Fieldwork Handbook: 'Taught Fieldwork & Research Fieldwork'





A guide for Academic Supervisors & Fieldwork Leaders to ensure the health, safety and well-being of fieldwork participants

Purpose

This Handbook outlines what should be considered when planning and undertaking taught fieldwork away from the University where students take an active part and carry out practical work, for example, collecting organism samples on a shoreside. The same principles should also be applied to research fieldwork, in which students and / or staff will usually work, unsupervised away from the University.

This Handbook, as with other University health and safety Policies, Handbooks etc seeks to ensure health and safety does not hinder an activity but supports it by providing practical solutions so the activity can take place, safely. The information meets the requirements of the University's Fieldwork Policy Standard and encompasses the principle that good health and safety is about the management of risk and not about the complete elimination of it.

In general, health and safety considerations when planning and undertaking fieldwork will not be complicated, with risks often no greater and with precautions no different to those we take in our private life. The Handbook aims to show how easy the health and safety assessment process is, with timely planning and a common-sense approach, used alongside the appropriate scientific and environmental knowledge to highlight areas requiring more thought, usually all that is needed.

A number of template documents are included in the Appendices to help and which can be customised to make fieldwork specific. A separate Handbook is available for 'Social and Community Based Field Research' (people) and 'General Day Trips and Visits'.

Definitions

For the purpose of this Handbook, the following definitions apply:

TAUGHT FIELDWORK:	Fieldwork / study away from the University which includes a taught element and involves a greater level of risk than that encountered generally in everyday life and where University staff will attend to support participating students (eg student group(s) taking plant samples on a mountainside).
RESEARCH FIELDWORK:	Traditional field research away from the University, which is generally unsupervised, not part of a taught module and which could involve unusual / higher risk activities.
FIELDWORKER:	Fieldworkers include those under supervision and those working independently of direct supervision on a field activity.
ACADEMIC SUPERVISORS (AS):	Responsible for ensuring all fieldwork they direct complies with the requirements of the Fieldwork Policy. The AS is defined as: the module organiser for group taught fieldwork, the Project Supervisor for undergraduate/MSc and MRes students, the main AS for PhD students, the Principal Investigator for all research associated fieldwork.

FIELDWORK LEADERS (FL):	A competent FL is essential for all group taught fieldwork. The FL is responsible for implementing all the controls identified in the risk assessment for maintaining the health and safety of participants. The FL is also responsible for the supervision of all participants taking part in the fieldwork. FLs are expected to take charge in case of emergency and making decisions to abort or change the fieldwork as required.
	FLs may often be involved in planning and risk assessing fieldwork but the responsibility for ensuring compliance with the Fieldwork Policy remains with the AS.
	Where groups of people are involved in research fieldwork the appointment of a competent FL should be considered.
FIELDWORK SUPERVISORS (FS):	FS are often required for group taught fieldwork where the main group is split into sub-groups. FS must be competent to supervise these sub-groups under the direction and with the support of the Fieldwork Leader.

Planning / Risk Assessment

Those responsible for planning fieldwork must also make sure it runs smoothly to safeguard the teaching / learning / research outcomes and health, safety and well-being of all participants.

Timely planning to make sure everything is in place in advance of fieldwork is essential. This will avoid delays, should reduce the potential for problems arising and is especially important if participants need time to make their own arrangements.

As with any activity a risk assessment is needed which documents foreseeable health, safety and wellbeing risks and the controls needed to manage these. But do not over complicate this. In reality many places visited during taught fieldwork are the same as those visited outside of work except more people are attending who will be performing a low risk activity eg taking soil samples. With regards to research fieldwork, the participant will be carrying out an activity which their Academic Supervisor should have extensive experience of, ensuring all associated hazards and controls are captured.

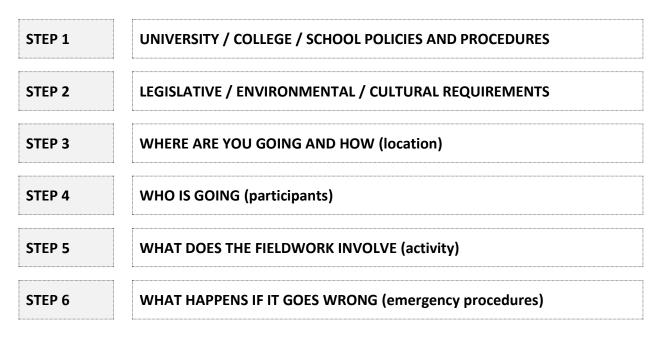
Planning and risk assessments go hand in hand. Breaking fieldwork down into logical steps, from its inception to execution will help to identify general fieldwork management arrangements and highlight any hazards so controls can be decided on. But be practical. The amount of time spent should be proportionate to the complexity and hazards of the fieldwork, taking into account the location, the activity and participant competence.

Participants should be encouraged to be involved, especially those carrying out research fieldwork to develop useful fieldwork management skills.

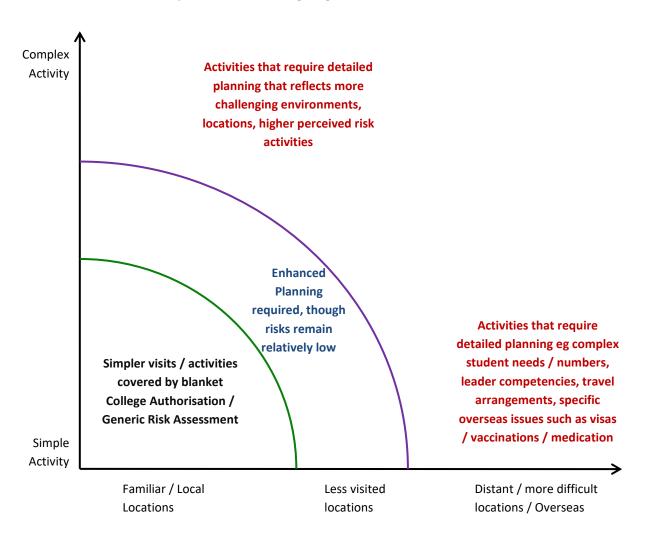
For most fieldwork, template documents which can be 'tweaked' to make them specific should, unless there are major changes to the format or level of risk, be acceptable.

Several template Risk Assessments are available on the <u>Health and Safety Website</u>.

Breaking fieldwork down into the following steps is recommended:



As a general rule the more difficult the location and complex the activity, the more planning and detailed risk assessment will be required. The following diagram summarises this:



Step 1: University / College / School Policies & Procedures

The section outlines what should be considered when planning fieldwork. It is envisaged that, in most cases, once the initial format of teaching / research fieldwork has been agreed, and as long as the format or associated risks do not change significantly, the fieldwork will have overarching authorisation from the Dean of College through their relevant Heads of School. A possible checklist is:

AUTHORISATION:	Is Dean of College / Head of School authorisation needed or does the fieldwork have over-arching authorisation?
ETHICAL CONSIDERATION:	Is Ethical Approval required due to the activities that are to be carried out? For example, potential to disturb protected species or involve vertebrates?
COSTS:	Have costs of specific equipment and training, especially that related to ensure the health and safety of participants been identified and included in funding proposals?
POLICIES / PROCEDURES:	Are there specific University / College / School Policies and Procedures which apply eg <i>Minibus Safety Policy, Overseas</i> <i>Travel Policy, Diving Safety Policy</i> ?
INSURANCE:	If carrying out unusual activities, will the general University Insurance cover be sufficient? Do participants need to arrange their own insurance for 'free time' activities?
SANCTIONS:	If travelling overseas are there Sanction exclusions ie countries the UK, EU or the US have Sanctions against which could make the provision of support difficult and which could inadvertently impact on the University?

Step 2: Legislative / Environmental / Cultural Considerations

Always check if specific legislative / environmental / cultural requirements apply, or if authorisations from Regulatory Authorities or landowners are needed for the area being visited or the activity. For instance:

LEGISLATIVE & AUTHORISATIONS:	Do you need permission, eg if crossing or sampling on private land is the owner's approval needed? There may be similar restrictions on land managed by public bodies, eg Natural Resources Wales. Are permits needed to collect samples? Is vehicular access required on restricted roads?
ENVIRONMENT/LOCATION:	Is the fieldwork site located in an area protected by legislation such as a Site of Special Scientific Interest or are the species to be studied protected? Specific Authorities (may change dependent on the location/species), may need to be contacted to check planned activities are permitted.
CULTURAL:	Are there religious / cultural issues or local customs requiring a specific standard of dress or behaviour?

Step 3: Where are you going and how (incl. getting around on site)

The nature of the fieldwork site and existing knowledge, especially if working unsupervised, will direct the level of pre-trip research needed. This could involve a pre-trip visit, which although useful, is often not practicable or necessary if the site is low risk. Other methods are talk to colleagues or review documents and Websites eg Topographic Maps, Tide Times, Travel Guides.

In most cases sites can be split into two types, 'easy' and 'difficult'. 'Easy' sites often require no heightened fitness level or special equipment to get to and where help will be available. 'Difficult' sites often need some degree of fitness to get to, or problems could arise if participants are unprepared or forget something. Help may also not be readily available; a long way from amenities or a mobile phone reception black spot making it hard to ring for help.

Getting to site and moving around once there often poses the greatest risk. If possible, use public transport, or arrange travel with a recommended provider eg coaches, 4 x 4 plus driver. If participants are driving, refer to the *Driver and Vehicle Safety Policy* or, if driving minibuses the *Minibus Safety Policy*, and if travelling overseas check the *Overseas Travel Policy* as specific requirements apply. In addition, consider travel time extras such as holiday traffic, road works and rest breaks; especially if needing to be somewhere at a set time.

Finally, clearly instruct participants in what to expect. Details of what to wear and take, site conditions, pick up / drop off point, date, times, costs, specific needs eg overseas.

INCLUSIVITY/ACCESS:

Inclusive for all (physical and mental) wellbeing? If not are adjustments possible? Is the site remote? Is fitness needed? Is it easy to get help or something if forgotten?

WELFARE:

Are toilets, food/drink, washing/changing facilities at or near the site? If not are pack lunches, drinks, antibacterial wipes to clean or breaks en-route needed? Are there specific needs eg vaccinations if overseas? GENERAL: Are costs involved? Is there personal safety / health issues or local customs or cultural practices to be considered?

TRAVELLING:

Consider travel time and extras. Is there on-site parking? Is the drop-off / pick-up point close to site? Do specific requirements apply eg MIDAS, restrictions if overseas? Are there costs?

ACCOMMODATION:

Use accredited providers eg AA, YHA. **NOTE: Use of private accommodation such as Airbnb is discouraged.** Remember standards vary eg overseas. On arrival, check facilities clean / safe.

WEATHER:

Can issues arise if it is very wet, windy, cold or hot (check conditions pre-trip right through to post-trip to account for overruns)? Is sun block, foil blankets etc needed?

ENVIRONMENTAL:

Are checks needed before and during the trip eg tide times, river levels, daylight hours? Do flora or fauna pose a risk eg mosquitos, ticks? Is there a risk of personal / environmental contamination?

Step 4: Who is going

Always pre-assess participant numbers, competencies and vulnerabilities. For example, age, physical and mental capabilities, knowledge (1st, 2nd, 3rd, MSc, PhD), previous experience of the fieldwork site / activity and reference to Fieldwork Participant Forms (see Appendix 1) to identify individual needs.

This should be carried out in plenty of time pre-trip so arrangements can be made to ensure teaching / learning / research outcomes and participant health and safety. It will also give you time to inform participants what they are responsible for so they can plan, eg walking boots, vaccinations.

Participants must be fully aware of what to expect. For example, the site is remote or physically demanding; with participants encouraged to speak to staff if they have concerns about taking part or feel they need support. In the past, this has included staff taking epi-pen training because of someone with severe allergies, or agreeing with a landowner to drive across their fields to get closer to the site.

SUPERVISION:

Ratios must consider participant competence and be sufficient to ensure the teaching / learning / research outcomes and the health and safety of all participants. Account for break out work etc - it could increase the supervision needed.

What is the participants' experience of the location being visited and activity being carried out? This will affect the level of supervision and training needed.

COMPETENCE:

TRAINING, INSTRUCTION, INFORMATION:

Identify what participants require before and during the trip eg site awareness, how to take samples. Consider the different needs such as Fieldwork Supervisors, general participants or unsupervised fieldworkers.

Provide pre-trip training, instruction and information in a timely manner, so they can ask for help / advice if needed.

Keep training & briefing records; both pre-trip and once on-site.

HEALTH & WELL-BEING:

Check Fieldwork Participant Forms. Encourage participants to tell you about concerns (physical and mental) so support can be arranged. Consider what else eg vaccinations.

PHYSICAL DEMANDS:

Be clear eg 30 minute up-hill walk, 2 hour trek on rough terrain, the need to carry ruck-sacks / equipment, no on-site welfare facilities

UNSUPERVISED:

Unsupervised fieldworkers must be competent and physically able to carry out the fieldwork. Review their risk assessment. Agree contact times. Check suitable emergency arrangements are in place.

PARTICIPANT TASKS:

Provide concise instructions eg kit to wear, behaviour, need to take refreshments, costs, remembering personal medication, 'free time' restrictions, personal insurance, arranging vaccinations.

Step 5: What does the fieldwork involve

The following highlights common issues that may need to be considered¹:

	Tick if applicable	\checkmark
AUTHORISATIONS / RESTRICTIONS:	• Double check if authorisations / restrictions are in place eg protected species, visiting Sites of Special Scientific Interest	
CUSTOMS:	Are there local customs or practices	
EQUIPMENT:	 Is specific equipment needed to ensure teaching / research and health and safety standards are met? Does this need to be hired 	
	Is equipment use restricted to experienced or trained people only	
	• Does equipment have to be suitable for the environment eg waterproof	
	Do you need spares or a set quantity for fieldwork participants	
	Are containers needed to bring samples back	
	• Is specific maintenance, inspections, calibration or statutory examinations eg LOLER required? Keep records of any inspections, maintenance etc	
	Are overhead obstructions, including electrical cables a concern	
	Is power needed eg batteries, generator, spare fuel	
PERSONAL EQUIPMENT:	• Do participants have to bring certain kit eg waterproofs, walking boots	
	• Is PPE needed eg gloves (provide in different sizes), antibacterial wipes	
	If kit is critical is a formal check needed before departure	
CONTAMINATION:	• Is there a risk of personal contamination eg from soil, water, sewage	
	Do participants need vaccinations eg tetanus, Hepatitis A	
WORKING NEAR WATER:	• Who will check the nature of the water course pre-trip and monitor for changes eg swollen rivers following heavy rain	
	Is safety equipment needed eg a throw-line, life jackets	
WORKING ON	• Can the activity be carried out in another way to avoid working on water	
WATER:	• If operating a small craft the requirements of the Marine and Coastguard Agency must be complied with. Contact H&S for further advice	

¹ It is important you check any activities to be carried out during fieldwork will meet teaching, learning and research outcomes.

Tick if applicable \checkmark

MANUAL	Will the equipment / samples be heavy
HANDLING:	How will you get equipment / samples to and from the site
	Are there hidden loads eg participants carry rucksacks with personal kit in
	Will there be more weight to carry on the way back ie samples
COLLECTING SAMPLES:	• Are there everyday risks eg sharp edges, insect bites, stings, brambles
	Are there higher risks eg venomous snakes, poisonous plants
	• Are you allowed to collect samples from the area you are working in
	• Do authorisations / restrictions apply eg limited number of samples
	What equipment do you need to collect /contain the samples
	• Do samples need to be stored in a certain way to ensure their integrity
	Are risks introduced as part of storage eg chemicals such as formaldehyde
TRAINING:	Is training / refresher training needed to carry out the fieldwork
	Is specific training needed before the trip
	Is additional training needed during the trip
	If so, who will provide the training
	How will you document the training has been given
THIRD PARTY SUPPLIERS:	 Have you checked Public Liability Insurance, Accreditations, Risk Assessments of 3rd Parties providing a service involving unusual / high risks
	• Is it clear who will supervise the activities? Is this confirmed with 3 rd Party
	Have you checked other specific requirements eg footwear, equipment
	 Will the 3rd Party provide specific items eg equipment or is it the participant's responsibility
FREE TIME:	Will there be free time
	• If so, is it clear what this involves eg no supervision, restricted activities, expected standard of behaviour
	Have you reminded participants they must arrange personal insurance if planning high risk or unusual activities during free time

Step 6: What happens if it goes wrong

First Aid

Always assess what on-site emergency support is available so extra mechanisms can be put in place if needed. Consider the nature and location of the fieldwork, if the trip is supervised / unsupervised, participant needs, how you will get help; taking into account difficulties such as remoteness of site, mobile phone black spots and specific site / activity risks eg poisonous insect bites.

Support could include taking a First Aider(s) and First Aid Box if visiting a remote site where help is unavailable and radios if visiting a mobile phone black spot. If there is on-site support, taking people with First Aid Awareness training and a small first aid kit should be adequate. In some rare cases, you may need to arrange on-site support such as a Local Guide.

It is important emergency contacts; home and site based are taken on each trip, with the contact details for someone attending the trip left back at 'base' eg Bangor. Sometimes, call back times may need to be set with escalation procedures put in place if contact is not made as agreed. This is especially important if the fieldworker is unsupervised.

For **supervised group fieldwork** a Trip Registration Form (see Appendix 2) should be completed with a copy taken on the trip and a copy handed to the 'Home Contact' eg College Office or Security Lodge (if returning out of hours). The Form also acts as a Register to check everyone is back for the trip home.

In addition, when developing emergency procedures consider:

- Arranging full First Aider and / or First Aid Awareness / Emergency training (if required).
- Making arrangements if specific health needs are identified eg Epi Pen Training, tetanus.
- Checking people take their mobile phone (charged, in-credit).
- Arranging other means to communicate:
 - Radios if visiting a mobile phone black spot.
 - <u>Emergency SMS</u> to text the emergency services if speaking is not possible. 999/112 a text may still send even if there is poor/no mobile phone signal. Download <u>'what3words'</u> app to establish a specific location.
- Thinking what else could be of use. For example, sun block, thermal foil blankets, insect repellent, anti-bacterial wipes, non-drowsy anti-histamines.
- Identifying a 'Local Contact' to provide on-site support.
- In case of an accident, obtaining 'next of kin' details.
- University Accident and Incident Reporting Procedures.
- After care support (e.g. Student Services) in the event something does go wrong.

The Paperwork

Once all the above has been considered, the fieldwork planned and the risks, controls, supervision / training and emergency requirements identified, put it down on paper (risk assessment). The amount of detail should reflect the level of risk and the likelihood of things going wrong if controls are not in place.

As part of this process it is essential the risk assessment is communicated to all relevant persons; this includes those going on the trip and 'Home Contacts' who need to be aware.

Communication

The importance of giving participants relevant fieldwork and health and safety information in good time cannot be over emphasised. This includes updates and clear instruction if they have to make their own arrangements. However, this does not mean handing out numerous documents. Information can be passed on by email, on Blackboard or as a pre-trip briefing with relevant links provided.

A pre-trip briefing could include:

- Trip location, date and times.
- Transport arrangements including pick up / drop off points and times.
- Associated costs, eg entry fees, transport.
- Pre-trip and on-site training requirements.
- Supervision arrangements and expected standards of behaviour and dress.
- Specific site details, eg there is 2 hour walk on a steep track to the beach, a 15 minute walk from the drop off point, some scrambling over rocks, no on-site toilets.
- Environmental issues, eg weather, tide times.
- Welfare arrangements, eg required clothing, food, drink, a reminder to take medication.
- Emergency arrangements eg First Aid, emergency procedures, on-site contacts details and 'Home Contacts' eg College Office, Main Arts Security Lodge.
- Call back arrangements (if required).
- University Accident and Incident Reporting procedures.

Reviewing Procedures

From time to time to review what is being done and confirm systems are working. The purpose is to identify if enough is being done to safeguard those involved. In some cases it may even be possible to simplify things by eliminating unnecessary bureaucracy – not losing sight that participant health, safety and well-being is paramount.

A simple approach is to choose a small number of field activities; with attention given to trips where incidents took place or those undertaken by inexperienced participants / Academic Supervisors / Fieldwork Leaders or involving higher risk activities or new research. Talk to participants to see if they felt the trip was well organised or if they have any suggestions, also check documented procedures to see if ethical approvals, authorisations etc. were acquired and that all risks were identified and controlled.

As part of this process include emergency and escalation procedures. If ever implemented did they work?

Finally, if procedures, risk assessments etc are changed following a review, do remember to communicate them to all relevant persons with old versions removed from use.

The USHA Guidance on Health and Safety in Fieldwork has been used to develop this Handbook

Appendix 1: Participant Form



Fieldwork Participant Form¹

To ensure your health and safety during fieldwork you must complete, sign **and return** this Form to your College / School contact. A copy will then be held securely with information only shared with relevant Fieldwork Leader(s).

Name:		
Date of Birth:	Student / Staff ID Number:	
School:	Course:	
Term Time Contact Details:	Term Time Address:	
Land-line Number:		
Mobile Phone:		
Email:		
Emergency Contact 1: (Name, Number & Relationship eg Parent)	Emergency Contact 2: (Name, Number & Relationship eg Parent)	
Have you an up to date Tetanus Vaccination: (up to date Tetanus may be required for some fieldwork) Please detail any health / medical conditions or allergies you feel we should be aware of to ensure your health, safety and		
well-being whilst participating in fieldwork. For example diab		

I confirm the above information is correct and that I will inform the relevant person of any changes if required.

Name (Print): Signature: Date:

 $^1\,{\rm All}$ data will be held in accordance with the University's Data Protection Act Policy

Appendix 2: Trip Registration Form



Estimated Departure & Return Time:

Trip Title:

Trip Date:

Trip Registration Form

This Form must be completed (list of participants can be supplied in another format and attached to this front cover) before a Trip. A copy should be passed to the 'Home Contact' or Security Staff and a copy held securely by the Fieldwork Leader / Team.

Emergency Contact Number 01248 382795

Names of All Participants:

	1
Trip Organiser's Name:	
	2
Telephone:	
	3
Email:	
Home Contact & No. if applicable:	4
	5
Destination:	3.
	6
Contact Name & No. if applicable:	
	7
Provisional Itinerary:	8
	9
	10
	10
Transport Arrangements:	11.
Outside Hire Vehicle	
Own Vehicle	12
Emergency Procedures:	13
	14
Local Contact & No. if applicable:	45
	15
Pre-Trip Planning / Briefing:	16.
Have participants been briefed on the following:	
Transport and Drivers	17
Materials / Equipment required	
Itinerary	18
Welfare eg food, drink, clothing, rest facilities	
Conditions at destination eg muddy, rocky	19
Weather Forecast	
First Aid / Emergency Procedures (112 / 999)	Continue overleaf