Lone working in laboratories can only be carried out with permission from the Academic coordinator in charge of the following labs:

- Geo-Chemistry Lab
- Crushing Lab
- Petrophysics Lab
- Palynology Lab
- Geography labs.

Persons must be fully competent in all operations being carried out and should not deviate from the same.

In general lone working should be limited to carrying out relatively simple low risk operations. These should only be carried out during office hours.

More information on manual handling is available from the School Safety Adviser or from [www.abdn.ac.uk/safety/resources/personal/lone\\_working](http://www.abdn.ac.uk/safety/resources/personal/lone_working).

## **1.8 ACCESS TO THE SCHOOLS BUILDINGS**

### **1.8.1 Meston**

The North and South Entrances are open from 0800 to 1800 hours Monday to Friday. Access out with these periods is by the North Entrance and is restricted to official key holders only. At approx 2300 hours the Meston door is double locked and no entry allowed.

### **1.8.2 St Mary's**

The Elphinstone entrance is open from 0800 to 1800 hours Monday to Friday. Access out with these periods is restricted to key holders only( by side door from lane).

### **1.8.3 Working Hours**

The normal working hours of the School are defined as being between 0800 and 1800 hours, Monday to Friday. Work in the Department out with these hours is subject to the following conditions:

- Each person enters in the night book (located at the desk in the north entrance in Meston or at desk inside the side entrance from lane in St Mary's) his/her time of arrival, principal location and time of departure. Anyone already in the building and intending to stay after 1800 hours must also sign the book. Evening work officially terminates at 2200 hours.
- Students who find it necessary to be in the Meston building between 2200 and 0700 hours must have written permission from - Head of Discipline or Head of Section.
- Working in labs out with office hours is discouraged. Work( if necessary) should be limited to low risk operations. Otherwise permission must be obtained from Academic Supervisor.

### **1.8.4 Visitors**

The School contains many hazards and it follows that unnecessary visitors should be discouraged. In view of our legal responsibilities, it is advisable to restrict visitors from all laboratories except for supervised educational visits.

## 2. HAZARDS AND CONTROLS

### 2.1 TEACHING SPACE

- THERE IS NO EATING OR DRINKING ALLOWED IN THE LABORATORIES.
- Lecturers in charge of the class are responsible for the safety of the class.
- Lecturers must be aware of the safety instructions for the Building/Lecture Theatre being used.
- The first lecture must start with instructions about what to do in the event of a fire.
- Staff responsible for practical classes must know the location of Fire Extinguishers, First Aid Boxes and who the trained first-aiders in the department are.
- Passage-ways in teaching labs should not be cluttered up with microscope boxes or students' bags.
- Students must be aware of the proper method of lifting heavy equipment and materials for example drawers of rocks (knees bent straight back - lift straight up).
- Report faulty electrical appliances (microscopes, transformers, spent bulbs, cables etc.) to the Technical Resource Officer or any of the Technical staff.
- In case of emergency in the Sections suite (Meston) and G10 (Meston) there are numerous electrical cut-off buttons (round & red) located on the laboratory walls. These are clearly labelled.

### 2.2 RESEARCH SPACE

Research space is normally coordinated by an academic member of staff with direct responsibilities for its safe operation. Day to day operations may be delegated to the technician in charge.

<b>Meston</b>	The following laboratories have their own specific safety hand-outs. They are issued to all personnel using these respective areas:- <ul style="list-style-type: none"><li>• Geochemistry Laboratory</li><li>• Petrophysics Laboratory</li><li>• Rock Crushing Laboratory</li><li>• Sections Suite</li><li>• Polishing Lab.</li></ul> In addition permission must be obtained from John Still before use of the Electron Microscope/Microprobes.
<b>St Mary's</b>	Permission must be obtained from the Laboratory Technician before carrying out work in the Red Corridor labs  A laboratory safety induction will be given by the Senior Lab. Technician prior to starting work in this area.

## 2.3 OUT OF HOURS RUNNING OF UNATTENDED EXPERIMENTS AND EQUIPMENT

Some experiments necessarily require to run continuously. Equipment left running must have information on actions to take in the event of a problem. The University provides Overnight Running Permits for these purposes which are available from the School Safety Adviser.

Anyone leaving equipment running unattended out of hours must recognise that they have full responsibility for it. They are responsible for ensuring that it does not cause harm to anyone or cause any damage to the building and the equipment, data and records which are contained in the building. They must also be prepared to receive out of hours telephone calls and to return to the University at any time in order to assist with any emergency arising from their work.

Remember that outside normal working hours the building is still a place of work for some groups of staff (e.g. cleaners and security personnel). Their safety must be considered when a decision is made to leave experiments and equipment running through the night.

Some laboratories which regularly run equipment overnight are listed here and all are equipped with Overnight Running Permits.

Building	Room	Name	Notes
<b>Meston</b>	119	Geo-chemistry Lab	The GC/MS is the only instrument that runs continuously. Periodically other equipment could be running overnight and would be suitably labelled.  Any experiments running overnight are contained in the relevant fume cupboard with appropriate labelling explaining hazards, shutdown procedures and contact number.
	G08	Electron Probe Lab	The Electron Probes run continuously. Periodically other equipment could be running overnight and would be suitably labelled.
	G14	SEM lab	The SEM runs continuously. Periodically other equipment could be running overnight and would be suitably labelled.

### 2.3.1 Water Supplies

It is absolutely essential that water supplies to any equipment or experimental apparatus are properly connected. The consequences of leaks out of hours can be devastating and the University has had far too many floods caused by inadequately connected water supplies. Not only have the costs of the damage caused been very high, the disruption to the departments affected has been very significant. Water leaks affect not only the laboratory housing the equipment. Laboratories and offices on floors below can also be badly affected.

Water supplies must be connected using pressure resistant tubing and hose clips at all connections (e.g. Jubilee clips). Wiring on of tubing is never acceptable. If the wire is tight enough to secure the tubing it is also very likely to cut the tubing. If equipment will run over several days or weeks, connection should be checked every day.

Waste lines must be put well down into drains so they cannot jump out. Water flow must be kept as low as possible. Remember that not only can water pressure decline, pressure can rise (especially outside normal working hours when the demand for water in the area may drop).

## **2.4 FIELDWORK SAFETY**

Geosciences students, both undergraduates and postgraduates, must be made aware of, and encouraged to reduce to a minimum, the risks associated with fieldwork. Whilst it is impossible to warn of every possible risk of illness or injury that may result from - or be exacerbated by - fieldwork, staff (including postgraduate demonstrators) must exercise a duty of care to students that they lead and supervise in fieldwork activities. Fieldwork must be planned with best fieldwork safety practice in mind and staff responsible for safety must ensure that appropriate safety documentation relating to fieldwork is available and used effectively.

The School has produced an extensive Fieldwork Handbook detailing the procedures, safeguards and information required for the planning and carrying out of fieldwork activities. The School's Fieldwork Handbook can be sourced on the Geosciences website at [www.abdn.ac.uk/geosciences/resources/safety.php](http://www.abdn.ac.uk/geosciences/resources/safety.php) and is essential reading particularly for new staff and students.

## **2.5 VEHICLES**

The School hires vehicles as required.

Before anyone can drive a hired vehicle on University business an Online Driver's Declaration must be completed and accepted. Individuals are also advised to copy the acceptance information to the School Safety Adviser and to the School Finance Person to avoid delays in any bookings. The Driver Declaration Form is located at:

<https://www.abdn.ac.uk/staffnet/forms/driver-declaration/>

### **2.5.1 Legal Licence Requirements by Law**

- Hold a valid full driving licence for private cars: Category B and D1 (or Group A or B on an old style licence).
- Be 21 years of age and have 1 year's driving experience.
- Be insured to drive the vehicle in question.

### **2.5.2 Legal Licence Requirements from 1<sup>st</sup> January 1997**

It is a University requirement that all drivers of vehicles with more than 9 seats must pass a Defensive Driving Course.

- Existing drivers with UK driving license and who passed their test before 1<sup>st</sup> January, 1997 will continue to be able to drive a minibus under the rules above.

- New drivers who pass their car test after 1<sup>st</sup> January 1997 and obtain a Category B entitlement will only be able to drive a vehicle up to nine seats, including the driver. To drive a vehicle with between nine and 16 passenger seats, new drivers will need to meet higher medical standards and gain Category D1 entitlement on their driving license by passing an appropriate test.
- When driving a minibus (>9 seats) it is necessary to carry with them the Small Bus Disc which is obtainable from the School Safety Adviser.

### **2.5.3 School Rules**

1. Where seat belts are provided it is the responsibility of the driver to ensure that passengers belt-up. It is against the law for passengers not to do so and is a School requirement. This would also apply to hired vehicles.
2. Drivers should be aware of their alcohol consumption and drive well within the legally permitted levels of 'blood-alcohol' of the country concerned. Particular care should be taken to ensure that drivers are 'legal' and in a fit state to control their vehicle in the morning that follows a previous evening's social drinking.
3. It is imperative that all loose materials, e.g. rocks, hammers, spades, haversacks, etc. are secured in the back of the vehicles. In the event of an accident, they can injure passengers by becoming lethal flying objects.
4. In the event of an accident, contact the hire company as well as the Technical Resources Officer for insurance purposes and advice. The School is liable for the first £250 of any claim to our insurance, plus £75 for people between the age of 21-24.
5. In the event of a breakdown, the driver should contact the hire company. There may also be a notice within the vehicle giving contact details for a Breakdown service.
6. On returning from field excursions please report to the Technical Resource Officer, any problems, dents or scratches incurred to the hire vehicle during that time, so that they can be rectified or repaired.

### **2.5.4 Vehicle Maintenance**

Although vehicles are on hire and should have been checked prior to delivery, it is still the driver's responsibility to ensure that the vehicle is roadworthy. This is especially true if the field trip lasts several days.

If faults that might affect the vehicle's or passengers' safety are found, the vehicle must not be used until they are remedied. Report these to the Technical Resources Officer or other member of the technical staff and/or hire company.

It is legally the driver's responsibility to check vehicle is roadworthy. Before every journey, the driver should conduct a pre-drive safety check. He or she should walk around the vehicle, to check for visible defects and check the items listed below:

<p><b>Pre-Drive Safety Check:</b></p>	<ul style="list-style-type: none"> <li>• Oil Level</li> <li>• Coolant Level</li> <li>• Windscreen washer fluid level</li> <li>• Brake fluid level</li> <li>• Windscreen and windows are clean and undamaged</li> <li>• Lights, including brake lights and indicators, are clean and working</li> <li>• Tyre pressures, including the spare (and inner tyres and tyres on a trailer, if applicable)</li> <li>• Tyre tread, including the spare (and inner tyres and tyres on a trailer, if applicable). At least 2.5mm across centre 3/4 is recommended. Any cuts and bulges?</li> <li>• Doors open and close properly</li> <li>• Trailer brake lights and indicators work, if applicable</li> <li>• Roof rack or trailer is properly fitted, and all luggage is securely held</li> <li>• Mirrors are correctly adjusted, clean and unobstructed</li> <li>• Position and function of all the dashboard controls</li> <li>• Position of driving seat so that all pedals can be operated comfortably</li> <li>• Pressure on brake pedal</li> <li>• Lights and indicators are working</li> <li>• Wipers and washers are working properly</li> <li>• Fuel level (and type of fuel: diesel or petrol)</li> <li>• Seat belts, where fitted, are undamaged and working properly</li> <li>• Location of wheel brace and jack</li> <li>• Location and contents of first aid kit and fire extinguisher(s) if supplied</li> <li>• Location of relevant paperwork (small bus permit, insurance, MoT, emergency numbers, maps and Driving licence)</li> <li>• Note:- Small bus permit must be displayed on Minibus when in use.</li> <li>• Change for parking or the telephone (or mobile phone or phonecard)</li> <li>• Luggage is securely stowed and aisles and exits are clear</li> </ul>
<p><b>Brake checks:</b></p>	<p>Before the passengers are loaded, the brakes should be checked. With the engine running, check the handbrake is working properly, and that the brake pedal is firm when pressed.</p> <p>A moving brake test should then be conducted, off-road if possible. Reach a speed of not more than 15 mph, check the mirrors and if it is safe, apply the brakes fairly firmly. The brakes should work effectively, the vehicle should not pull to one side, luggage should be stored securely.</p>

### 2.5.5 Hazardous Cargo

The carrying of hazardous cargos (chemicals etc.) is not permitted.

## 2.6 COMPUTER WORKSTATIONS

Those working with keyboards and computer display screens for prolonged periods as a significant part of their normal work can be exposed to a number of health hazards. The principal hazard relates to the arms. The problems, which can develop, are referred to as WRULDs (Work related upper limb disorders). The risks can readily be 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.

The risk is only significant for those who use computer workstations intensively for a large part of each working day. Staff who are identified as being in this category will have their workstation assessed for compliance with workstation standards. More information on workstation assessments is available from the School Safety Adviser, from one of the School's assessors or from [www.abdn.ac.uk/safety/resources/workplace/computers](http://www.abdn.ac.uk/safety/resources/workplace/computers) including instructional videos.

School Workstation Assessors	
<i>Meston</i>	J. Christie
<i>St Mary's</i>	Alison Sandison

## 2.7 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 usually a chair. The only suitable means of access are a stepladder or "kick stool". Swivel chairs should never be used.

There are several pairs of stepladders or kick-stools located in various laboratories and offices around the School. They are inspected on a regular basis to ensure that they remain in good condition. If at any time, a ladder becomes damaged it should be reported immediately and taken out of circulation for repair.

When storing items on shelves do not place heavy items up high. They will be difficult to place on/remove from the shelves, and if they were to fall they could cause serious injury. Instead, place them at head height or close to the floor.

## 2.8 MANUAL HANDLING

In the work place, 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.

Before attempting to lift anything, size up the job. Do not hesitate to seek advice or help with heavy or awkward 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).

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

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

More information on manual handling is available from the School Safety Adviser or from [www.abdn.ac.uk/safety/resources/workplace/handling](http://www.abdn.ac.uk/safety/resources/workplace/handling).

## **2.9 BUILDING MAINTENANCE**

The Estates section is responsible for maintaining the fabric of University Buildings and any fixtures and fittings. Staff from the Estate Section regularly inspects buildings. However, those who work in a building are likely to be the first ones to notice that something is unsafe. Any building items requiring attention should be reported to the Technical Resources Officer or a member of the technical staff, who will arrange for Estates to be contacted. Any matters requiring urgent attention should be reported immediately and directly to Estates using the Emergency 24-Hour number 3939.

## **2.10 CONTRACTORS**

Contractors must never undertake any work in the School without first obtaining the permission of the Technical Resources Officer. This is to ensure that:

- Contractors' staff do not endanger their own health and safety by entering laboratories without taking necessary precautions and
- Contractors do not endanger 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 buildings should contact the Technical Resources Officer in advance to agree any precautions, which might be required.

**Certain areas are hazardous including the roof (Fume Cupboard Extraction) and a "Permit to Work" must be obtained before any work commences.**

No access is allowed to room G10 in Meston without the permission of Professor David Jolley or the Technician in charge. Contractors must be accompanied and informed of the hazards associated with this lab.

## **2.11 ELECTRICAL SAFETY**

Accidents involving electricity are usually very serious. Anyone who comes into contact with a source of electricity and only receives a shock, from which they can walk away, should consider themselves very lucky. Faulty electrical equipment can also be a source of fire.

Before using electrical equipment users should check its condition and if you see anything that looks unsafe (e.g. a cracked plug, frayed wire) report it immediately to the Technical

Resources Officer or a technician. Repairs may only be performed by a competent person, normally a technician, authorised by the Technical Resources Officer.

If you have any reason to believe that any portable equipment is damaged or defective, you should:

1. Unplug the equipment
2. Take steps to prevent anyone using it again by unplugging and removing the piece of equipment immediately.
3. Inform the Technical Resources Officer or any member of the technical staff who will arrange to have it repaired by a competent person.

If wall sockets or electrical installations are found to be faulty they should be reported to the Technical Resources Officer immediately. A notice will be displayed to this effect and the fault will be reported to a University electrician.

There is an inspection programme of all portable electrical equipment in the School, co-ordinated by the Technical Resources Officer and carried out by

<b>Meston</b>	Walter Ritchie
<b>St Mary's</b>	Alison Sandison Audrey Innes

## **2.12 MACHINERY**

The School has machinery used in the cutting, crushing and preparation of rock samples. No one is permitted to operate this machinery without first having undertaken training.

Some of the machinery is fitted with locks to prevent unauthorised access. Persons requiring access must contact the technician in charge.

The machinery contains rotating parts and the user must not attempt to repair any components. If a fault develops contact the Technical Resources Officer or technician in charge who will arrange for its repair and ensure that the equipment is locked-off preventing accidental energising during maintenance.

## **2.13 HOUSEKEEPING**

Everyone can make an important contribution to safety by keeping the department in a tidy condition.

- Keep passageways and the area around where you work clear for access. People can be injured bumping into or tripping over items. In event of a fire clear access to the fire exits will be needed.
- Keep cupboards and filing cabinet drawers closed. They can cause injury if left open and someone bumps into them.
- Never allow wires and cables to pass across places where people might walk. They can be a serious trip hazard. If there is no alternative route, ensure that a cable is covered by special rubber cable protectors designed for this purpose.
- Do not let rubbish accumulate other than in rubbish bins. Any accumulation of material, which can burn, increases the risk of fire.

- Food and fruit should not be left in rooms to decay as this can lead to a health hazard.
- If you see a spillage on the floor that has been made by someone else, arrange for it to be cleaned up immediately before someone slips on it and injures themselves.

### **2.13.1 Good Laboratory Practice**

The following should be instinctive practices for anyone who works in a laboratory. They make the laboratory a safer place for everyone but they are only of any value if everyone in the laboratory takes an active interest.

- a) Corridors, fire exits and passageways forming means of escape through working areas must be kept free of obstruction.
- b) Floor surfaces must be kept clean and in good condition.
- c) Any spillages and breakages should be cleaned up immediately.
- d) Benches should be kept tidy and gangways kept clear.
- e) ALL bottles should be clearly labelled with their contents and, where possible, marked with the appropriate hazard warning symbol. (E.g. Marking a bottle with nothing other than a label saying "Solution A" is not acceptable).
- f) Wash bottles containing anything other than water must be marked in a highly visible and distinctive manner.
- g) Do not set up apparatus in front of service controls or in a way which blocks exit routes.
- h) If any apparatus has to be set up above head height, ensure that a suitable means of access is available. (A suitable means of access will be a kick stool or a step ladder). Climbing on a bench, chair or laboratory stool is not acceptable).
- i) Eating and drinking are forbidden in all laboratories.
- j) Do not apply cosmetics or chew on pencils and pens in a laboratory.
- k) Mouth pipetting (even of harmless substances) is prohibited.
- l) When wearing gloves do not touch anything which someone else without gloves might touch (e.g. telephone, computer keyboard, door handle).
- m) Always wash your hands thoroughly after handling hazardous substances and after leaving the laboratory.
- n) Wear your lab coat and remove it when you leave the laboratory or laboratory suite.

## APPENDICES

### A.1 SCHOOL SAFETY COMMITTEE

The Head of School has set up a Safety Committee. The committee has the following membership:

<b><i>Head of School</i></b>	Prof. Chris Soulsby	2344
<b><i>School Safety Adviser &amp; TRO</i></b>	Jan Walker	2942
<b><i>School Admin. Officer</i></b>	Ann Simpson	3428
<b><i>Meston (Geology)</i></b>	Dr Stephen Bowden	3467
<b><i>St Mary's (Geography)</i></b>	Dr. James Scholfied	3034
<b><i>St Mary's ( Archaeology)</i></b>	Dr. Gordon Noble	2333
<b><i>Laboratory Technician</i></b>	Audrey Innes	3698
<b><i>Laboratory Technician</i></b>	Colin Taylor	3494
<b><i>Clerk</i></b>	Julie Forbes	2894
<b><i>TRM</i></b>	Eddie Stephen	2500
<b><i>Postgraduate reps</i></b>		

## A.2 WHO DOES WHAT AND WHERE

### Meston Building

Usage	Room	Responsible Person
<i>Rock Crushing room</i>	01	Dr M. Hole C. Taylor
<i>Thin Section Laboratory</i>	02/03	TRO
	07	
<i>Radioactive Rock store</i>	029	Dr S. Bowden
<i>Petrophysics laboratory</i>	G03	Dr D. Healy C. Taylor (Tech)
<i>Cathode Illuminescence Laboratory</i>	G06	Dr Joyce Neilson
<i>Electron Probe Laboratory</i>	G08	Dr M. Hole J. Still (Tech)
<i>Basin Studies</i>	G09	Prof. A. Hurst
<i>Palynology laboratory</i>	G10	Prof D. Jolley
<i>MSc/Teaching laboratory</i>	G11	Prof. A. Hurst
<i>Fluid Inclusion room</i>	G12	Prof. J. Parnell
<i>Polishing Laboratory</i>	G13	TRO
<i>SEM laboratory</i>	G14	Prof. J. Parnell J. Still (Tech)
<i>Computer Support Lab</i>	115	J. Christie (Comp. Officer)
<i>Computer Workstation Laboratory</i>	116	J. Christie (Comp. Officer)
<i>1<sup>st</sup> Year Teaching Laboratories</i>	118	TRO Walter Ritchie (Tech)
<i>Clean Sedimentary/Palynology Prep</i>	119	Prof. D. Jolley
<i>Geochemistry Laboratory</i>	119A 119B 124	Prof. J. Parnell C. Taylor (Tech)
<i>2<sup>nd</sup>/3<sup>rd</sup> Year Laboratories</i>	122	TRO Walter Ritchie (Tech) Colin Taylor (Tech)

## St Mary's Building

Usage	Room	Responsible Person
<i>Archaeology</i>	B02	Prof. K. Dobney Dr L. Flink
<i>Cartography</i>	B05	A. Sandison (Tech) J. Johnson (Tech)
<i>Bio-archaeology</i>	B36	Prof. K. Dobney
<i>Geo-archaeology</i>	B38	Dr K. Milek
<i>Archaeological Chemistry</i>	B39	Dr K. Britton
<i>Archaeology</i>	B13	K. Britton
<i>Prep. Room</i>	B14	A. Innes (Tech)
<i>Microscope Analysis Room</i>	B15	A. Innes (Tech)
<i>Palynology laboratory</i>	B16	A. Innes (Tech)
<i>Instrument Store/Cold Store</i>	B17	A. Innes (Tech)
<i>Sediment Laboratory</i>	B18	A. Innes (Tech)
<i>Teaching Lab</i> <i>Freezers</i> <i>Core Preparation</i>	B20	A. Innes (Tech)
<i>Hydrology Laboratory</i>	B20A	A. Innes (Tech)
<i>Aerial Photo Store</i>	B21	Dr D. Green
	B22 B22A	Dr D. Green
<i>Archaeology Laboratory</i>	B23	A. Inness (Tech)
<i>Map Room</i>	G18	A. Sandison (Tech)

### A.3 USEFUL TELEPHONE NUMBERS

<b>Police, Fire &amp; Ambulance</b>		(9)999
<b>Accident &amp; Emergency, Foresterhill</b>		(9)0845 456 6000
<b>Security (non-emergency)</b>		3327
<b>Security (Emergency) 24 Hours</b>		3939
<b>University Safety Adviser</b>	Nigel Corby	3894
<b>Head of School</b>	Prof. C. Soulsby	2672
<b>School Safety Adviser &amp; TRO</b>	Jan Walker	2942
<b>Radiation Protection Adviser</b>	Dr S. Bowden	3467
<b>School Administrative Officer</b>	Ann Simpson	3428
<b>Head of Archaeology</b>	Prof. K. Dobney	2634
<b>Head of Geography</b>	Dr D. Mair	2326
<b>Head of Geology</b>	Prof. D. Jolley	3450

### A.4 RESTRICTED AREAS

#### Meston Building

Usage	Room	Information
<b>Mineral Collection</b>	G029	<ul style="list-style-type: none"> <li>The key for the store can only be issued by :               <ul style="list-style-type: none"> <li>Technical Resource Officer</li> <li>Dr Nigel Trewin, Curator</li> <li>Dr Stephen Bowden, Radiation Protection Adviser</li> </ul> </li> <li>Access is limited to persons with an actual need to enter the room.</li> <li>The Log Book must be completed with name, date and time of entering/leaving</li> </ul>
<b>Radioactive Store</b>	G029	<ul style="list-style-type: none"> <li>The key for the Radioactive store can only be issued by Dr Stephen Bowden, Radiation Protection Adviser</li> <li>Entry into the Radioactive store can only be made by Registered Radiation Workers</li> <li>Personnel Dosimeters must be worn at all times when in the room</li> <li>Access for checking presence of samples is limited to one hour per month</li> <li>The removal or inspection of radioactive samples from the collection is subject to an approved risk assessment</li> </ul>
<b>Palynology lab</b>	G10	<ul style="list-style-type: none"> <li>No access without permission of Prof. David Jolley</li> <li>Access is restricted to Authorised users</li> <li>Authorised users must have received a safety induction from Prof. David Jolley</li> </ul>

**A.5 WHEN A CARDIAC ARREST IS SUSPECTED:-**

1. Assess the person. If suspected cardiac arrest, call or send someone to call 999 immediately.
2. Someone should call an AED trained first aider ( list on corridor walls and below).
3. Send someone the entrance of the building to meet the ambulance and the AED trained first aider.
4. The first aider should administer cardio-pulmonary resuscitation (CPR) until the AED trained first aider arrives.

Many victims will survive if bystanders act immediately while ventricular fibrillation (VF) is still present. The **Automated External Defibrillators (AED)** must be used within a 4 minute time period for a chance of successful resuscitation.

**Automated External Defibrillators (AED) are located in:**

- The porter’s cabin at the entrance in Fraser Noble Building (ext 2532).
- The Zoology building (ext 2217)
- The University office visitor centre.

**Personnel trained in defibrillator use:**

<b>Name</b>	<b>Location</b>	<b>Tel</b>	<b>Room</b>
<i>Joyce Clark</i>	Fraser Noble	4207	175
<i>Rainer Ebel</i>	Meston	2930	G32
<i>Colin Taylor</i>	Meston	3494	119A/B

## A.6 BUILDING EVACUATION MANAGEMENT

### Evacuation Management Team

Meston	St Mary's
Jan Walker	Jan Walker
Colin Taylor	Alison Sandison
Walter Ritchie	Audrey Innes
John Still	
Malcolm Hole	

### Fire Wardens

Meston	St Mary's
First floor west – Walter Ritchie	Jan Walker
First floor east - Colin Taylor	Alison Sandison
First floor west – Walter Ritchie	Audrey Innes

The first member of the above team leaving via the North entrance of Meston building or the Elphinstone Road entrance in St Mary's will undertake the role of Evacuation Officer . They should:

- on exit empty the fire information box located near the above doors (this contains fluorescent vest, location of gas cylinders / hazardous chemicals, and evacuation checklist)
- don the high visibility fluorescent vest
- check with Fire wardens that their area is cleared
- if possible, without endangering life, ascertain location and extent of fire. (check fire alarm zone panel)
- delegate qualified First Aiders to look after casualties
- ensure emergency services have easy and fast access
- report to emergency services on their arrival, passing on all relevant information
- permit re-entry to the building only with permission from the emergency services and after the alarms have been silenced.
- If necessary, contact estates section on 3939 to request attendance of an electrician to silence alarms