

Safety Handbook 2013-14

GGE'S RESPONSIBILITY	2
YOUR RESPONSIBILITY.....	2
SAFETY PERSONNEL	3
WORKPLACE SAFETY COMMITTEE	3
GENERAL SAFETY ISSUES.....	4
REPORTING ACCIDENTS.....	4
REPORTING DANGEROUS OCCURRENCES	4
REPORTING FLOODING OR ELECTRICAL PROBLEMS.....	4
LABORATORY ACCESS 08:30 -17:00 MONDAY – FRIDAY	5
OUT OF HOURS AND LONE WORKING.....	5
FIRST AID	6
FIELDWORK SAFETY	6
GUIDANCE NOTES FOR FIELDWORK HEALTH & SAFETY.....	6
RISK ASSESSMENT.....	7
SUPERVISED FIELD COURSES.....	7
<i>Introduction.....</i>	7
<i>Duties of Leaders.....</i>	7
<i>Duties of Students.....</i>	9
INDEPENDENT FIELDWORK.....	10
<i>Planning independent fieldwork</i>	11
<i>Safe working in the field.....</i>	12
FURTHER ADVICE	13
ANNEXE 1 - SAFETY POLICY STATEMENT.....	14

Disclaimer: The information in this handbook is as accurate and up-to-date as we can make it. It does not, however replace the entries in the University's Academic Regulations and Guidance for Students and Staff, as well as course-specific regulations, which are authoritative statements. In case of conflict, these regulations take priority. The statements of Earth Sciences and Geography policy in this handbook are made in good faith. It may however be necessary from time to time to vary courses, procedures and other arrangements.

This definitive version of this Handbook can be viewed on the Geography, Geology and the Environment website at:

<http://www.keele.ac.uk/gge/handbooks/>

Updated September 2013

Geography, Geology and the Environment (hereafter referred to as GGE) is committed to ensuring the health and safety of all its staff, students, and visitors. To this end, it endorses and accedes to the health and safety policies and procedures of the University as laid down in the University Health and Safety Manual.

Further information concerning health and safety matters in the University may be obtained from:

1. University Health and Safety Manual available on the Web at

<http://www.keele.ac.uk/dohs/a2z/>

2. Information for staff working with radiation :

<http://www.keele.ac.uk/dohs/radiation/>

Under the Health and Safety at Work Act (1974) the employer, staff, students and visitors have certain responsibilities:-

GGE's Responsibility

GGE is responsible, so far as is reasonably practicable,

- for ensuring the health, safety and welfare at work of all its staff, students and visitors
- for establishing appropriate emergency procedures
- for establishing mechanisms for consultation with all members of GGE in respect of health and safety.
- for devising safe working practices in its laboratories, lecture theatres and offices.

Your Responsibility

It is the responsibility of **all** staff, students and visitors working in the building:-

- to take reasonable care for the health and safety of themselves and of others who may be affected by their acts and omissions whilst in the workplace.
- to co-operate as necessary to enable any duty or requirement imposed on GGE by, or under, any relevant statutory provisions to be carried out or complied with.
- to not interfere with, or misuse, anything provided by GGE or the University in the interests of health, safety or welfare.

All undergraduate students in GGE must familiarise themselves with this Safety Handbook. You will be asked to complete a Student Safety Form and return this to the Office signifying that you have done so. For staff and research students, this Handbook supplements the information in the University Staff Health and Safety Leaflet, which you have all been supplied with, and that on the Department of Health and Safety website.

Safety Personnel

Staff responsible for safety matters in GGE:

	Room		Phone
Workplace Safety Advisor	David W. Emley	WS 1.21	33617
Workplace Radiation Supervisor	David W. Emley	WS 1.21	33617
Chief Fire Steward	Peter Greatbatch	WS 0.10	33628, 34178
Deputy Fire Stewards	David W. Wilde	WS 0.10	33628, 34178
Designated First Aiders	Emma Harvey	WS 0.04	33183
	Stu Clarke	WS 1.23	33171

Workplace Safety Committee

As required by the Health and Safety at Work Act, GGE has a Workplace Safety Committee made up of staff and student representatives. The committee meets once each semester. If you wish to bring a safety related matter to the attention of the committee, please consult your student representative or the Workplace Safety Advisor. GGE is bound by the Safety Policy Statement of the University.

Members of the committee are:

Stuart Egan	Chair: Head of School
Stephanie Everill	Office Manager
David W. Emley	Workplace Safety Advisor, Radiation Protection Advisor
Michael B. Edge	School Manager
Elaine McFarlane	School Manager
Ralf Gertisser	Academic Staff
Peter Greatbatch	Chief Fire Steward
Sam Toon	EPSAM Representative
Ian Wilshaw	Deputy Workplace Safety Officer
Richard Waller	Fieldwork Safety Advisor

Postgraduate and Undergraduate Student Representatives

General Safety Issues

A number of areas within the William Smith Building can only be used with permission and after receiving training e.g. Geochemistry Laboratory and Woodlands Laboratory. Those wishing to use these areas are directed to the instructions and methods of working that are available separately.

- **All** users of the William Smith building **must** familiarise themselves with the location of fire alarm points, fire exits and fire extinguishers and with the emergency evacuation procedures outlined on the inside cover of this booklet.
- Smoking is not permitted in the building.
- Eating and drinking is not permitted in laboratories and lecture theatres.
- Personal electrical equipment that runs off mains supply e.g. kettles, heaters etc **MUST NOT** be used without prior testing by a designated Electrically Competent Person – contact a member of technical support staff.
- Close all doors and windows when leaving a room or laboratory, especially at the end of the working day. Not only is this a security issue, but it could help prevent the spread of fire.

Reporting Accidents

Whenever an accident occurs within the William Smith Building which involves injury to yourself or to others, an entry **must** be made in the Accident Book. This is kept in the GGE Office.

The Workplace Safety Advisor must be informed whenever an accident occurs within the building or its immediate confines so that a full investigation can be made.

Reporting Dangerous Occurrences

Whenever an incident occurs within the William Smith Building, or its immediate confines, which *does not involve injury BUT which could have done so*, an entry **must** be made in the Accident Book. This is kept in the GGE Office. The Workplace Safety Advisor must also be informed.

Reporting Flooding or Electrical Problems

During working hours, contact the GGE Office. Outside working hours YOU **MUST** contact Security (internal phone 888) as soon as possible.

Laboratory Access 08:30 -17:00 Monday – Friday

Undergraduates are not permitted to work unsupervised in the Geochemistry Suite and Woodland Laboratory. A member of staff must always be informed of your intent to work in any of these laboratories and you will not be allowed to do so until training has been given by an appropriate member of staff in the use of equipment, apparatus, substances and procedures. A key for access to the Woodland Laboratory is available in the Office and must be signed for when collected and when returned. See Dave Emley if you need a key for longer-term use.

The General Safety Rules of each laboratory must be read and signed along with any appropriate COSHH/Risk Assessments before work commences.

Out of Hours and Lone Working

The normal working hours of GGE are 08.30 to 17.00 Monday to Friday. The Building is closed on Saturday and Sunday.

Access to the building is normally available outside working hours but **no machinery or facilities in the Geochemistry Suite or the Woodland Laboratory may be used without special permission.** See the Workplace Safety Advisor.

All undergraduates wishing to use facilities after hours must seek permission from their tutor.

Hazardous operations involving obvious fire, explosion, poison or other risks must NOT be undertaken when working alone. Routine operations which involve any **significant level of hazard** may only be done outside normal working hours when there is at least one other worker in the same laboratory or within earshot.

It is always advisable if you are working alone outside of normal office hours to advise a friend, family member or colleague of this. This person should be someone who will notice if you do not return at the expected time.

Assess the following and include it in any risk/COSHH assessment that you make:

People

Do any of the people you are likely to meet pose any significant threat to your personal safety?

Environment

Do any of the areas you will be working in pose a significant threat to your personal safety?

Task

Does the task you are undertaking pose a significant threat to your personal safety?

If there is a problem:

How will you call for help?

Who will respond?
What will they do?

If you do not report back at the end of your day:

Who will notice?
What will they do?

Finally, can I be sure that I have taken all reasonably practicable precautions to protect myself?

Considering the answers to these questions may help you to recognise potential problems and areas that may pose specific risk.

First Aid

First Aid help and advice is available from Emma Harvey (GGE office tel. 34307).

A First Aid Box is available in the Office, Room WS 0.04.

First Aid boxes do not contain any medication. If you need pain-killers etc then you should contact the Health Centre or your GP.

Fieldwork Safety

Note for students: Students undertake fieldwork within a variety of contexts and are requested to take particular note of the sections on pages 7 to 8 (supervised field courses) and 10 to 12 (independent fieldwork).

Guidance Notes For Fieldwork Health & Safety

The safety of staff and students when engaged in fieldwork activities is of paramount importance. The GGE policy with respect to safety in pursuit of fieldwork is in accord with the Guidance Notes for Fieldwork Health & Safety approved by the University Occupational Health & Safety Committee (Keele, 1995), which is reproduced here:

****** The Management of Health and Safety at Work Regulations (1993) requires that the University should reduce the risk of injury during all its operations. The University must provide a safe place of work as far as is reasonably practical and these notes are provided to assist in ensuring that the duty of care is properly exercised.

Fieldwork in GGE involves some inherent special risks and hazards, e.g. associated with mountains, coasts, quarries and river-sections. Severe or dangerous weather conditions may also be encountered at any season, especially on mountains or the coast. Consequently, in accordance with the Health and Safety at Work Act (1974), field course leaders must ensure necessary safety precautions have been taken and take every reasonable care concerning the safety of field course participants. In addition, it is imperative that students should cooperate by behaving responsibly in order to minimise the risk of accidents.

Risk Assessment

Formal risk assessment is the principal procedure employed both to minimise the risk to staff and students and to fulfil relevant legal obligations. Consequently staff and students should be familiar with the process and its application to fieldwork activities:

1. identify hazards
2. identify persons at risk
3. evaluate the level of risk
4. identify and implement control measures to reduce the level of risk
5. record the process
6. review as required

If as a result of the risk assessment process, a proposed activity is considered too hazardous, it should be modified to reduce the level of risk to an acceptable level. Once completed, the risk assessment should be communicated to all staff and students involved in the fieldwork activity. Any participant who is concerned about any aspect of fieldwork raised by the risk assessment process should discuss the issue with the field course leader, or in the case of independent work, their supervisor. If any students have special needs or pre-existing medical conditions that may influence their ability to take part in the proposed activities, these should be identified and discussed prior to the field course, where appropriate in consultation with Occupational Health, Disability Services or their own GP. If any activities are considered unsuitable, then practical adjustments should be considered prior to the trip.

Supervised Field Courses

Introduction

During fieldwork, students are at all times responsible to, and must be under the supervision of, a named member of staff and the leader of the fieldwork. The leader will be responsible for ensuring that appropriate safety measures (as highlighted by the risk assessment) are complied with by all members of staff and students. However, **if students wilfully jeopardise their own safety, then the leader or members of staff cannot be held responsible for that student.**

Students must be aware that they, as individuals, have a responsibility for their own safety and also for the safety of others who may be affected by their actions. Failure to do so may result in a criminal prosecution (under the Health and Safety at Work Act 1974) and/or disciplinary measures. Non-compliance with the instructions of the Party leader may also be a breach of University Regulations (see [Regulation 20 – Student Discipline](#)).

Duties of Leaders

One overall leader must be appointed by the Head of School. The leader may appoint one or more group leaders (as appropriate) to act on their behalf in the field. Responsibility for health and safety ultimately lies with the Head of School. Individuals nominated as leaders must display the relevant attributes/experience to carry out their duties.

Leaders must be responsible for:

- i Production of a documented risk assessment. Leaders of all official GGE field courses are required to submit a formal risk assessment to the Head of School. All members taking part in the field course activities should be involved in the construction of the risk assessment. Formal records of all risk assessments for fieldwork are to be kept by Earth Sciences and Geography.
- ii Communication of the risk assessment and specific warning of relevant hazards to all field course participants.
- iii Identification of participants with special needs (e.g. mobility issues or medical conditions). These should be discussed with the participant in order to make any necessary adjustments to the proposed fieldwork activities. In some instances, this may require the generation of personal risk assessments for the participants involved in consultation with Disability Services.
- iv Ensuring the party is adequately trained and equipped for the expected conditions (e.g. terrain and weather) and activities, and provided with any necessary safety equipment (e.g. first aid kits, hard helmets etc).
- v Providing adequate supervision and first aid cover in the field.
- vi Checking local weather conditions (and sea conditions in coastal locations) and changing plans if necessary.
- vii Where appropriate, giving notice to a third party of:
 - a) a time of departure
 - b) a list of the persons involved
 - c) a proposed route
 - d) the destination and time of arrival and return
 - e) notification of safe return
 - f) contingency plans in event of leader being incapacitated.
- viii Reporting any accidents or incidents to the GGE Workplace Safety Advisor and entering details into the Accident book. Serious accidents involving loss of life, fractures, bleeding wounds, etc., if resulting in the casualty being unable to work as normal for more than three days, **MUST** be reported to the GGE Safety Advisor as soon as possible after the event for transmission to the Health & Safety Executive (HSE) through the University Health & Safety Advisor (UHSA) (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995)

Field course Leaders are advised to consult the following guidance as appropriate, as well as the sources of further advice listed on p13:

- BS8848: British Standard regarding overseas fieldwork.
- **Guidance on Health and Safety in Fieldwork.** UCEA/USHA booklet.
http://www.ucea.ac.uk/objects_store/guidance_on_health_and_safety_in_fieldwork.pdf
- **A Code for Geological Field Work** issued by the Geologists' Association

- **Safety on Mountains** published by the British Mountaineering Council

Duties of Students

Students are strongly encouraged to advise field course leaders of any medical conditions that may affect their ability to take part in field course activities. In this respect, all students are required to fill in a medical questionnaire on their arrival at Keele and they should keep staff informed of any changes in their stated medical conditions. Staff will in turn endeavour to identify practical adjustments that can be made to the field course itinerary for students concerned, or if no alternative is practicable, arrange alternative activities.

In accordance with the **Health & Safety at Work Act (1974)**, leaders will have been advised by their School to follow certain safety precautions and to take every reasonable care concerning the safety of members of their parties. However, *the potential dangers make it imperative that students should co-operate by:*

1. **Familiarising yourself with the field course risk assessment and observing all safety instructions given by party leaders or advisors.** Anyone not conforming to the standards required may be dismissed from the field course. Students should:
 - a. Behave responsibly at all times.
 - b. Stay with the party, except by clear arrangement with the leaders.
 - c. Assemble where requested (e.g. outside a quarry) in order to receive specific instructions regarding likely hazards.
 - d. Report any injury or illness.
2. **Wearing adequate clothing and footwear** for the type of weather and terrain likely to be encountered. Full details of appropriate and inappropriate clothing and footwear will be provided during field course briefings. Leaders may refuse to allow students to take part in field course activities if they are considered inadequately equipped.
3. **Using appropriate safety equipment when requested to do so:**
 - a. Wearing a safety helmet when visiting old quarries, cliffs, scree slopes, etc., or wherever there is a risk from falling objects. It is obligatory to do so when visiting working quarries, mines and buildings sites.
 - b. Wearing safety goggles for protection against flying splinters when hammering rocks and using chisels.
4. **Taking special care in hazardous environments:**
 - a. *Cliff edges:* take special care near the edges of cliffs and quarries, or any other steep or sheer faces, particularly in gusting winds.
 - b. *Steep slopes / rock faces:* ensure rock faces are safe before venturing below, avoiding working under unstable overhangs; avoid loosening rocks; avoid working directly above or below another person; don't run down steep slopes; avoid areas where landslides or rock falls are seen to occur. In particular **do not climb cliffs, rock faces or crags**, unless this has been approved as an essential part of the work.
 - c. *Coastlines:* Take great care when walking or climbing over slippery rocks below the high water mark on rocky shores; be aware of the risk of being cut

off by the tide and aware of escape routes; do not work in coastal areas if the tide or sea state is high.

- d. *Quarries/mines/building sites*: Staying clear of any machinery or equipment, complying with safety rules and any instructions give by officials; keeping a sharp look-out for site vehicles. Do not enter old mine workings or cave systems unless it has been approved by the field course leader.

5. **Being aware of traffic** when crossing or working close to roads.
6. **Reporting any accidents or unexpected problems that are encountered to a staff member as soon as possible.** Students should stay within earshot and visibility of other members of the party at all times.
7. **Observing sensible standards of behaviour**, conducting themselves with consideration for others, particularly in hotels or other accommodation, and ensuring they don't damage property in any way (e.g. by climbing over walls, leaving gates open, trampling crops). Consumption of alcohol impairs judgement and is prohibited when students are engaged in fieldwork activities.

N.B. Any damage to accommodation or equipment must be paid for by those involved.

Note: *All relevant hazards and associated control measures will be documented in the field course risk assessment and this should be consulted in addition to any advice listed here.*

Please do not disturb the environment more than is absolutely necessary. Observe conservation requirements.

- Do not collect specimens unless required for serious study in which case you should ensure you have acquired the necessary permissions beforehand.
- Do not damage outcrops casually or indiscriminately.
- Do not disturb living plants and animals.
- Do not leave litter, including rock chippings.

Remember that public access is an acute problem in the countryside and especially in areas designated as National Parks.

Independent Fieldwork

Both undergraduate students and postgraduate students are likely to have to undertake independent fieldwork as part of their academic programme. Individuals operating independently **must undertake a full risk assessment**. This should be produced in consultation with their academic supervisor(s) prior to any work being undertaken. A copy of the risk assessment should be handed to the supervisor, and an additional copy taken into the field and modified if new hazards come to light. Students will be given training in risk assessment before undertaking their own independent fieldwork, although initial guidance is provided in this section.

Note: *The advice presented in the section "Duties of Students" (pp 9) also applies to independent field work and should be consulted in addition to the advice listed below.*

1. The School **strongly discourages lone working** and recommends that all students undertaking independent research projects do so with the support of at least one field assistant. This may involve students enlisting the support of a friend or family member. Alternatively, students can arrange to work either in pairs or in small groups if their projects are based in the same area. At the very least, students should leave details of their time of departure, proposed route, estimated time of arrival and emergency contact details with a reliable third party.
2. Whilst any necessary training, advice and safety equipment will be provided prior to independent fieldwork, **students are solely responsible for their own safety in the field.**
3. Remember that everyone has their own personal limit in field situations related to their abilities, experience and training. **Do not be tempted to exceed your safe limits.** Get into the habit of regular hazard assessments in the field and always err on the side of caution. If you consider any activity, locality or set of conditions (e.g. inclement weather) to be too hazardous to undertake the proposed work safely, then postpone the work or change your plans.

Planning independent fieldwork

Much of the risk associated with independent fieldwork can be minimised by thorough forward planning. Issues you should consider in advance include:

Note: *Information gained during the planning stage should be used to inform your risk assessment.*

1. Familiarising yourself with the proposed field area and identifying particular hazards (e.g. consider the terrain and likely weather conditions). In addition:
 - a. Identify any codes of conduct or sources of advice relevant to the environment you're working in (e.g. British Mountaineering Council if working in mountainous environments; HM Coastguard if working in coastal environments). Additional sources of advice relating to particular environments are provided on page 12.
 - b. If working in coastal environments obtain local information about tides, currents and sea states to avoid getting trapped on inter-tidal banks or below sea cliffs.
 - c. Even familiar and seemingly "safe" environments such as urban areas are associated with specific hazards such as theft, vandalism and violent crime. Carefully consider appropriate control measures such as working in pairs or with companion in earshot, carrying personal alarms and mobile phones, arranging regular rendezvous.
2. Identify local rescue/medical facilities, and contact telephone numbers.
3. If your proposed work involves working on private property (e.g. a quarry or landfill site) **YOU MUST** obtain prior permission, discuss your plans with the site operator and follow appropriate safety procedures.
4. Identify any training you require in order to work safely in the field. E.g. do you know how to use a map and compass?

5. Devise contingency plans for “what if” situations, e.g.
 - a. Plan of action if field partner fails to turn up at a pre-arranged rendezvous.
 - b. Plan of action in case of bad weather or illness.
 - c. Plan of action with your field partner in the event of accidents of varying severity.

6. If planning to work in non-UK countries, there are a series of additional issues that you must consider (see links on p13 for further information):
 - a. Is the proposed country safe to work in? Are there any specific health and safety issues related to the country? Guidance and advice can be obtained from the Foreign and Commonwealth Office.
 - b. Do you require any medical treatment or immunisations prior to working in the proposed country? Consult your doctor well in advance of fieldwork if unsure.
 - c. Ensure you have adequate insurance for treatment, rescue and repatriation? European Health Insurance Card (EHIC) is a minimum requirement for those working in EU countries.

Safe working in the field

Once in the field, the following procedures and control measures should be considered to ensure the safety of yourself and any field partners:

1. If working as part of a group define a field partner. If you wish to work independently, keep within hailing distance or visual contact with your partner(s). **NEVER** carelessly break arrangements to meet your partner at some time during the day (e.g. lunch) especially when working "independently" in roughly the same area.

2. Agree a formal daily plan and rendezvous scheme (especially with your partner(s)), which includes:
 - a. making a list of areas/routes to be covered
 - b. defining meeting locations and times

3. Check weather forecasts regularly. When in the field, keep a constant lookout for changes. Do not hesitate to turn back if the weather deteriorates. Irrespective of the weather when you set out (or weather forecasts), **always** take weatherproof and additional warm clothing.

4. Carry at all times a small first aid kit, some emergency food, a survival bag, a whistle, torch, map, compass, watch and mobile phone (check you can obtain a signal in your field area). In no mobile reception is available, identify the location of the nearest public phone.

5. Know the international distress signal; six whistle blasts, torch flashes, shouts or waves of a light-coloured cloth. Leave one minute pause before repeating.

Further Advice

This fieldwork safety advice is issued by the Head of School, based on the recommendations and advice of the Committee of Heads of University Geoscience Departments (CHUGD) and the Geological Society of London, as set out in their final report entitled 'Safety in Geoscience Fieldwork: Precautions, Procedures and Documentation (1995)'.

Further advice on field safety and related issues can be obtained from the following sources:

- **The British Mountaineering Council** (www.thebmc.co.uk) - provides access to extensive information on safety in mountainous environments, including a video and booklet entitled "Safety on Mountains".
- **HM Coastguard** – provides basic but useful information on safety in coastal environments via the Seasmart website (<http://www.direct.gov.uk/en/TravelAndTransport/Boatingandtravellingbywater/Keepingsafeatthecoast/index.htm>) – includes information on hazards associated with specific coastal regions.
- **Royal Society for the Prevention of Accidents** (<http://www.rosipa.com/>) – provides information and advice on safety in a variety of environments.
- **A Code for Geological Fieldwork**, issued by the Geological Society: (<http://www.geolsoc.org.uk/gsl/education/page2542.html>)
- **Health and Safety Executive** (<http://www.hse.gov.uk/>) – provides information and advice on a broad range of health and safety topics.
- **Suzie Lamplugh Trust** (<http://www.suzylamplugh.org/>) – provides guidance on personal safety.
- **Foreign and Commonwealth Office** (<http://www.fco.gov.uk/en/travel-and-living-abroad/>) –

Directgov: Travel and Transport

<http://www.direct.gov.uk/TravelAndTransport/TravellingAbroad/BeforeYouTravel/fs/en> provides wide-ranging advice on travelling abroad.

- **Fit for Travel** (<http://www.fitfortravel.scot.nhs.uk/>) - provides details on the health issues and immunisation requirements required for overseas destinations

Annexe 1 - Safety Policy Statement

Statement of the Policy of Earth Sciences and Geography, University of Keele, (hereafter referred to as GGE) with respect to the Health and Safety at Work of all persons who are employed by GGE, engaged in work for GGE, students of GGE or members of the public visiting GGE.

1. DECLARATION

It is the policy of GGE to place great importance upon the health and safety of its staff, students, and visitors.

2. SAFETY OF FACILITIES

GGE will ensure, so far as is reasonably practicable, that its premises and facilities are provided and operated in accordance with safe working practices for its staff, students and visitors.

3. SAFETY OF PERSONNEL

GGE will provide information, instruction and supervision so as to ensure so far as is reasonably practicable, the health and safety of all its staff, students and visitors.

4. RESPONSIBILITY

i) Head of School

So far as is reasonably practicable, the Head of School must ensure, among other things:

- (a) that the University's arrangements for the administration of safety matters are carried out and that, where appropriate, a safety committee is convened; a Workplace Safety Adviser is appointed, and workplace safety instructions produced, which are revised regularly in the light of current good practice
- (b) that suitable arrangements for dealing with emergencies have been set up
- (c) that arrangements for investigating accidents and dangerous occurrences are made and that appropriate action is taken in the light of these investigations
- (d) that potentially hazardous operations are carried out in appropriate locations and that there is suitable monitoring of these
- (e) that arrangements are made to check that all equipment is in a safe condition, that all hazardous operations receive appropriate hazard assessment, and that appropriate working conditions are laid down

- (f) that arrangements are made for the training of staff in safety matters and that arrangements are made for carrying out suitable personal monitoring where appropriate
- (g) that members of GGE understand the safety responsibilities delegated to them
- (h) that students and visitors receive appropriate safety instructions
- (i) that appropriate safety rules for field trips are devised for GGE.
- (j) that members of GGE working outside the building are aware that they must observe the safety requirements of GGE or establishment in which they are working.

ii) **Academic Staff**

a) ***Responsibility for Undergraduate Students***

So far as is reasonably practicable, academic staff must ensure that in undergraduate laboratories for which they are responsible:

- (i) students receive appropriate supervision at all times
- (ii) students receive training in safety matters
- (iii) students behave in a safe manner
- (iv) an appropriate risk assessment is carried out before starting any experiment. The supervisor will check this assessment and accept responsibility for it.

b) ***Responsibility for Postgraduate Students***

So far as is reasonably practicable, academic staff who supervise post-graduate students or junior staff must ensure that such students or staff:

- (i) have received training and are competent to carry out the proposed experimental work
- (ii) observe at all times appropriate safe practices
- (iii) carry out an appropriate risk assessment before starting any experiment. The supervisor will check this assessment with the student or junior member of staff and accept responsibility for it. He/she will make regular checks to see that agreed procedures are being followed.

c) **Responsibilities of students**

Students also have legal responsibilities not to endanger themselves or others by their actions.

iii) **Workplace Safety Adviser**

The Workplace Safety Adviser (WSA) is the member of staff concerned with day-to-day health and safety matters within GGE. The WSA's main function is to advise the Head of School on all matters relating to health and safety. Other important responsibilities include disseminating safety information within GGE, advising other members of GGE on hazardous procedures and investigating accidents and dangerous occurrences. Specific safety duties agreed with the Head of School are set out in the GGE safety instructions.

iv) **Radiation Protection Supervisor**

Each School in which work with ionising radiations is carried out has a School Radiation Protection Supervisor (RPS). The RPS is responsible for:

- (a) authorising all work with ionising radiations within the School
- (b) organising training programmes for radiation workers
- (c) ensuring that all relevant regulations are observed, and
- (d) ensuring that appropriate monitoring is carried out.

The SRPS will keep the University Radiation Protection Supervisor informed on all matters in the School relating to ionising radiations.

The SRPS has the authority to stop any work in the School which is not in accordance with the regulations. Detailed duties are set out in the University's internal regulations for the use of radioactive materials, etc.

5. HAZARDS

The University recognises the common hazards to health and safety described in section 5 of Safety in Universities: Code of Practice, Part 1 - General Principles (London 1974). The School will educate and supervise its staff and students to eliminate these hazards. This Safety Handbook is issued to all GGE staff and students. GGE recognises special hazards associated with its individual laboratories and fieldwork.

6. RADIATION HAZARDS

The University recognises the particular hazards associated with the use of all forms of radiation, so has required GGE to appoint a Radiation Protection Supervisor. In

particular, regulations exist concerning the use of X-ray equipment and radioactive sources, sealed radioactive sources, lasers and electromagnetic

7. SAFETY INSPECTIONS

Regular and thorough internal safety inspections of GGE will be made at least once every year by an in-house inspection team with a non- GGE person. Further inspections will be carried out by members of the University Occupational Health and Safety Committee and others as appropriate, on a 3-year cycle. Any faults noted will be recorded and the person responsible for the area concerned will be asked to rectify the fault and to notify the inspection team when this has been done.

8. ACCIDENTS AND DANGEROUS OCCURRENCES

All accidents (from which personal injury results) and dangerous occurrences (where there is no injury but one could have resulted, or equipment is damaged) must be recorded in the GGE accident or incident books respectively and the Workplace Safety Adviser informed. The Workplace Safety Adviser will carry out an investigation and will report to the Workplace Safety Committee. In the event of an accident leading to death, major injury or an absence of more than three days or in the event of a reportable dangerous occurrence, the University Safety Adviser must be informed within 3 working days.

9. FIRST AID

GGE will provide, as far as is reasonably practicable, facilities for First Aid with the objectives of:

- a) preserving life
- b) limiting the effects of a condition
- c) promoting recovery

in the event of injury or ill health of the School's staff, visitors or students, including students of any other institution to whom the University owes a duty of care. To this end GGE will:

- (i) appoint qualified First Aiders
- (ii) maintain adequate First Aid boxes
- (iii) collect quarterly reports of accidents and incidents and investigate all serious accidents
- (iv) carry out safety inspections in all areas
- (v) regularly consult First Aiders, staff and students
- (vi) regularly review the provision for First Aid and amend as necessary

- (vii) arrange for periodic First Aid training sessions for staff members in fieldwork classes.

The list of current First Aiders in the School is displayed in the entrance foyer. If in doubt, telephone 888 and request assistance from the Security Watch Room.

10. CONSULTATION

Individuals may communicate with the Workplace Safety Committees through the Head of School, the Workplace Safety Advisor, through Safety Representatives, or through the postgraduate or undergraduate year representatives. Members of staff may also make representation to the University through their recognised trade unions.

11. SUGGESTIONS

GGE will always welcome constructive criticisms, comments or suggestions from any person, which may be designed to improve any existing arrangements for the health and safety of all personnel. Such communications should be addressed to the Head of School or the Workplace Safety Advisor.

12. PERSONAL DUTIES

GGE reminds all staff and students that under the Health and Safety at Work Act 1974 their duties are:

- (a) to take reasonable care for the health and safety of themselves and other persons who may be affected by their acts or omissions at work
- (b) as regards any duty or requirement imposed on GGE or University or any person by or under any relevant statutory provisions, to co-operate so far as is necessary to enable that duty or requirement to be performed or complied with
- (c) not to interfere with or misuse any thing provided in the interests of health, safety or welfare. Intentional or reckless interference is a criminal offence.

Emergency Evacuation Of Buildings

When an emergency occurs:

- Sound the alarm at one of the 8 “break glass” points.
- Dial **9-999** (internal phone only) to call the Fire Brigade.
- Dial **888** (internal phone only) to inform Security.
- Attack the fire only if safe to do so.
- On hearing the fire alarm leave the building by the nearest safe route.
- Close the doors behind you.
- Report to assembly point:- **Front Car Park**.
- Do not return to the building for any reason until authorised to do so.
- Do not use the lifts.

If any route is blocked, walk to the nearest alternative. After leaving the building please make your way to the assembly area on the front car par.

First Aid

If you receive any injuries, swallow any toxic material, have an allergic reaction or feel unwell during normal working hours **YOU MUST** seek First Aid immediately.

Designated First Aiders are:

Emma Harvey	GGE Office	33183
Stu Clarke	WS 1.23	33171
Security		888

Security can administer first aid in the absence of any first aiders.

First Aiders carry a portable First Aid kit. Outside working hours a statutory First Aid box is housed in the entrance to the kitchenette on the first floor. This only contains plasters and bandages. If you require any medication then you should contact the Health Centre or your GP.

Useful Phone Numbers

Department of Occupational Health and Safety	33566
Disability Services	34364
Health Centre	33189
Dentist	33190
Maintenance	33137
Security Emergency	888
Security 24hr service	33004

Workplace Safety Advisor (D. Emley)	33617
GGE Fire Steward (P. Greatbatch)	33628, 34178
GGE Office	33615

If you are off campus:

GGE Office	01782 733615
GGE email	geo@keele.ac.uk