# NEW RESEARCH STUDENTS HANDBOOK
# 2020 - 2021

**WELCOME TO THE DEPARTMENT!**

**Please read the whole of this handbook NOW; please retain it for future reference!**

You have a pigeon hole in the Department which will contain various announcements and hand books about the Department. However, we generally communicate with everyone via e-mail and you will be receiving a series of announcements this way.

**Please let Jane Hart** jane@esc.cam.ac.uk **(Downing Site) or Lucy Matthews** lhm29@cam.ac.uk **(Bullard) have your address & telephone number in Cambridge by completing the back sheet of this handbook.**

## 1. INTRODUCTORY GUIDELINES see - Downing Site Guidelines; Bullard handbook.

Whilst students may meet with supervisors frequently, for example in the lab or over coffee, regular formal progress meetings should be arranged. Although it seems likely that the frequency of such meetings will change over time, supervisors should aim to arrange a formal meeting at least once a term. Students experiencing difficulty in meeting with supervisors, or with concerns about funding or other Department arrangements which can't be resolved by their Supervisor, should discuss with their Advisor. The Chairman of the Graduate Affairs Committee (Ian Farnan), your Graduate Tutor, one of the Graduate Affairs Student Representatives or the Graduate Administrator (Andy Buckley) will also be happy to advise.

## 2. UNIVERSITY SAFETY COURSE

The University Safety Office operates a safety course which is obligatory for all postgraduate students in science based subjects, this will be online in 2020. The Postgraduate Safety Course Introduction Online Training is a general safety course which everyone must complete:
https://www.training.cam.ac.uk/ohss/event/3618286
The University Safety Office has other more focused safety training courses which will be provided online, you will be sent details but these should be listed here:
https://www.safety.admin.cam.ac.uk/training/postgraduate-safety-course/postgraduate-training.
There is separate safety training for each of the department's labs.

## 3. DEPARTMENT DATES:

**a)** **Friday 2nd October 2020** NERC DTP induction event (*for those funded by the NERC DTP*)

**b)** **Monday 5th October 2020, from 14:00 am, Department Induction for all new Grad students –** Tilley lecture theatre

**c)** **Friday 9th October 2020 11:00 am – by Zoom.**
Annual Chemical Safety Review Meeting for all those using Chemistry labs on Downing Site.

## 4. DEPARTMENT SAFETY

**Please read key safety information in this handbook. PLEASE ALSO READ:**

**Department Safety Handbook (green) - please read the handbook, and sign the induction checklist, fill in the medical form and return both to Michelle Austin (Downing Site) or Lucy Matthews (Bullard).**

During the COVID-19 outbreak the protocols contained within the Safety Handbook are superseded by the guidance in the documents here: https://www.esc.cam.ac.uk/resources/health-and-safety/covid-19/returning-to-work-at-the-downing-site. For any help, please contact Lucy Matthews lhm29@cam.ac.uk or Michelle Austin mea42@cam.ac.uk.

## 5. FINANCE

Sections 14, 15 and 16 below apply to most postgraduate students. *This section applies only to those whose maintenance payments are administered by the Department (these are most people funded by NERC, EPSRC, ERC and industry but not people funded by Gates, CISS or overseas scholarships).*

**Student Maintenance Payments should be made to you monthly in advance and the actual payment should arrive in your account in the final few days of the preceding month** (i.e. the payment for October should be credited to your account in the final few days of September).

The expectation is that all students will aim for submission of their thesis by **Christmas of their 4th year.**

### NERC DTP FUNDED STUDENTS:

NERC expect that all of the students funded on any particular DTP are treated in the same way. Everyone funded by the Cambridge Earth Systems Science NERC DTP has been awarded a 3.5 year PhD, regardless of the department they are in.

RCUK rules indicate that student maintenance payments should stop at the end of the period of the award (in the case of Cambridge this is 3.5 years), or at thesis submission if earlier, they also stipulate that "Where the student continues to undertake work that is directly linked to their thesis, it is permissible for the doctoral award to continue to the end of the quarter in which the thesis is submitted."

In effect this means that whilst all NERC funding will be paid for a continuous period, that period will be a maximum of 3.5 years (unless there is a period of authorised intermission for a placement, ill-health or other reason).

## 6. SEMINARS

***The normal times and venues for our main seminar series are given below, at the moment most are operating over Zoom instead.***

| | | |
|---|---|---|
| Tuesday mornings | 12.00 pm | Tilley Lecture Theatre (or Harker 1)<br>Tea & biscuits at 11:30am in the Common room. |
| Wednesday afternoons | 4.00 pm | Bullard Lecture Room - Tea from 3.40 pm |
| Thursday mornings | 11:30 am | BP Institute Seminar Series - Open Plan area BPI |
| Thursday afternoons | 2.00 pm | Institute of Theoretical Geophysics -<br>DAMTP, Seminars, Informal lunch at 1.05 pm |
| Friday mornings | 11:00am | Isotope Coffee Talks in Harker II |
| Friday afternoons | 4.00 pm | Tea time talks in the Common Room<br>at Bullard, Tea from 3.40 pm |

There are usually also a range of other seminars.
Details of Department seminars and of relevant seminars elsewhere in Cambridge are given in the Weekly Bulletin sent to all by e-mail each Friday and are on the department website.

## 7. DEMONSTRATING

Research students are required to assist in demonstrations in undergraduate practical classes, at standard rates of payment. The prime consideration is that the demonstrators in any particular course be those who are most suitable for that course. Demonstrators are generally required to attend the lectures for the course they are demonstrating.

There are also opportunities for demonstration in field courses for which different payment arrangements apply.

Guidelines are on the Department website as pdfs: https://www.esc.cam.ac.uk/resources/staff-resources/demonstrators-guides-esc-only

You should complete a UPS2 Form to be paid for demonstrating and you should also complete the HMRC "Starter checklist" form (or demonstrating payments may be taxed). If you are not a UK or EU citizen, to be paid for demonstrating your visa must allow you to work in the UK.

## 8. FIELDWORK AND TRAVEL INSURANCE

You must arrange insurance for all fieldwork and travel (see insurance under section 20).
For all fieldwork, you must complete a Field Risk Assessment form (at the end of this handbook). The Department regularly arranges fieldwork safety and first aid courses, but if your fieldwork takes you to particularly remote areas you may need to consider more advanced emergency medical training. Please discuss this with your supervisors and with Lucy Matthews.

## 9. PHOTOCOPYING, LASER PRINTER RECORDS AND TELEPHONES

It would be greatly appreciated if members of the Department would always fill in the appropriate record book when using the photocopiers and laser printers, indicating clearly whether the work is departmental or personal. Colour copying costs ***ten times*** as much as black and white – please use B&W unless you really need colour!

We have had a certain amount of abuse in the use of the telephone system recently with members making personal calls without recording them. Please note that we have a printout of all calls made from all extensions and this will be closely scrutinized.

## 10. TRANSFERABLE SKILLS TRAINING

All research students are required to do 10 days training a year in transferable skills and to keep a log book to record this training; (see end of this handbook).
A separate circular will contain courses which the Department will arrange.

## 11. GRADUATE ADVISORS

Each postgraduate student has a Graduate Advisor, these are members of the academic staff who are not actively involved in a student's project but who will take an interest in what they are doing, will be available to meet with them to discuss their development needs.

Advisors should make sure that they meet the student from time to time, perhaps for a chat over a coffee, and will provide a point of contact if there are any difficulties between the student and the supervisor. The intention is to identify and support students who might otherwise drop out or drift along but never submit. Having someone that the student can talk to, independent of their supervisors, also allows us to provide an extra layer of mentoring and an element of pastoral care for the department's postgraduate students.

Advisors should also make a particular effort to attend research seminars given by the students associated with them.

The University has a formal **Student Complaints Procedure**
Details can be found at: www.studentcomplaints.admin.cam.ac.uk/student-complaints.
At a local level if any issues arise which need action details should be passed on to the Department Administrator or discussed informally by the Advisor with the supervisor.

If any of the postgraduate students feels that there are difficulties about either of the Graduate Advisor assigned they can discuss this with the Department Administrator who will arrange a substitute.

## 12. FIRST YEAR ASSESSMENT

Two Assessors will be appointed to meet with each student to review their 1st year report and second year report and provide feedback, at least one will be a member of the academic staff in the Department of Earth Sciences, in some cases the second Assessor may be a member of the academic staff in a different department of the University. The Assessors' feedback is an important part of the approval process for progression beyond the probationary 1st year of the PhD (i.e leading to formal registration for the PhD degree).

In January you will be asked to prepare, by early April, a short report of up to 2,000 words **maximum** (plus figures). The report will typically summarize the aims of your project within its wider research area, describe your activities and results so far, and outline plans for the next stages of work.

Each postgraduate student should send a copy of their first year report to –

- your supervisor,
- each of two "Assessors"
- your respective Graduate Tutor
- Andy Buckley (the Department Administrator)

You should then contact your Assessors and arrange a meeting to discuss the report with by the end of May, either on a one-to-one basis or together with both Assessors.

Theses dates will be adjusted for those who start in Jan or April (see table on the next page).

The Supervisor & Assessors should send the Graduate Affairs Committee (via the Department Administrator) a brief summary to say that you are happy about each of these points after the meeting. The GAC will then pool the information from Supervisor/ Assessors and so determine if the student should be formally registered for a PhD.

Alternatively, there is any concern that the project is going nowhere (even if through no fault of the student) or there are reservations on any of the other points a more considered response is helpful with an explanation of where the concern lies. The GAC will pool the information from Supervisor/Assessors to consider whether the scope of the project needs to be rethought and if

- the student should be formally registered for a PhD but carefully monitored,
- the probationary period should be extended with additional guidance/monitoring, or
- in a worst case scenario the student should be recommended to change to a MPhil or CPGS and submit the work that has been done.

In some departments progression from 1st to 2nd year is based on a formal viva, Earth Sciences relies on review (and discussion with both Supervisor and Assessors) of the 1st year report, and the supervision reports received over the course of the 1st year. Feedback from Assessors is considered along with this other information, by the Graduate Affairs Committee who then make a recommendation on registration to the Degree Committee.

Graduate Tutors are:
North Wing & South Wing:
Prof. Ian Farnan (Chairman GAC)
Dr Alex Liu
Bullard: Dr Sanne Cottar

Student representations are:

Nick Barber, Lizzie Steele
Bullard: Deborah Wehner

## FIRST YEAR REPORT GUIDELINES

The Graduate Affairs Committee is responsible for ensuring that you have made a satisfactory start to your research and that you have the chance to discuss your project with them and with your Assessors. The procedure is as follows:

i. You will normally submit a short report (2,000 words **maximum** plus figures) in your first year. The report will typically summarize the aims of your project within its wider research area, describe your activities and results so far, and outline plans for the next stages of work.

ii. You arrange a meeting with your Assessors, normally before the end of the Lent term. This is a chance to review the direction and emphasis of your project, and for you to discuss any concerns about your project or its supervision. Your assessment group needs to ensure that both you and the project have the potential to produce a successful PhD thesis. ***It is your responsibility to contact Assessors to schedule this meeting.***

iii. Your Assessors, together with your supervisor, are likely to recommend approval of your project at this stage, perhaps with some suggestions for its future development. In this case they will submit comments to the Graduate Affairs Committee, who will then recommend to the Board of Graduate Studies that you be registered for the PhD degree.

iv. If it is felt that you need more time to demonstrate the viability of your research, you will be asked to submit an updated research report. Your Assessors and your Supervisor will discuss your progress with you again. If they are now reassured of your PhD potential they will recommend that you be registered for the degree. The Graduate Affairs Committee may wish to keep your progress under review during the second year.

vi. If your performance and potential are found unsatisfactory for a second time, a report will be submitted to the Graduate Affairs Committee who will recommend that the Head of Department gives you three months' notice of termination of your PhD studentship. The Assessors may nevertheless consider that your work will be worthy of the University's Certificate of Postgraduate Study (CPGS) if you use these three months to expand your research report to between 5,000 and 10,000 words. In this case, your supervisor will guide you as to the appropriate format and content of this report.

| **Start Date** | 1 Oct | 1 Jan | 1 April |
|---|---|---|---|
| Year 1 report sent to Supervisors, Assessors & Administrator for discussion | Early April | Early Jul | Early Oct |
| Supervisors, Assessors reports to Dept Administrator | End May | End Aug | End Nov |
| Resubmitted reports (if necessary) | End Jul | End Oct | End Jan |
| Year 2 report/thesis plan to Supervisors & Assessors | Early May | Early Aug | Early Nov |

## SECOND YEAR REPORT GUIDELINES

The 2nd year report is intended to encourage the student to focus on the form which the thesis will take and to reflect and record what further experimental and theoretical work needs to be carried out before

writing up. This report should cover these points and include a work-plan with a time-line for completion of lab work and writing up and ideally a first draft of a thesis plan showing the chapters which will be included and comments on what work is needed for each chapter.

It should be submitted by early May of the second year. Copies of the report should be given to your Assessors and you should arrange a meeting with them to discuss it soon thereafter.

This report will normally be no more than 4 pages (with a brief summary of the thesis plan and a timeline showing the work-plan as an additional appendix). A copy the report should also be given to supervisor and e-mailed to Andy Buckley (for the GAC)

By the end of the 2nd year all students should have presented a seminar/talk (for instance at the Bullard teatime talks, isotope coffee, PALS, DTP conference or similar group). You should send your Advisor (and of course your Supervisor) a reminder when this is coming up.

## FINAL YEAR POSTGRADUATE STUDENTS

The final year review is intended to provide career advice and to support students considering the next career step or their first job. The postgraduate student should prepare a cv for consideration at a face-to-face discussion.

Final year postgraduate students should meet with their Supervisor &/or Advisor to discuss career development and future career prospects and get guidance on where they can seek further advice for career training.

The Degree Committee website provides guidance on the format of the thesis and summarise the process for submitting your PhD: https://www.dcesg.physsci.cam.ac.uk/current-student/phd/phdsubmit

### 13. SUPPORT COSTS FOR RESEARCH

Research Council and some sponsored research studentships have between £6000 – £9000 towards research costs (RTSG) over the course of their studentship, the exact amount depends on the funding scheme/sponsor. Unfortunately because of the different approaches taken by the various studentships sponsors, the amounts available to others may vary. The use of external facilities as well as fieldwork and travel to conferences etc. must be covered by these funds (or by applications to colleges or other sources, see below for some examples).

Expenditure is authorised by your supervisor, you should discuss with your supervisor how to balance the available funds against needs you may have over the duration of your studentship. Supervisors will be provided with a summary statement showing the funds available to support your studentship. Julie Blackwell, in our accounts office will keep a record of expenditure; you should be able to find out from her what may be left.

Information about costs for facilities and other needs for research will be circulated separately.

### 14. TRAVEL

Travel and other claims, must be supported by receipts. Our auditors are not prepared to accept point of sale credit/debit card receipts as proof of expenditure. They also require a till receipt for point of sale purchases (particularly for expenses claims such as restaurants).

**14a. DEPARTMENT ALLOCATION**

The Department's travel allocation to all research students will be £150pa. Claims, with receipts, should be made on the Department claim form and given to Julie Blackwell in the Accounts Office.

**14b. UNIVERSITY FIELDWORK FUND**

You may qualify for additional support from the ***University Fieldwork Fund*** but you must apply for this when you submit an application for Leave to Work Away:
https://www.dcesg.physsci.cam.ac.uk/current-student/LWA/FieldworkFund

***Other Support***

If estimated conference or travel costs exceed the funds available from the £150pa Department travel allowance, the University Fieldwork Fund and support from your sponsor, and you wish to seek a grant from the Department towards the shortfall, please first consult your supervisor. Then make written application, will in advance, to the Head of Department stating the purpose of the conference, its importance and the cost.

However, our budget has not kept up with the inflation of recent years and expenditure has had to be checked everywhere in the Department. The Department will help with necessary expenses as far as it can, but that will not be far. As a general rule, if you incur expense without first having it authorised, do not expect to be reimbursed!

**14c. NERC and EPSRC FUNDED STUDENTS ONLY**

Conferences

NERC and EPSRC expect that within the period of the award each student should have the opportunity to attend at least one conference at which they can present findings of their research. They provide £150pa per student towards conference attendance as part of the RTSG but that is not ring-fenced from other funds in the RTSG. Please consult your supervisor well in advance about the conferences you wish to attend. Claims, with receipts, should be made on the Department claim form (https://www.esc.cam.ac.uk/resources/staff-resources/expenses-form-esc-only) and given to Julie in the Accounts Office.

NERC - Fieldwork Claims

Claims, with receipts, for fieldwork approved at the start of your studentship, should be made on the Department claim form and given to Julie in the Accounts Office. If you have any questions about fieldwork funding, please contact Andy Buckley first.

**14d. TRAVEL GRANTS - CAMBRIDGE PHILOSOPHICAL SOCIETY**

I attach details of the Cambridge Philosophical Society, from which you will see that for the investment of only £10 a year you are eligible for travel grants (averaging between £100 & £200), and for support in your fourth year whilst writing up, *provided you have been a member of the Society for nine months.*

Please contact Andy Buckley if you would like help finding recommendations from existing fellows.

With 70-80 research students in the Department, most of which have extensive travel needs, it is essential that all potential sources should be tapped. I shall therefore expect any research student applying to me for a travel grant over and above the Department £150 travel allocation, to have first applied to the Cambridge Philosophical Society, as well as to the University Fieldwork Fund, college, sponsor and other appropriate sources.

***15. THE CAMBRIDGE PHILOSOPHICAL SOCIETY*** *was founded in 1819 'for the purpose of promoting scientific inquiry'. It became a Body Corporate by virtue of a Charter granted by King William IV in 1832.*

*OFFICE*
*The office of the Society is situated at 17 Mill Lane Cambridge CB2 1RX (telephone Cambridge 334743; FAX 01223 334748). Information and certificates of application for membership may be obtained from the Executive Secretary.*

*MEMBERSHIP*
*Membership of the Society comprises Honorary Members and Fellows. Any person desirous of becoming a Fellow must be recommended in writing by three or more Fellows; approved candidates are elected at open meetings of the Society. An application form can be downloaded from:*
*https://www.cambridgephilosophicalsociety.org/membership/how-to-join*

*Applicants for membership are asked to present their signed certificates in person at the Society's office.*

***FACILITIES***
***RESEARCH STUDENTSHIPS. The Society maintains a Studentship Fund to allow one or more Postgraduate Students to conclude a promising piece of research nearing completion.***

***The Fund is intended expressly for this purpose; awards will not be made to extend the time that a student can spend in Cambridge unless there is evidence that an extension is likely to lead to the completion of a specific piece of research.***

***The Fund is used for the provision of one or more Studentships in any of the natural sciences, technologies, or branches of mathematics, for a period not longer than three months. Awards are not normally given for more than three months. Candidates should also seek other possible sources, including their Colleges.***

*The recipient of a Studentship must have been a Fellow of the Society for at least one year previous to the closing date for applications. Each applicant must give the names of two persons having knowledge of his work that will be called upon to act as referee. The closing dates for applications are 1 November and 1 July. Further details and forms of application may be obtained from the Executive Secretary.*

***TRAVEL GRANTS. The Society will consider applications from Fellows for a limited number of grants for travel within and outside the United Kingdom to attend conferences, visit laboratories and conduct fieldwork.*** *Preference will be given to projects involving the promotion of research rather than the presentation of results. The recipient of a Travel Grant must have been a Fellow of the Society for at least one year previous to the closing date for applications. The closing dates for applications are 1 November, 1 February and 1 May for travel in the following vacations. Late applications for travel in August and September may be considered if submitted before I July and supported by good reasons for the delay.*

*Applicants must ensure that a letter of support is sent to the Society's office by the closing date. In the case of a Postgraduate Student the letter should come from the Supervisor.*

*Application forms may be obtained from the Executive Secretary.*
*TRANSLATION GRANTS.* ***In approved cases the Society will make grants to Fellows towards the cost of written or oral translations*** *prepared with the help of the Advisory Service on Translations of the Scientific Periodicals Library. The recipient of a Translation Grant must have been a Fellow of the Society for at least one year and not be eligible for grants from the General Board of the University. A condition of the grant will be that a percentage of the cost must be paid by the applicant. A copy of any written translation must be deposited in the Scientific Periodicals Library.*

*An application form from a Postgraduate Student must be certified by his Supervisor.*

*Further details and forms of application may be obtained from the Executive Secretary of the Society or from the Librarian of the Scientific Periodicals Library.*

*Cambridge Philosophical Society*
*17 Mill Lane*
*Cambridge CB2 1RX*

## 16. DEPARTMENT OF EARTH SCIENCES: PLAGIARISM STATEMENT

(This is a shortened and more subject-specific version of the University statement at http://www.admin.cam.ac.uk/univ/plagiarism/students/statement.html)

### Definition and scope

Plagiarism is the unacknowledged use of the work of others as if this were your own original work. It is always wrong and a breach of academic integrity, whether in supervision exercises, project reports, exam answers or published papers. The University regards plagiarism as a serious offence. The penalties for plagiarism may be severe and may lead to failure to obtain your degree. The University reserves the right to check any submitted work for plagiarism, and can do so with increasingly sophisticated software.

*The golden rule is that there should be no doubt as to which parts of your work are your own original work and which are the rightful intellectual property of someone else.*

Plagiarism may be due to copying (using another person's language or ideas as if they are your own) or collusion (where collaboration is concealed to gain unfair advantage).

### Methods and media

Methods of plagiarism include:

- Quoting directly another person's language, data or illustrations without clear indication that the authorship is not your own and without due acknowledgement of the source.
- Paraphrasing the critical work of others without due acknowledgement. Changing words or their order does not avoid plagiarism, if you are using someone else's original ideas without acknowledgement.
- Using ideas taken from someone else without reference to the originator.
- Cutting and pasting from the Internet to make a pastiche of online sources.
- Colluding with another person, including another candidate (other than as explicitly permitted for joint project work).
- Submitting as your own work research that has been contributed by others to a joint project.
- Submitting work that has been done in whole or in part by someone else on your behalf (such as commissioning work from a professional agency);
- Submitting work you have already submitted for a qualification at another institution or for a publication without declaring it and clearly indicating the extent of overlap.
- Deliberately reproducing someone else's work in a written examination.

Plagiarism can occur with respect to all types of sources and in all media:

- not just text, but also figures, photographs, computer code etc,

- not just material published in books and journals, but also downloaded from websites or drawn from other media,
- not just published material but also unpublished works, including lecture handouts and the work of other students.

**Avoiding plagiarism**

The conventions for avoiding plagiarism in the Earth Sciences are as follows:

- When presenting the views and work of others, cite the source in ways such as '….as shown by Jones (1938)'.
- If quoting a secondary source, to which you have not gained access, make this clear in ways such as '…Hailstone (1802) as discussed by Marr (1916, p. 176)."

- If quoting text verbatim, use quotation marks or indented text and a citation; e.g. "Many of the great movements above described, appear to have been produced by an action both violent and of short duration." (Sedgwick 1836).
- If using an exact or redrawn copy of a figure from another work, cite the work in the figure caption; e.g. 'redrawn from Hughes (1866).'
- If incorporating data into a figure from another source, cite the source in the figure caption; e.g. 'orientation data taken from Whittington (1938).'
- Collaboration with staff or other students during project research may arise during, for instance, Part II or Part III projects. If there is likely to be any doubt as to who contributed which parts of submitted work, make this clear in the text wherever necessary; e.g. 'Prof. I.N. McCave supplied the comparative data on contourites in table 3.'
- Wherever a source is cited, the full bibliographic reference – including title, journal, volume and page numbers – must be given at the end of the report or essay, except in an essay done in exam conditions.

## 17. TRAINING IN COMPUTER SKILLS FOR RESEARCH STUDENTS

As undergraduates, you have probably had courses on presentation and computer skills, including report writing, bibliographic skills, word-processing, spreadsheets and computer drafting. You will have further developed many of these skills in compiling final-year undergraduate reports. With the specialised nature of your postgraduate research projects, extra training in computer skills needs to be targeted to your individual needs.

For this purpose, the University Computer Service offers a portfolio of courses throughout the year. You are *strongly advised* to attend relevant courses, either to upgrade your own capabilities in a particular area, or to learn a new skill in an area appropriate to your project.

Courses are free to students, but you *must* book in advance – most courses get booked up days ahead. You can register online at https://www.cam.ac.uk/cs/courses/, where a full timetable and description of courses is available. You must explicitly cancel your booking in advance if you cannot attend. Most courses assume some prior knowledge of basic computing skills, but no more than you should have from your undergraduate experience.

Courses range from basic computing skills to complex programming, the topics likely to be of most interest to research students will be:

- Bibiographic software (EndNote)

- Databases
- Desktop Publishing
- Graphics and photo/image processing
- Multimedia
- Presentation software (PowerPoint)
- Programming
- Spreadsheets
- Statistical and mathematical software (e.g. R)
- Unix (inc. Linux)
- Web page authoring
- GIS (Arc etc)

As well as taught courses, there are Self-Teach Courses available for some popular applications. These courses are mostly on CD-ROM, borrowable from the Computing Service against a deposit.

Full details from the Computer Service website at
http://www.cam.ac.uk/cs/courses/coursedesc/tys.html

## 18. DEPARTMENT WEBSITE

All department members who have a userid should be listed on the department directory:
https://www.esc.cam.ac.uk/directory

Any academic staff, research worker or postgraduate student may setup a 'profile page'
e.g. https://www.esc.cam.ac.uk/EARTHSCI/directory/david-hodell
This can be used to post a summary of research, a photo of themselves etc. but these pages should only contain work related material. The profile pages can be maintained by the users themselves.

To avoid lots of profile pages without content, postgraduate students need to ask for their profile page to be setup when they have some content ready (email Alison Holroyd webmaster@esc.cam.ac.uk). Other questions should be addressed to Alison.

**EDITING SITE CONTENT:**
The editor for the site includes a word style interface and operates from any web-browser (e.g. Explorer, Firefox etc). It's simple to make minor text changes and we may hold a lunch time session sometime to show people how to find their way round it if they want to do anything more involved. However here's some guidelines to get you going:

Use your web browser and go to the relevant page and then click on the "Log in" button at the top right. The initial logon may seem slow and can take a minute or so.

Select the EDIT button on the menu bar. You can then move through the various levels of the content by using the NEXT button at the bottom of the page. Don't forget to SAVE.

Editing sections of the page is done using a Word style interface, pause mouse on the icons to see what they do if unclear, the leftmost curly arrow is an undo icon.

***It is important that we don't put any material on the site which would infringe copyright - in***

***particular, think carefully about the copyright of images and check copyright of pdfs of publications with the Department librarian Sarah Humbert shum05@esc.cam.ac.uk***

**Department publications database:**

Any profile page can be linked to the Department's publications database (Eprints) which is maintained by the library staff.

Open your page to edit. Use the "Key Publications" box, select HTML from the edit menu and paste in

```
<p><iframe frameborder="0" height="400"
src="https://info.esc.cam.ac.uk/scripts/pub_list.php?uid=XXXXX"
width="100%"></iframe></p>
```

Substituting your CRSID for XXXXX

Save it and you should now have a link to library pubs list.

If you have any problems email Alison Holroyd webmaster@esc.cam.ac.uk.

## 19. DEPARTMENT OF EARTH SCIENCES COMPUTING FACILITIES

*On the Downing Site Computer Officers can be contacted by emailing **helpdesk@esc.cam.ac.uk**.*
*Alternatively call ext 33368.*
*Their offices are in the north wing, N323 and N318.*

*At the Bullard site the Computer Officers to contact are Ian Frame **<if201@cam.ac.uk>** 37065 or David Lyness **<dgl11@cam.ac.uk>** ext 37190.*

There is advice on Downing Site computing services at https://info.esc.cam.ac.uk/helpdesk/

This includes the location of shared hardware such as printers, scanners, A0 plotters etc:
https://info.esc.cam.ac.uk/helpdesk/?page_id= 2086

Site licenced software is summarised at:
https://info.esc.cam.ac.uk/helpdesk/?page_id=569

Recommended software packages are summarised at:
https://info.esc.cam.ac.uk/helpdesk/?page_id=657

A summary table showing which department computer locations support this is at:
https://info.esc.cam.ac.uk/helpdesk/?page_id=496

### Department of Earth Sciences - Computing Information

1. Your Account

Your computer accounts are usually organised by your supervisor or Department Administrator on your arrival. In some cases, however, you need to start the process yourself. This section describes how to obtain your computer accounts.

- If you require a Department computer account, fill and sign the request form and obtain the Department Administrator's approval/signature.
- Upon the receipt of the completed form, the Computer Office issues you a Department computer account. The account is usually set up within one working day.
- Depending on your status and your job function, the Computer Office at the same time organises your essential accounts with University Computing Service (UCS). The UCS process may take several days.

You will need a Department computer account in order to log on to any computer on the Department network and to use the department applications, such as the webpage management and the publication databases.

User account request form: https://info.esc.cam.ac.uk/docs/forms/New_User_Form.pdf

More information: https://info.esc.cam.ac.uk/helpdesk/?page_id=780

2. Network Connection

For staff members, there are two types of network connections available.

1. Department Network
   This network is only for department-owned computers/devices (which includes computers you buy with your grant/funding). The Computer Office organises the connection with appropriate security measures. The connection will be either wireless or wired.
2. University Network
   Department also provides University-wide wireless network, namely Lapwing and Eduroam. You can connect your private mobile device (laptop, tablet, etc.) to these networks at your own risk. You are expected to follow the rules, the policies and the guidelines issued by both UCS and JANET.

More information: https://info.esc.cam.ac.uk/helpdesk/?p=366

3. Obtaining Computer Equipment

- The Computer Office can arrange purchase of wide range of computer equipment thorough the University's preferred suppliers.
- If you are not sure what kind of computer equipment you need for your research or study, see our hardware purchase guideline. Computer Officers are always available to assist you to determine what is needed.
- For research staff and research students, the Computer Office may be able to offer a short term loan of computer equipment. Please contact the Computer Office for availability.

More information:
https://info.esc.cam.ac.uk/helpdesk/?page_id=1088 (Purchase Process)
https://info.esc.cam.ac.uk/helpdesk/?p=1114 (Guideline for Equipment Purchase)

4. Obtaining Software Licences

1 The Computer Office can arrange purchase of some commercial software with academic discount for academic, research or teaching purpose.

- Some software licences have restrictions, mainly licences sold by UCS, where the hardware (computer) must be owned by the department or purchased with research grants.
- If you are not sure the eligibility of your computer, please contact the Computer Office.
- Usually the Computer Office installs all standard software and any licensed software purchased at the same time onto a new computer.
- If you require special software to be installed, commercial or non-commercial, and you are not sure how to obtain a licence or how to configure it, contact the Computer Office.
- We regret that we are unable to arrange any personal purchase of commercial software licences.

More information: https://info.esc.cam.ac.uk/helpdesk/?page_id=720

5. Web Page

- For all academic and research staff and research students, the Department provides a profile page in the main web site.
- New profile pages are created by the webmaster (Alison Holroyd webmaster@esc.cam.ac.uk) who can also provide some assistance with their management. Please contact the Webmaster to get the page created so you can edit it.

6. Contact

- In person: the Computer Officers are located in N323 and N318 (through N316) on the third floor, North Wing at the Downing Site.

- E-mail: helpdesk@esc.cam.ac.uk
- Telephone: 33368 [+44-(0)1223-333368]
- Web: https://info.esc.cam.ac.uk/helpdesk

# REGULATIONS GOVERNING THE USE OF COMPUTING FACILITIES WITHIN DES

Computing Committee, Department of Earth Sciences

## 1 REGULATIONS GOVERNING THE USE OF COMPUTING FACILITIES WITHIN THE DEPARTMENT OF EARTH SCIENCES

1.1.1 Introduction:

This document covers the use of computing equipment by Department of Earth Sciences (DES) staff and by other authorised persons. The document defines both good practice and practices which may constitute misuse. It draws attention to operational procedures which may help to prevent misuse, including misuse by unauthorised users. The document applies to all computing facilities within DES, whether or not these are supported by DES Computer Office (CO). This document is intended to be interpreted in addition to or in conjunction with any relevant documents and guidelines published by University Computing Service, University of Cambridge (UCS) and Joint Academic Network (JANET).

## 2 COMPUTING FACILITIES

2.1 Definition of Computing Facilities

Computing facilities are taken to include computers, peripherals, networks and all programmable computing equipment, whether or not connected to a network. They also include all software and data stored within computing equipment or in transit on magnetic and other media.

2.2 Access to Facilities

2.2.1 Access to computer facilities requires identification in the form of a unique user identifier (ID), known to the computer system being accessed, and a password known only to the user. Application for an ID must be approved by Head of Department (HoD) or Department Administrator (DA) and forwarded to CO who will ensure that the chosen combination is unique. The CO maintains a record of individual users and their authorised user IDs, they will allocate an initial password and explain how it may be maintained.

2.2.2 The combination of user ID and password is intended to prevent unauthorised users from accessing DES computing facilities. It is therefore important to protect the security of both IDs and passwords. Users should only use the IDs assigned to them. If it is necessary for IDs to be shared among users, a user who is in charge of keeping the ID safe must be nominated and authorised or alternative security measures should be agreed with the CO. Passwords should be changed regularly and must be changed at the request of CO due to the security concerns.

2.2.3 It is the responsibility of the user to ensure that only authorised individuals have access to DES computing facilities using their own user ID. Therefore users should ensure that they log out from the computer facilities or system adequately and leave no confidential information in the facilities.

2.3 Misuse of facilities

2.3.1 Misuse of computing facilities is considered a serious offence and in many cases it constitutes a criminal offence. Appendix A shows the list of actions which may constitute misuse of computing facilities. The list merely provides an overview of actions which will be considered to amount to computer misuse.

2.3.2 Any alleged misuse by a member of staff will be investigated in accordance with any appropriate Disciplinary Procedures by the University and may render the individual liable to disciplinary penalty.

2.3.3 With the authorisation from HoD, DA or Chairman of Computing Committee (CCC) appropriate action by the CO will be taken against users who are believed to have misused DES computing facilities. This may include suspending use account and disconnecting from the network.

2.4 'Hacking'

2.4.1 ‘Hacking’ is defined as gaining, or attempting to gain, unauthorised access to a computer system. It also covers other acts aimed at interfering with a computer system, whether through damage or destruction of data or programmes, or through disruption of operational practices. 'Hacking' is illegal and believed to be a criminal offence.

2.4.2 Users should cooperate with CO and other authorities to investigate any incidents thought to be 'hacking'. It is also users' responsibility to ensure that their activities using computer equipments will not invite any 'hacking'.

2.4.3 As part of the University and the academic community making use of JANET, DES is also required to assist UCS or JANET in investigating 'hacking' of systems which are not under DES control. 'Hacking 'or attempted 'hacking' of DES systems, or any other hacking which involves the use of DES equipment, of staff time or of information gained during the course of DES employment, will be considered a serious breach of discipline to be dealt with under the Disciplinary Procedures by the University.

2.4.4 'Hacking' or attempted 'hacking' of other computer facilities may also render an individual liable to prosecution and claims for damages by those organisations.

## 3 DATA COLLECTION, USAGE AND STORAGE

3.1 Data Security

3.1.1 Data are a valuable asset and must be protected from unauthorised access, use or manipulation. Any user of DES is personally responsible for the security and integrity of any data accessed or created and for compliance with relevant copyright rules applicable.

3.1.2 The CO ensures that appropriate measures, in accordance with ‘good practice’ within the computer industry, are in place in order to protect essential data and/or programmes. The measures in place will be reviewed periodically by the CO and Computing Committee (CC).

3.1.3 Additional security measures can be provided as required.

3.1.4 Users should assess the level of security needed to protect essential data and/or programmes, taking into consideration the cost of acquisition, the consequences of loss, and the cost-benefit of additional security such as extra back-ups.

3.1.5 In the case of computer equipment outside the control of the CO but within DES, the users must provide adequate measures to ensure the security of essential data and/or programmes. The same principles as those outlined above will apply.

3.2 Data Protection Act 1984

3.2.1 The storage and use of computerised records relating to individuals is governed by the Data Protection Act 1984. All staff operating or compiling databases which contain personal data must make themselves aware of the contents of this act.

3.3 Misuse of Data

3.3.1 The unauthorised access of data and its manipulation, corruption or destruction - regardless of whether or not this is for personal gain - will be treated as a serious offence. Appropriate action will be taken against individuals who misuse data. The fraudulent misuse of data for personal gain will be treated as a criminal offence.

## 4 INTELLECTUAL PROPERTY RIGHTS AND COPYRIGHT

4.1 Software and Data Sets

4.1.1 Software is recognised by law to be an intellectual property. Regardless how it was obtained, the use of the software us under a legally binding licence agreement that defines the terms of conditions, under which the software may be used. All users are expected to comply with the terms of licence agreements.

4.1.2 No user at DES shall use unauthorised copies of software. DES except users to comply with any legal conditions controlling the use of that software or data sets.

4.1.3 Care should be taken if using unsolicited software, especially so-called 'freeware' or 'public domain' software. Such software should be passed to the CO for examination if the user is not sure of the nature of the software.

4.1.4 Data or data sets generated through professional activities within DES are also considered to be intellectual property. User should not knowingly distribute or release data or data sets to non-DES organisations by any means without prior discussion with and permission from line management.

4.1.5 If data or data sets are generated by activities with external bodies, including research commission and corroboration, permission or agreement to publish such data or data sets must be obtained by both DES line management and related external people.

4.1.6 Software and Data Obtained under Academic Terms. Most of the commercial software and data provided at DES is obtained under special academic terms. Users are expected to understand such special terms of conditions under which they may use the software.

## 5 ELECTRONIC COMMUNICATION

5.1 Data Communications Networks and JANET

5.1.1 No attempt should be made to attach or connect computer equipment to the network or to disconnect the equipment from the network without the knowledge of the CO.

5.1.2 UCS and DES use the network connection from JANET. As JANET operates under the terms of a licence granted by OFTEL to the Secretary of State for Education and is operated by the United Kingdom Education and Research Networking Association under contract to JISC, users at DES are expected to comply with these terms and conditions.

5.2 Electronic Mail (e-mail)

5.2.1 Electronic mail (e-mail) is an important means of communication and offers facilities which are complementary to other media. However, it is no more secure than ordinary, paper mail and is, in some respects, less secure. It should not be used for information of a confidential nature.

5.2.2 Care should be taken when opening attachments delivered by email. Users are expected to contact the CO if they are not sure of the nature of the attachment.

5.2.3 The e-mail service used within DES is operated by UCS. It is the responsibility of users to keep a record of any messages. It is strongly advised that messages which may need to be referenced for audit purposes or which may be quoted as part of official records should be filed in hard copy form.

5.2.4 Users are expected to follow all e-mail relevant guidelines provided by UCS.

5.2.5 Users should not use the e-mail system as a data archive.

5.3 Internet

5.3.1 The Internet has established itself as an important communication facility for the research community. Users are encouraged to make use of the internet for DES business and only.

5.3.2 See Section 6.2 for the use of the internet for using private activity.

5.3.3 No material which breach copyright may be published on the internet.

5.3.4 Users must not attempt to obtain any illegal information or to access illegal parties through the internet. It is considered to be a criminal offence.

5.3.5 Inappropriate use of the internet, distributing any kind of offensive material, accessing non-business related information and using it for personal gain, is regarded as a serious offence. The HoD or CCC will take necessary action against such use of the internet.

5.4 On-line Publishing

5.4.1 Publishing information through the internet, by the means of the world wide web (www) or other services, must be in accordance with relevant DES and UCS guidelines and policies.

5.4.2 If DES or the user does not hold the copyright of the information, text, images or data, to be distributed, permission must be obtain from the copyright holder. Where the copyright belongs to DES, permission must be obtained from curator of the material.

5.5 Offensive Material

5.5.1 Computing facilities at DES must not be used to distribute information or material which might reasonably cause offence or which would be considered socially unacceptable.

5.5.2 The transmission of messages which are threatening, offensive, obscene, or which constitute racial or sexual harassment will be considered a serious misuse of DES facilities. User found to be responsible for the generation, transmission or distribution of such information or material will be subject to the University's and DES's disciplinary procedures.

5.5.3 The use of DES computing facilities to obtain or distribute obscene or offensive material on the internet is regarded as a serious offence. Again the user will be subject to the University's and DES's disciplinary procedures.

## 6 OTHER CONSIDERATIONS

6.1 Working at/from Home

6.1.1 Where users use computers at home in connection with their work they should ensure that the strictures on copyright violation, protection against viruses, etc, described in other sections of this notice, are followed, especially where files are transferred between home and work.

6.1.2 Extra care must be taken when accessing DES computer facilities from home. Adequate measures for security protection should be provided on computers at home and only secure connection to the DES computing facility should be used.

6.2 Private Use

6.2.1 Users are allowed to use DES computing facilities for their private use, including internet access, provided that such activity does not interfere with DES business and that users do not misuse the facilities.

6.2.2 It is the responsibility of the user to ensure that such private use of the facilities does not cause any financial damage to DES and/or the University.

6.3 Hardware security

6.3.1 No computer equipment should be placed in or removed from a DES site without the prior permission of line management and CO.

6.3.2 DES computing facilities should be kept secure using adequate physical security measures, such as locks and keys.

6.4 Health & Safety

6.4.1 Users are expected to be aware of DES's and the University's relevant heath and safety policies and guidelines.

6.4.2 Users must contact the DES Safety Officer or CO if there are any health and safety concerns related to DES computing facilities.

## Appendix A

## EXAMPLES OF COMPUTER MISUSE

This list gives examples of misuse which may be subject to disciplinary or other appropriate action. It is not intended to be comprehensive and should be read in conjunction with sections above.

- 'Access' - failure to take reasonable steps to protect the security of IDs and passwords; the unauthorised use of another person's ID/password.
- 'Hacking' - hacking of any DES computer system, or hacking into any other computing system using DES resources.
- Data Protection Act 1984 - failure to comply with the provisions of the Data Protection Act; unauthorised access to, or disclosure of, information about individuals.
- Misuse of data - unauthorised access to data and/or programs, and their manipulation, corruption or destruction; failure to take reasonable steps to protect the integrity of DES data and/or programs.
- Software Use - failure to comply with the terms of DES software licensing agreements; infringing DES copyright or Intellectual Property Right arrangements on DES-generated software and data sets; the generation or use of illegal copies of software; failure to comply with the terms of usage of academic software; the unlawful introduction or dissemination of rogue software.
- Data Communications Networks - failure to comply with the conditions of use of the JANET network or of any other specialised communication link; attaching or disconnecting equipment from the network without the agreement of a computer officer.
- Electronic Mail - the misuse of the e-mail system, particularly the transmission of messages which are considered threatening, offensive, obscene or which constitute racial or sexual harassment; sending chain letters.
- Internet - the use of DES computer facilities to import or distribute obscene or offensive material either within DES or externally.
- On-line publishing - failure to comply with recognised DES guidance on the use of electronic communication media.
- Hardware security - failure to ensure the security of computing equipment.
- Health and Safety - failure to observe Health and Safety codes.

## 20. INSURANCE FOR TRAVEL AND FIELDWORK

1. **Overseas travel and fieldwork** - University employees and registered postgraduate students - University Travel Insurance

University employees and registered postgraduate students travelling abroad on university business (including fieldwork) can apply for travel insurance through http://www.admin.cam.ac.uk/offices/insurance/travel. This ensures they and their accompanying family members have access to emergency services similar to those available in the UK with up to £5 million for medical and emergency travel and up to £5000 for lost or damaged baggage. See website for full conditions, but particularly note that the insurance is only valid if you are "in compliance with the Board of Graduate Studies procedures for Working Away from Cambridge"; to meet this requirement

- If you will be away for ***more than 2 weeks*** you must apply for "Leave to work away" (www.dcesg.physsci.cam.ac.uk/current-student/LWA).
- ***However long you will be away for, if you are carrying out fieldwork you must complete a risk assessment***, please submit it with the LTWA application and email it to both Lucy Matthews lhm29@cam.ac.uk and Andy Buckley ab78@esc.cam.ac.uk. If there is no LTWA application the risk assessment only needs to go to Lucy Matthews.

If you are applying for LTWA over the summer you will need to enter Easter term and then enter the specific dates after that.

***If you are going to travel/do fieldwork abroad, you must contact the University insurance office at the website above. If they advise that they will not give insurance for a particular country because of the risk there, then you should contact*** Andy Buckley ab78@esc.cam.ac.uk***.***

This travel insurance does not provide any motor insurance. If you borrow, hire or buy a vehicle abroad you must arrange local, fully comprehensive motor insurance.
This insurance does not apply to research undertaken while on sabbatical.
Nuclear, biological and chemical attacks are excluded but it will cover terrorist attacks and travel to war zones if you contact the Insurance Section directly.

2. **UK travel and fieldwork** - University employees and registered postgraduate students - Travel Insurance. For fieldwork and travel for research in the UK individuals need to arrange their own cover.

3. **Postgraduate students carrying out fieldwork before the formal start date of their studentship, either overseas or in the UK, need to arrange their own insurance cover.**

4. **Undergraduate taught field courses**
All staff and demonstrators for undergraduate field courses (as well as undergraduates) are covered en bloc by the Department with Sun Alliance.

5. **Part II Mapping projects**
Students must have insurance cover, and from next summer onwards, will be asked to arrange their own cover. They will be asked to confirm on the Fieldwork Risk Assessment form, that they have done so.

6. **If in doubt!** Do not assume that you are automatically covered by the University because you are a member of the Department; you are not!

**CAMBRIDGE UNIVERSITY DEPARTMENT OF EARTH SCIENCES**

**Fieldwork - Code of Safe Practice and Good Conduct**

## i. Responsibilities and liabilities

Geological fieldwork is carried out in a variety of environments ranging from city streets to remote mountain peaks. Safe practice largely amounts to using common sense appropriate to the situation, along with awareness of any special hazards arising from what you are doing. Much fieldwork is carried out as part of a large group, and the guidelines in this leaflet concentrate on such situations. It is your duty to attend the safety courses that are offered.

In accordance with Health and Safety legislation, field party leaders will be following standard safety procedures and taking every reasonable care to ensure the safety of their group. However, this does not remove the duty of care from each individual for their own safety and that of other students and staff. You may even be held legally liable if accidents arise through your failure to obey instructions or meet obligations. In particular, it is your responsibility to stay in touch with the field party, not moving ahead of the leader unless directed and not leaving the party for any purpose without the leader's permission.

## ii. Health, fitness and accidents

Fieldwork requires a level of fitness sufficient to walk 5-10 miles per day over paths and moorland which can be steep, rugged and uneven. It is your responsibility to attain and maintain this basic fitness. If you have a disability or a medical condition, permanent or temporary, that might in any way affect your ability to carry out the fieldwork, it is your responsibility to inform the party leader in advance. Leaders will make reasonable efforts to accommodate individual problems, consistent with the progress and safety of the main party. Similarly, inform the leader if you or a colleague has any sort of accident or begins to feel ill in the field.

## iii. Clothing and Equipment

It is your responsibility to ensure that your clothing, equipment and footwear are suitable for the range of conditions that you are likely to meet. Field party leaders will provide advance information. However, for UK field work you will need, in particular:

- walking boots: trainers are unsuitable;
- waterproof rain-jacket (with a hood) and over-trousers;
- loose-fitting trousers (not jeans, which provide ineffective insulation when wet);
- warm fleece top(s) or pullovers;
- warm (e.g. fleece) hat and gloves, sunhat, sunscreen, insect repellent;
- day sack: a rucksack, not a shoulder bag;
- hard hat and safety goggles. You will be provided with a hard hat for all taught fieldtrips and goggles, when required, for the IA trips. You will need to provide your own goggles on other trips;
- water bottle, whistle

Field trip leaders may reasonably refuse to allow you to take part in field day if you are unsuitably dressed for the prevailing weather and terrain conditions.

## iv. Hazardous environments

Some fieldwork is done in environments that present particular potential hazards. Any risks to you and the rest of the party will be minimised if you take common-sense precautions.

*Cliffs, quarry faces and steep slopes:* Rocks may fall down a cliff or face at any time, but particularly during and after rain. Keep away from under steep faces as far as possible; in such situations it is essential to wear a protective helmet. Never work under a quarry overhang. Similarly avoid the tops of

quarry faces and cliffs; which are prone to collapse. On slopes, do not work directly above another person and do not dislodge loose rocks, either by accident or for amusement. Rock climbing of any sort is forbidden on field trips.

*Coasts:* Party leaders will have checked tide tables, and you should obey their instructions about the timing and route for traversing a shore section. Take great care on slippery rocks, typically below high water mark, and on any shore with boulders or large pebbles. Helmets should be worn in such slippery and unstable areas, and when specifically instructed by leaders. Avoid areas of soft mud and sand. When the sea is rough, keep a safe distance beyond breaking waves. You should not cross tidal channels, or go swimming unless specific permission has been given by leaders.

*Roads:* Roadside exposures should not be viewed unless it is safe for all the party to do so. Post a lookout and wear high-visibility clothing. Avoid hammering and do not leave debris on the road or verge. Parties should walk facing the traffic, no more than two abreast at any time and in single file when appropriate.

*Working quarries and industrial sites:* Leaders will have obtained prior permission for access. Obey any special precautions that are required; e.g. wearing helmets and safety goggles. Keep in a closely-grouped party. Avoid all equipment and cables, and keep a sharp lookout for moving machinery.

*Old mines, caves:* Do not enter any old mine workings or caves unless this has been approved by a party leader.

*Hammering:* Unnecessary hammering is discouraged on all trips. Flying chips of rock and metal are a serious danger; geologists have lost eyes this way. Do not hammer unless you are sure that you can do so without endangering others, then only to collect the smallest sample necessary. Warn them of your intention - chips have been known to cause injury some metres from their origin. Wear either safety goggles or glasses, or ordinary glasses with unbreakable lenses. Never hit one hammer with another - they can shed lethal, metal flakes.

*Work in pairs:* Some first and second year fieldwork is carried out in pairs, although as part of a larger party. In these situations, you will be directly responsible for your own safety and that of your partner. Never work alone.

*Safety handbook:* People on the IA Easter field course, will be issued with a fieldwork safety handbook, and are expected to be familiar with basic safety precautions for working in remote or mountainous terrain. In particular, you should know the international distress signal of six blasts on a whistle or six shouts or six torch flashes or six waves, followed by a minute's pause.

**v. Conduct on field trips**

Leaders aim to make each field trip a geologically rewarding and enjoyable experience for all students. Any disruptive behaviour on your part will distract both the leaders and your colleagues from this aim. As in the Department, field trips should provide a positive working environment for everyone, free from bullying, harassment or other unacceptable behaviour. You must therefore act in a civilised way throughout each field trip: failure to do so will reflect badly on the University and Department as well as yourself. You will be given one verbal warning and then the leader has the authority to ask you to leave the field trip. In such a case, you would be required to vacate your accommodation and bear your share of the field trip expenses, any money the department has advanced you and all associated travel costs. Your College will be informed. Some specific guidelines are:

*Attendance:* You are expected to attend on all days of the field trip, unless special exceptions have been agreed prior to departure. Apart from good cause, (which does not include hangovers) any student

who declines to attend on part of any day will be deemed to have left the field trip. In such a case, you would be required to vacate your accommodation and bear the expenses for your return journey. Your College would be informed.

*Accommodation:* Smoking is not allowed in any of the accommodation we use and boots must not be worn inside. You accept responsibility for the good order of the room to which you are allocated. Each hotel management is instructed to bill occupants for the costs of damage to a bedroom. Where damage to public areas occurs, the costs will be shared between those identified as responsible.

*Hotel rules:* You must comply with hotel guidelines on late-evening conduct. These guidelines will vary from hotel to hotel, but will usually involve designated times for re-entry to the hotel, for closure of any residents' bar, and for quiet in rooms and corridors. Most hotels will insist that alcohol bought outside is not consumed within the hotel. In any case alcohol must not be consumed in bedrooms nor may parties be hosted there.

*Mobile phones:* You may bring a mobile phone on field trips provided that you obey the conditions for its use determined by the party leader. Generally, phones should be turned off during group teaching in the field or during the evening. They should be turned on, as a safety measure, during mapping in pairs, but you should be aware that mobile phone reception is poor to non-existent in many of the field areas we visit.

*Hazardous recreational activities:* Rock climbing and caving are specifically forbidden on our field trips, even in your spare time. Some less hazardous activities may be permissible in your own time outside the working day, but you should consult leaders if you are in any doubt about their advisability. Whilst you, and not the leaders, will be primarily responsible for your safety during, for instance, swimming or hill walking, leaders may reasonably ask you not to take part if they think you are putting at risk the safety of yourself and others.

**vi. Bullying and harassment**

Definition: Bullying is any behaviour which makes someone feel intimidated, humiliated or offended, whether or not it is intended to do so. Harassment is bullying related to: sex or gender, age, disability, race, religion, sexual orientation, marriage and civil partnership or pregnancy and maternity and is illegal. In particular, sexual harassment includes any unwanted sexual comments or jokes as well as unwanted physical contact. Bullying and harassment can occur in day-to-day work, but the small groups and close-working environments encountered on fieldwork can make seeking help more difficult.

***The Department and the University regard all forms of bullying and harassment as unacceptable. It is the responsibility of each member of the Department, both staff and students, to assist in promoting an environment of mutual respect and consideration.***

Response: If you feel that you are being bullied or harassed whilst on fieldwork or a field trip there are several people you can contact. In the first instance, you could report the incident(s) to a trip leader (for taught field courses, any member of staff or demonstrator). If you are not comfortable talking to the trip leader(s), the following contacts are available:

- *Lucy Matthews, Safety and Welfare Co-ordinator for Earth Sciences, +44 1223 333470, lhm29@cam.ac.uk*
- *Andy Buckley, Department Administrator for Earth Sciences, +44 1223 333421, ab78@cam.ac.uk*
- *Student Advice Service, +44 1223 746999, advice@studentadvice.cam.ac.uk*
- Your tutor, senior tutor, Director of Studies, supervisor (for postgraduate students).

Incidents can also be reported at a later date to any of the above.

Any member of staff, or demonstrator, approached with a report of bullying or harassment, must:

- Treat concerns seriously.
- Protect the anonymity of the reporter, and ask permission from the reporter before seeking guidance

or conveying details to others.
Further details, and formal complaints procedures, may be found on the University web pages for Dignity@Study (for students) and Dignity@Work (for staff).

**vii. Undertaking**

Students are asked to read these notes carefully and by their signature on the attached sheet, to agree to observe the provisions they contain and any other instructions, verbal or written, given by the leader of the party. I have instructed the leaders of field parties that they must exclude from field work anyone who is not properly equipped, who does not observe safe practice or good conduct, or who does not obey the instructions given by the party leader or by those to whom the party leader has delegated this duty.

R.J. Harrison
Head of Department

## DEPARTMENT SAFETY COMMITTEE

| | |
|---|---|
| **Head of Department** | Prof**.** R.J. Harrison |
| **Department Safety Officer**, Committee Chair | Ms L H Matthews |
| **Laser Safety Officer** | Dr E. Ringe |
| **Radiation Protection Supervisor** (unsealed sources) | Prof. I Farnan |
| **Radiation Protection Supervisor** (sealed sources, x-rays) | Dr G Lampronti |
| **Safety Officer and Fire Manager,** Bullard Labs | Mr D Simons |
| **Fire Manager**/Principal Technician | Mr M Walker |
| Department Administrator | Dr A Buckley |
| Chemistry Safety Officer | Dr J Day |
| Fieldwork | Prof. M Edmonds |
| Sedgwick Museum Representative | Ms S Wallace-Johnson |
| Safety Administrator, Committee Secretary | Mrs M E Austin |
| Deputy Director, Health and Safety Division | TBC |
| Postgraduate Representative | Andrew Whyte |
| Teaching | Prof. N.J. Butterfield |
| Union Representative | Vacant |

**Bold type** for a Committee member's role indicates a formal Departmental safety position.

## HEADS OF SECTION

| | |
|---|---|
| BP Institute (Madingley Rise) | Prof. A Woods |
| BPI Colloids Interface Lab | Prof. Stuart Clarke |
| BPI Fluids Lab | Dr Charlotte Gladstone |
| BPI Polymer Colloids Lab | Prof. Alex Routh |
| | |
| Palaeontology Processing | Prof N Butterfield |
| Teaching | Prof N Butterfield |
| Mineralogy and Petrology | Prof N Tosca |
| Resonant Ultrasound Spectroscopy & High Temperature Lab | Prof M A Carpenter |
| Electron Probe Laboratory and Fieldwork | Prof M Edmonds |
| Radioactive Material Preparation, N M R Spectroscopy & Workshops | Prof I Farnan |
| Chemistry and Rock Processing | Prof S Gibson |
| Sedgwick Museum and Brighton/Rock Store Buildings | Dr L Hide |
| Mineral Magnetism & Electron Microscopy | Prof R Harrison |
| Godwin and Sedimentary Labs | Prof D Hodell |
| Rock cutting and Thin Section Preparation | Prof M Holness |
| Student Photography | Dr A Liu |
| Ocean Geochemistry | Dr A Piotrowski |
| X-ray Spectroscopy | Dr O Branson |
| Mill Lane Core Store | Dr J Rolfe |
| Radiocarbon Laboratory | Dr L Skinner |
| Isotope Geochemistry | Dr E Tipper |
| Marine Biogeochemistry | Dr A Turchyn |
| Photon Spectroscopy | Dr E Ringe |

**STRICTLY CONFIDENTIAL**

# FIELDWORK SAFETY / MEDICAL FORM

Name: ……. College: …….
(BLOCK CAPITALS)

Signed: ……. Email: …….

Date: ……

Home telephone: ……..

Mobile telephone ……..

*Person to be contacted if you are taken ill during fieldwork*

Name: ……

Address: ……

……

Home telephone: ……..

Mobile telephone: ……..

Dietary requirements: ……..

Medical conditions/medication prescribed to you:

…….

…….

Information on how we use your personal information is provided at:
https://www.information-compliance.admin.cam.ac.uk/data-protection/student-data

# Field Risk Assessment

**Department of Earth Sciences**
**Downing Street**, Cambridge CB2 3EQ
Tel: +44(0)1223 333400 Fax: +44(0)1223 333450
**Bullard Labs**, Madingley Road, Cambridge CB3 0EZ
Tel: +44(0)1223 337194/91; Fax: +44(0)1223 360779

## CONTACT INFORMATION

| Name | Status (ie undergraduate, academic) | Email | Mobile No. | Address |
|---|---|---|---|---|
| | | | | |

| *DATES OF TRIP* | *FIELDWORK AREA/PURPOSE OF WORK* | *ADDRESS/PHONE IN FIELD* |
|---|---|---|
| | | |

| *NEXT OF KIN TO BE CONTACTED IN EMERGENCY (INCLUDING ONE IN THE UK IF POSSIBLE)* | | | |
|---|---|---|---|
| **Name** (and relationship to you): | **Address:** | **Phone numbers:** | **Email:** |
| **Name (**and relationship to you): | **Address:** | **Phone numbers:** | **Email:** |

| *CONTACT DETAILS IN HOST COUNTRY (for projects outside UK)* | | | |
|---|---|---|---|
| **Name of Host:** | **Address:** | **Phone number:** | **Email:** |

| *EMERGENCY/INSURANCE DETAILS* | | | |
|---|---|---|---|
| **Emergency services number for your country of work:** | **Insurance Company** | **Trip Insurance Policy No:** | **Insurance emergency contact/medical assistance tel no:** |
| If you have any medical conditions or take any medication which may affect safety in the field please give details. ***All information will be treated in the strictest confidence*** | | | |

| *CAMBRIDGE DEPARTMENT CONTACT DETAILS* | | | | |
|---|---|---|---|---|
| **Name of Supervisor:** | | **Name of others on trip:** e.g. field assistants, supervisor, other Part II students staying in the area: | | Andy Buckley +44 (0)1223 333421, +44 (0) 7391 880643<br>Lucy Matthews +44 (0)1223 333470<br>Dudley Simons +44 (0)1223 337198 (Bullard)<br>University Security +44 (0)1223 331818 (out of office hours) |
| **Email:** | | | | |
| **Phone no:** | | | | |

| Hazardous Situation/Activity | Potential Risk | Control measures |
|---|---|---|
| **Travelling** to and from the field area.<br>Transport around the area during the trip.<br>Embarkation/disembarkation from vehicles, especially at roadside. | Personal injury; damage to vehicles in traffic accident<br><br>Cars approach from opposite direction to UK. Injuries to pedestrians. | Scheduled flights, trains, coaches<br>Use professional drivers or maintain safe driving (driver training where appropriate)<br>Use high viz vests and markers for road cut exposures<br>Exercise on long haul flights to avoid deep vein thrombosis |
| **Weather/climate**:<br>Extremes of temperature; high/low sunshine<br>Rain/getting wet<br>Sudden changes in weather or storms | Heat stroke, dehydration/hypothermia<br>sunburn<br>Discomfort/hypothermia<br>Reduction in visibility,<br>lightning strikes | Suitable clothing and sufficient water/carry thermal blanket<br>Wear hat and sunscreen<br>Carry waterproofs, extra warm layers, survival bag<br>Know compass direction and terrain to ensure follow route out<br>Leave mountain ridges immediately |
| **Wildlife and vegetation**:<br>Insects, animals<br>Plants may cause skin irritation | Bites, stings, attack by animals<br>Lyme disease<br>Rash on exposed skin | Maintain vigilance, wear long trousers and long sleeved shirts.<br>Check for ticks and remove immediately.<br>Rabies inoculations before travel increases time available for follow-up. |
| **Local factors** - diseases and hygiene<br>e.g. Weil's disease<br><br>Dress code and behaviour | Sickness<br><br>Could offend local customs leading to abuse | Immunisation, suitable medicines<br>See http://travelhealthpro.org.uk/country-information/ before you travel.<br>Ensure personal hygiene and always wash hands before eating. Use of anti-bacterial wash if limited clean water available<br>Familiarise yourself with customs so you can behave and dress appropriately. |
| **Accommodation:**<br>Hotel, field centre or camping | Fire<br>Carbon monoxide poisoning.<br>Security | Familiarise yourself with the fire drill and escape route<br>Do not use or refuel stove inside tent.<br>Ensure good ventilation of cabin when using gas heaters and cooking facilities. Never leave gas heaters on overnight.<br>Never cook in tent.<br>Do not bring still smouldering embers into tent.<br>Keep valuables out of sight. |
| **Remote areas** - getting help; coping with a problem... | Delay in rescue or treating illness or injury | Buddy system or contact arrangements. Use route cards.<br>Mobile phone. 4 dept walkie-talkies available.<br>Consider taking a First Aid training course or 2-day Fieldwork Safety and First Aid Course. |

| | | |
|---|---|---|
| ***Personal safety and First Aid provision:*** | Accidents<br>Exacerbation of medical condition | Obtain basic first aid competence and carry first aid kits<br>Maintenance of buddy system. Tell others of medical conditions and symptoms.<br>Ensure relevant injections are obtained/in date. |
| ***Lone Working:*** | Difficulty of calling for assistance in event of an accident | Carry a whistle<br>Buddy system – details of mobile phone contact at regular time intervals if outside sight and sound of rest of field party. |
| **Terrain:**<br>Rock faces, cliffs, screes, landslide steep/slippery/unstable slopes, caves.<br>Rivers, streams and marshy areas, deep bogs, flash floods. | Falling rocks, landslide.<br>Slips, trips and falls<br>Falling in water, getting wet and then cold, injury<br>Slow walkers getting left behind | Hard hats and walking boots with good tread and ankle support.<br>Do not climb unless you are sure it is safe.<br>Take extra care when crossing streams. Be particularly careful when going to the assistance of someone who has fallen in.<br>Maintain vigilance (do not camp) in wadis or areas liable to flooding |
| **Coastal conditions**:<br>Rough sea, tides coming in, abnormal waves, rip tides, quicksands, cliff instability | Falling in sea, exit route cut off by tide.<br>drowning | Throw lines may be a useful addition to safety equipment .<br>Ensure knowledge of correct use<br>Do not swim unless you have separate risk assessment covering the adequate life saving facilities present. |
| **Hammering rock samples** | Eye damage by flying rock chips | Goggles, warn people nearby before hammering. |
| **Carrying** heavy rucksacks of samples | Back strain | Make more than one journey if necessary |
| **Environmental impact**:<br>Litter, Fires, Sharp chippings | Environmental damage<br>Fires<br><br>Sharp chippings can damage animals' feet | "Carry it in, carry it out."<br>Do not make fire unless you are sure it will be safe, and is allowed.<br>Leave any rock shards tidied up inconspicuously. |
| **Further hazards**<br>Above suggestions do not cover all hazards. Consider further hazards applicable to your area. | | |
| **Further hazards (continued)** | | |

| | | |
|---|---|---|
| | | |

**General Notes**

General travel arrangements: passport, visa, money, insurance…...
Consult the Foreign and Commonwealth Office (FCO) website in advance of your trip, if going abroad.
Communication, especially in emergency: Use mobile phones in areas where reception is available. Have emergency numbers to hand. Have a whistle readily to hand. The international distress call is six short blasts repeated at one minute intervals.

Daily monitoring and feedback; daily briefing and debriefing; rendezvous; cut-off times; route cards

Moderation with alcohol, etc.; getting enough sleep, fitness preparation, proper diet in run-up period
Adequate food and drink each day, including breakfast. Emergency water and food
N.B. Consider the Geologists' Association Fieldwork Code. (http://www.geolsoc.org.uk/~/link.aspx?_id=0F5D9BDE-4E91-490C-8A66-B8E96B52377E&_z=z).

Signature

Supervisor's signature

Name
(please print)

Name
(please print)

Position:
(e.g.Part II/ research student/post-doc)

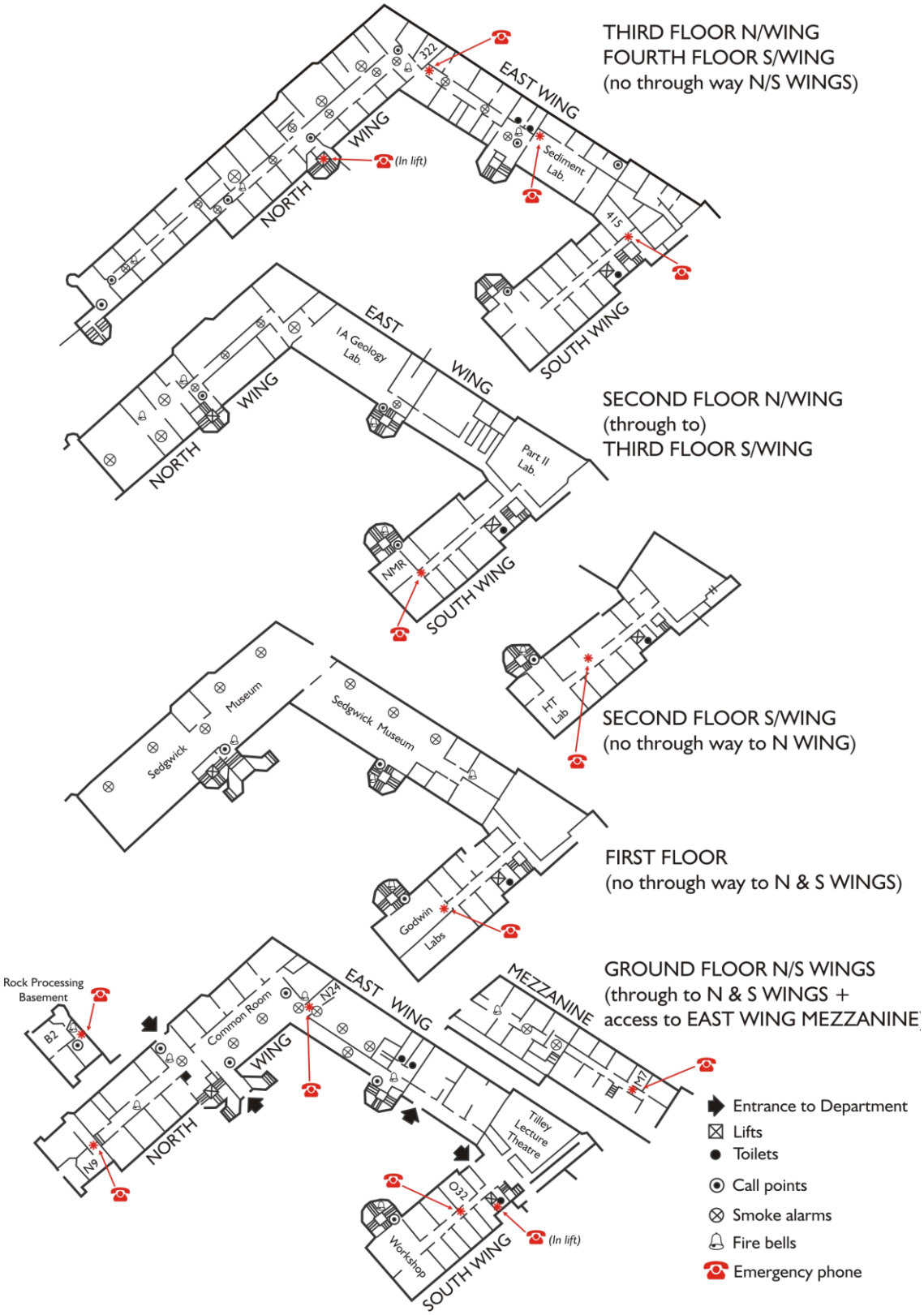
Date:

**Lucy Matthews (lhm29@cam.ac.uk, Downing Site, room S034) and Michelle Austin (mea42@cam.ac.uk) are happy to advise you on writing your risk assessment and can lend First Aid kits and other safety equipment for your trip:**
**https://www.esc.cam.ac.uk/resources/health-andsafety/fieldwork-safety.**

**Please make 2 copies of this form to be given to: Lucy Matthews (or Michelle Austin) and your supervisor. Keep the original and take it with you.**

The following is to provide guidance when compiling a Risk Assessment for **conferences** of **lab based work** in another institution

| | | |
|---|---|---|
| **Travel**<br>Air travel<br>Driving | Personal injury<br>Detention<br>Personal injury; damage to vehicles in traffic accident | Follow on-board safety protocol.<br>Exercise on long haul flights to avoid deep vein thrombosis.<br>Comply with all airport security procedures.<br>Ensure road worthiness of car, avoid driving whilst tired or under the influence of alcohol |
| **Local factors**<br>Dress code and behaviour | Could offend local customs leading to abuse | Familiarise yourself with customs so you can behave and dress appropriately. |
| **Accommodation:** | Fire<br>Carbon monoxide poisoning<br>Security | Familiarise yourself with the fire drill and escape route.<br>Keep valuables out of sight. |
| **Experimental Work** | Personal injury<br>Fire<br>Accidents | Follow the procedures and training given upon arrival at Institute – departmental and laboratory safety guidelines. |


THIRD FLOOR N/WING
FOURTH FLOOR S/WING
(no through way N/S WINGS)
EAST WING
NORTH WING
SOUTH WING
322
415
Sediment Lab.
(In lift)
SECOND FLOOR N/WING
(through to)
THIRD FLOOR S/WING
EAST WING
NORTH WING
SOUTH WING
IA Geology Lab.
Part II Lab.
NMR
SECOND FLOOR S/WING
(no through way to N WING)
Museum
Sedgwick
Sedgwick Museum
HT Lab
FIRST FLOOR
(no through way to N & S WINGS)
Godwin Labs
GROUND FLOOR N/S WINGS
(through to N & S WINGS +
access to EAST WING MEZZANINE
Rock Processing Basement
B2
Common Room
N24
N9
EAST WING
NORTH WING
MEZZANINE
M7
Tilley Lecture Theatre
O32
Workshop
SOUTH WING
(In lift)
Entrance to Department
Lifts
Toilets
Call points
Smoke alarms
Fire bells
Emergency phone

**DEPARTMENT OF EARTH SCIENCES**

To: Research Students
It is most important that we have your Cambridge address and telephone number in case of emergency. Could you please complete and return the attached form to Jane Hart via Reception in Downing Site as soon as possible. Or e-mail to Jane: < jane@esc.cam.ac.uk>

Information on how we use your personal information is provided at:
https://www.information-compliance.admin.cam.ac.uk/data-protection/student-data

Andy Buckley, Administrator

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**DEPARTMENT OF EARTH SCIENCES**

**CAMBRIDGE ADDRESS**

NAME .....

CAMBRIDGE ADDRESS .....

.....

.....

TELEPHONE .....

MOBILE PHONE (If different) .....

NI number ..... (If available)

CAMSIS number .....

COLLEGE .....

**PERSON TO BE CONTACTED IN EMERGENCY**

NAME .....

ADDRESS .....

.....

.....

TELEPHONE .....

MOBILE .....

DATE .....