

## AU General Risk Assessment

<b>Brief Description of Activity:</b>				<b>Assessor/s:</b>	<b>Date:</b>	
<b>LABORATORY TECHNICIAN DUTIES</b> The University campus contains several laboratories and therefore laboratory technicians are a necessity.						
<b>Hazard:</b>	<b>Persons at risk:</b>	<b>Risk factor:</b>			<b>Control measures required:</b>	<b>Residual Risk:</b>
<i>List what could cause harm from this activity, use appendix A to assist in identifying hazards</i>	<i>List who might be harmed eg staff, students, visitors</i>	<i>For each hazard, decide level of risk as if you were to do the activity without controls, see appendix B</i>			<i>For each hazard. List the measures you will be taking to minimise the risk identified, e.g. appointing competent persons, training received, planning and try-outs, use of personal protective equipment</i>	<i>For each hazard now decide the residual risk after the control measures are in place</i>
		Severity	Likelihood	Risk		
Hot liquids or surfaces	Staff, Students	Moderate	Unlikely	Medium	Ensure that adequate caution is taken when clearing away substances and equipment. Ensure when clearing away articles such as hot beakers etc care is taken when handling, with protective gloves/clothing being worn.	Low
Pressure systems	Staff, Students	Moderate	Very Unlikely	Low	Pressure vessels such as autoclaves must only be used by competent members of staff and always in strict accordance with manufacturers guidelines. A competent person must inspect pressure vessels on a regular basis. Particular attention should be paid to signs of damage to the vessel or seal deterioration.  A safety data sheet must be available for all compressed gas products. Compressed gas cylinders must only be used in accordance with the information contained in the safety data sheet. Only competent laboratory staff must handle gas cylinders. Cylinder regulators should be inspected annually by a competent engineer.	Very Low
Electricity	Staff, Students	Severe	Very Unlikely	Low	Ensure that all electrical equipment is tested annually to ensure electrical safety. Ensure the implementation of adequate reporting procedures with regard to potential electrical hazards i.e. faulty wiring. Members of staff should regularly check cables, plugs, sockets etc visually for any signs of any defects and report any problems promptly. Arrangements should be made to ensure that equipment is repaired, or disposed of as necessary.	Very Low

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Slips/trips	Staff, Students	Slight	Unlikely	Low	<p>Ensure that any member of staff without the relevant competencies does not interfere with, or attempt to make repairs to electrical equipment.                      Where practical electrical equipment should be low voltage (110v or battery operated). Bench power supplies must be protected with residual current devices (RCD). RCD's must be tested on a regular basis.                      Do not use any electrical equipment close to a sink.                      Handle beakers of liquids with great care. Do not overfill.                      Clear up any spillage immediately.</p> <p>Ensure walkways in classrooms and preparation rooms are kept clear from obstructions.                      Ensure that all materials and equipment are stored away safely.</p>	Low
Gas	Staff, Students	Very Severe	Very Unlikely	Medium	<p>Gas appliances must be inspected annually by a CORGI registered engineer.                      Laboratory gas supplies must be provided with cut-off valves at easily accessible places so that the supply can be isolated in the event of an emergency.                      Gas supplies must be isolated at the end of each lesson so that unauthorised people cannot turn them on.</p>	Very Low
Manual Handling	Staff, Students	Slight	Unlikely	Low	<p>Ensure that equipment, substances, glassware etc. are accessed and moved by someone who is trained in manual handling techniques.                      Ensure that heavy or bulky items are stored in easily accessible places. Also ensure items to be stored are split into smaller loads for easier access to loads. If heavy or bulky items need to be accessed from height, ensure that the correct equipment is used. Ensure that mechanical devices are used to transport equipment wherever possible- i.e. trolleys, sack trucks etc.</p>	Low
Radioactive Sources	Staff, Students	Very Severe	Very Unlikely	Medium	<p>Only sealed radioactive sources may be purchased and used. Approval must be obtained prior to the purchase of any radioactive source.                      Each university should appoint a Radiation Protection Supervisor (RPS) who should ensure that all appropriate procedures regarding storage and use of radioactive sources are in place and complied with.                      More detailed advice can be sought from a Radiation Protection Advisor.                      Storage facilities must be appropriate to the sources being stored, all sources must be kept locked and clearly labelled.                      More specific guidance on production, storage, use and disposal of radioactive sources must be consulted before any work; experiments or demonstrations are undertaken.</p>	Low

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Living organisms	Staff, Students	Moderate	Very Unlikely	Low	<p>A specific risk assessment must be undertaken in line with the COSHH Regulations where any living organism presents a hazard to health. Good personal hygiene must be followed before, during and after handling living organisms.</p> <p>Various animals are suitable for keeping and studying, providing that they are looked after properly. Consult with more detailed guidance to check which animals are suitable and the precautions that should be adopted.</p>	Very Low
Cuts from broken glassware	Staff, Students	Slight	Unlikely	Very Low	<p>Ensure that broken glassware is cleaned up immediately using the appropriate tools. Broken glassware should be placed in a suitable (impermeable) marked container. Broken glassware should be wrapped in newspaper and disposed of. Hand protection should be used when handling broken glass.</p> <p>All glass vessels should be checked for cracks and damage prior to use. Never allow damaged glassware to be used.</p> <p>Use glassware only for the purpose in which it was designed. When cleaning out glassware, inspect carefully beforehand.</p>	Low
Chemically hazardous substances	Staff, Students	Very Severe	Very Unlikely	Medium	<p>Ensure that only minimum quantities of substances are stored on-site and minimum quantity provided for the lesson.</p> <p>Ensure that all chemicals are stored appropriately i.e. separating of acids, flammables, oxidising agents etc. Flammable substances must be stored separately in a specifically designed storage area. The storage area must be fire resistant, be well ventilated and contain no source of ignition. Sources of ignition must be removed prior to the use of flammable substances.</p> <p>Ensure that all chemicals are handled, stored prepared and disposed of in the manner prescribed by the safety data sheets, or CLEAPS HAZCARDS. Substances must not be stored in the laboratory. They must be stored in locked cupboards in the preparation room. Preparation rooms must be locked when unattended by members of staff.</p> <p>Ensure that the appropriate PPE is available and used when handling substances.</p>	Low
Signed		Date		Date for review of risk assessment:		

**Appendix A**

<b>Hazard list – Use this table to help you identify hazards, you may think of others not on this list, use these to complete the risk assessment form</b>					
<b>Situational hazards</b>	<b>Tick</b>	<b>Physical / chemical hazards</b>	<b>Tick</b>	<b>Health hazards</b>	<b>Tick</b>
Assault by person		Contact with cold liquid / vapour		Disease causative agent	
Attacked by animal		Contact with cold surface		Infection	
Breathing compressed gas		Contact with hot liquid / vapour		Lack of food / water	
Cold environment		Contact with hot surface		Lack of oxygen	
Crush by load		Electric shock		Physical fatigue	
Drowning		Explosive blast		Repetitive action	
Entanglement in moving machinery		Explosive release of stored pressure		Static body posture	
High atmospheric pressure		Fire		Stress	
Hot environment		Hazardous substance		Venom poisoning	
Intimidation		Ionising radiation			
Manual handling		Laser light		<b>Environmental hazards</b>	
Object falling, moving or flying		Lightning strike		Litter	
Obstruction / exposed feature		Noise		Nuisance noise / vibration	
Sharp object / material		Non-ionising radiation		Physical damage	
Shot by firearm		Stroboscopic light		Waste substance released into air	
Slippery surface		Vibration		Waste substance released into soil / water	
Trap in moving machinery					
Trip hazard		<b>Managerial / organisational hazards</b>			
Vehicle impact / collision		Management factors			
Working at height					

**Appendix B**

<b>Risk matrix – use this to determine risk for each hazard i.e. ‘how bad and how likely’</b>	<b>Likelihood of Harm</b>				
	<b>Remote</b>	<b>Very unlikely</b>	<b>Unlikely</b>	<b>Possible</b>	<b>Likely</b>
<b>Severity of Harm</b>					
<b>Negligible</b> e.g. small bruise	Very low	Very low	Very low	Low	Low
<b>Slight</b> e.g. small cut, deep bruise	Very low	Very low	Low	Low	Medium
<b>Moderate</b> e.g. deep cut, torn muscle	Very low	Low	Medium	Medium	High
<b>Severe</b> e.g. fracture, loss of consciousness	Low	Medium	High	High	Extremely high
<b>Very Severe</b> e.g. death, permanent disability	Low	Medium	High	Extremely high	Extremely high