

HEA-GEES Funded Project, 2011-12

Department of Earth, Ocean & Ecological Sciences

Development of an online field safety
open educational resource using Xerte

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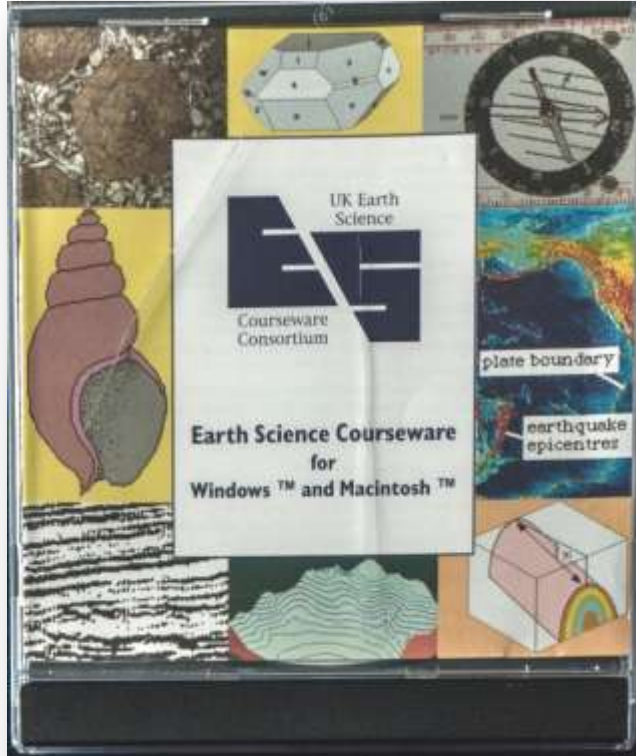
Why?

- Field Safety is important.
- Training is a requirement.
- Existing UKESCC resource is out of date and difficult to maintain.

Structure

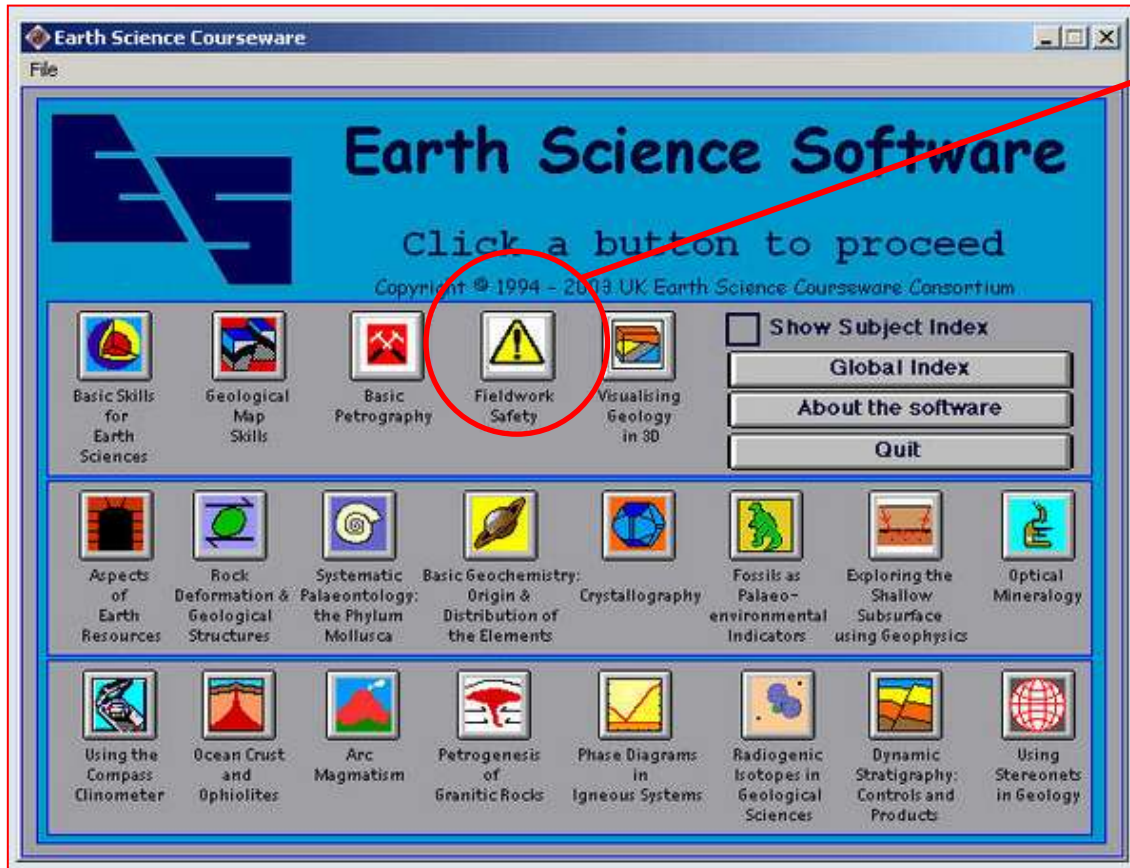
- Background to previous online Field Safety package.
- The new OER Field safety package.
- What's missing?

Background to Field Safety



- Original software package created for United Kingdom Earth Science Courseware Consortium.
- UKESCC: founded and managed by Bill Sowerbutts, University of Manchester.
- UKESCC: funded by HEFCE's Teaching & Learning Technology Programme (1992-1995).

The original Field Safety e-learning package



Package originally created and written by Don Mackenzie and Helen Wilkins at Derby University using Macromedia AuthorWare Pro

AWP bought by Adobe in 2005, and officially abandoned since 2007...

Getting hard to run web versions...

The new Field Safety e-learning package

- Created at Liverpool University by Maggie Williams, Peter Williams & Alan Boyle.
- Project funded by HEA-GEES.
- Uses **Xerte**: freely available multimedia-development software developed by a team at Nottingham University. Allows free updating/customising of source code.
- Finished project is a Flash web-based package for students to use prior to their first fieldwork – and as a reminder for subsequent fieldwork.

Underlying Principles

- Student centred.
- Simple structure with accessibility.
- Use best external web resources.
- Use a variety of presentations and interactions to engage user and provide feedback.
- As comprehensive as possible (for UK Geology students).
- Adaptable by Institutions and disciplines.
- Available through Jorum (source code) and as a standalone web page (Flash-delivered):
- <http://pcwww.liv.ac.uk/geo-oer/fs>





Welcome	Geological equipment 2	Planning for upland fieldwork
Information about 'Fieldwork Safety'	Google Maps	Upland fieldwork
Introduction	Links: maps & sources of information	Recognising fieldwork hazards & risks
Medical emergency	Coastal fieldwork - hazards 1	Fieldwork hazards & precautions
First Aid Kit	Tides	Hazards & precautions: feedback
Hands only CPR	Cliff collapse	Self-assessment quiz
The Countryside Code	Coastal fieldwork - hazards 2	Risk assessment
Geological Fieldwork Code	Quicksand	Risk assessment for upland areas
Health matters	Planning for working in quarries	Risk assessment for coastal areas
Kit	Equipment for quarries	Risk assessment for quarries & mines
Kit for different seasons	Working quarries & pits - hazards 1	Acknowledgements
Kit: clothing	Working quarries & pits - hazards 2	
Kit: footwear	Disused quarries 1	
Kit: equipment	Disused quarries 2	
Kit: other safety equipment	Disused mines 1	
Geological equipment 1	Disused mines 2	



The British Heart Foundation has produced new guidelines on artificial respiration. This video with Vinnie Jones shows you how to do it.

Remember:

Check if the person is breathing.

Call 999.

Lock your fingers, knuckles up.

Push down 5 to 6 cm in the middle of the chest.

Repeat about twice a second and keep going until the ambulance arrives.





The Geologists' Association has published the "Geological Fieldwork Code". This code, which is widely recognised as a standard for advice and guidance in the field, also includes a code for coring: a sampling technique that some researchers use to take cores from rock outcrops.

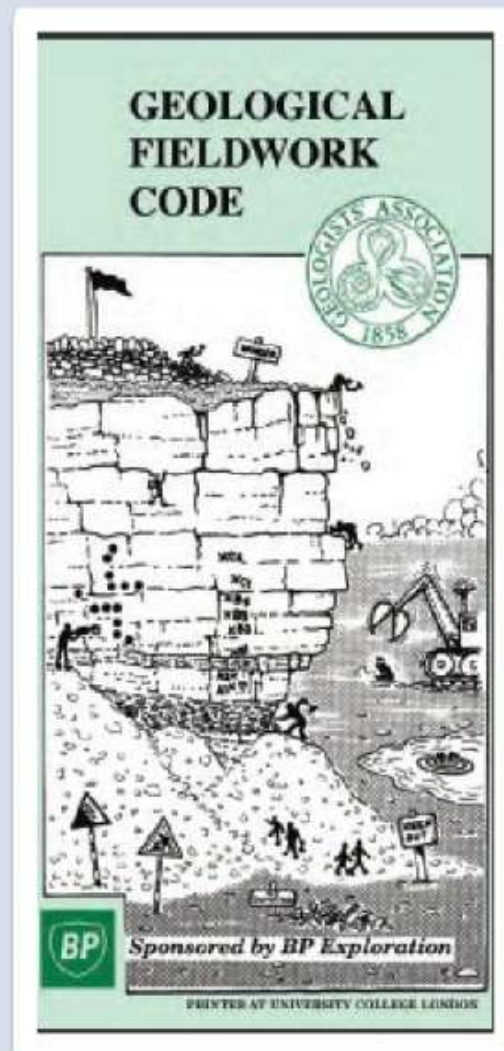
Three of the most important points to remember are:

- Fieldwork is potentially hazardous.
- You need to be aware of the fieldwork hazards, particularly when you are working in the field below steep faces, in quarries and on coastal areas.
- In the field always use strong footwear and wear warm, waterproof clothing and carry safety equipment (including a compass and First Aid kit).

If you open the link below you can download the Geologists' Association "Code for Geological Fieldwork".

The link is on a fieldwork resources page where you can also read the Geological Society of London's 'Code for Geological Fieldwork'.

[The Geological Fieldwork Code.](#)





Always obtain prior permission for entry to a working quarry or pit. Unauthorised entry is not only illegal, but you may also place yourself in danger. On arrival you must contact the site manager (or his deputy). On supervised visits this is usually done by your tutor.

You must:

- obey any special instructions given by the site manager and/or your tutor
- stay with all members of the party
- ask the site manager for permission to collect samples
- keep away from quarry equipment or controls
- behave responsibly at all times.

Moving plant

Quarry vehicles loaded with material often move fast and are a hazard. Serious injury (fractured limbs, crushing, death) could result from impact with quarry vehicles. To avoid injury you must remain alert and ensure that drivers and plant operators are aware of your presence at all times.

Remember: When you are crossing quarry roads, quarry vehicles have priority.



Unstable quarry faces

Piles of rock and quarry waste tips

Settling ponds & mud lagoons

Slopes and faces in pits

Footwear must:

- fit properly
- give good ankle support
- be broad, strong and lightweight

Thin, ill-fitting and poor quality footwear is both dangerous and uncomfortable. Good quality, waterproof footwear is essential and for most types of fieldwork walking boots are best. Specialist footwear may be required for some types of field work. If in doubt consult staff in a good quality outdoor pursuits shop.

WARNING

Trainers are not appropriate for fieldwork. You are at risk from sprains and damaged ankles if you wear them on rocky and uneven ground.

Walking boots should be broad, strong and lightweight and have:

- a deep rubber tread
- thick but supple uppers
- firm ankle support and padding

Remember:

Socks should be of natural fibres e.g. wool.

Wear one or two pairs of socks inside your boots to reduce chafing.

New boots should be broken in gradually before they are worn for a full day.



Boots and socks

Wellingtons

Safety boots



These quiz questions will test your understanding of Fieldwork Safety and your awareness of safety issues and the sorts of hazards that you are likely to meet when working in the field. The questions will appear in a random order.

For each item select the best possible option out of the choices listed.

Question 1 of 20

This photograph shows a coastal area near Amroth, Pembrokeshire. The main hazard here is the:



- unstable sand-clay cliff
- colony of birds nesting on the cliff
- extensive mud flats below the cliff
- unstable rock cliff

Submit

Next

Fieldwork Safety Licensing

- Available as a standalone module:
- <http://pcwww.liv.ac.uk/geo-oer/fs/>
- Released as an open educational resource licensed under the terms of the Attribution-Non-Commercial-Share Alike 2.0 UK: England & Wales license.
- See <http://creativecommons.org/licenses/by/2.0/uk/> for details.



What is missing?

- Set up with UKESCC and Geology in mind.
- To cater better for geography should add rivers & glaciers...



Acknowledgements

Hazel Clark and **Alison Stokes** for their helpful and constructive comments on draft versions of this resource.

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