

UNIVERSITY OF WESTERN SYDNEY

LABORATORY RISK ASSESSMENT FORM

To complete this form refer to LRA Guidance Notes & UWS Hazard Identification, Risk Assessment and Control Procedures
(www.uws.edu.au/about/adminorg/corpserv/ohr/occupationalhealthandsafetyandwelfare/uwsohspolproc/ohsindex)

PROJECT/EXPERIMENTAL DATA

Staff/Researcher/Student: Dr Omar Mubin

Supervisor/s (name and qual): Mauricio Novoa

College/School: SCEM

Unit No./Course No.: 300773

Location (Campus, Room No.): Kingswood, ZG 33

Project Title: Honours Project Commencement

Briefly outline the procedure for this project/experiment:

Industrial Design Honours Students will be expected to use the studio lab space to accomplish hands on work on their projects. This could include model making, cutting, cardboard usage, use of the 3d printer, soldering, Arduino prototyping. It will essentially be a need based process. Different supervisors and experts will also be involved.

LEGAL OBLIGATIONS

The NSW OHS Act 2000 and OHS Regulation 2001 (Chapter 2) requires identification of all foreseeable hazards in the workplace, assessment of the risks that these hazards pose to health and safety and the elimination or control of these risks.

SUMMARY OF RISK ASSESSMENT

Physical Hazards -	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Electrical Hazards -	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Chemical Hazards -	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Biological Hazards -	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Radiation Hazards -	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Outdoor/Farm Hazards -	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Field Work Hazards -	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

If yes to any of the above complete the appropriate risk assessment attached.

If work involves 'physical activity' (e.g. exercise and sports assessment) of staff/students complete "pre-screening questionnaire" prior to commencement.

DISSEMINATION OF RISK ASSESSMENT

It is imperative that copies of this form be distributed to relevant personnel, such as technical staff involved in the project, laboratory supervisors and casual staff for undergraduate units.

Has a copy of this form been disseminated to all relevant personnel? Yes No

DECLARATION

We the undersigned declare that this Laboratory Risk Assessment is a true record of the Risk Assessment undertaken. We agree to monitor the effectiveness of control measures and review this Risk Assessment in line with the requirements of the OHS Regulation 2001.

Student/Staff Researcher: OMAR MUBIN

Date: 18/02/13

Supervisor/s:

Date:

Signature:

Date:

Review Date⁴:

1 of 13

Head of School/ Academic Supervisor/Manager:

Date:

RISK ASSESSMENT FOR FIELDWORK¹¹ HAZARDS

Is the fieldwork classified as LOCAL¹² fieldwork? Yes No

If 'Yes' proceed to Risk Assessment Table for Fieldwork Hazards and see UWS [Fieldwork Safety Guidelines](#) Section 3.3 and Attachment 1. (<http://www.uws.edu.au/about/adminorg/corpserv/ohr/occupationalhealthsafetyandwelfare/uwsohspolproc/ohsindex>)

Is the fieldwork classified as REMOTE¹³ fieldwork? Yes No

If 'Yes' continue risk assessment below:

Outline the Fieldwork Activity:

Name of designated 'Fieldwork Supervisor' leading the fieldtrip:

Name of designated contact person within UWS and/or elsewhere not involved in the fieldtrip:

Contact details of nearest emergency services and/or hospital:

Have all staff/students/volunteers completed a "Fieldwork Health & Safety Acknowledgement Form" Yes No

Is there a reliable means of communication if in a remote area? Yes No

- (eg mobile/sat. phone, radios, GPS for boats & land vehicles)

Are all staff & students trained in the various operations and emergency procedures of the fieldtrip? Yes No

Is there a portable First Aid Kit (containing appropriate supplies) available for the fieldtrip? Yes No

If 'No' each Dept./School should configure their own specific First Aid Kit taking into account potential hazards/injuries as detailed in RA

Name of trained First Aid Officer (Senior First Aid level) attending the field trip:

Are there appropriate SOPs for working in sun, heat, wet, cold, and/or windy conditions on the fieldtrip? Yes No

Is there special safety equipment required for the fieldtrip? (see [Fieldwork Safety Guidelines](#) section 5.2.1) Yes No

If 'Yes' please specify:

Are there any vehicles including 4WDs being used on the trip? Yes No

If 'Yes' see [Fieldwork Safety Guidelines](#) section 4.5.

State type of vehicle and name of licensed and appropriately trained driver(s):

Does the fieldtrip involve the use of boats? Yes No

If 'Yes' boating fieldtrips must comply with Maritime legislation see [NSW Safe Boating Handbook](#) Yes No

Name of licensed and trained personnel:

List specific hazards that may be present in the fieldwork in table following and continue risk assessment procedure.

Laboratory Risk Assessment Guidance Notes

1. The **Risk Rating (R¹ and R²)** is determined using the Risk Assessment Table below.

For each hazard, *using the Risk Assessment Table*, record the outcomes or adverse consequences (**AC**) – i.e. how severely could it harm someone if they are exposed to that hazard? Consider the worst-case scenario. In the column ‘**AC**’, record A, B, C or D as follows:

A	fatality, etc
B	long-term illness, etc
C	medical attention, etc
D	first aid needed, etc

Then, *again using the Risk Assessment Table*, judge the probability (**P**) or likelihood of each consequence occurring. In the column ‘**P**’, record I, II, III, or IV as follows:

I	very likely
II	likely
III	unlikely
IV	rare

Using the Risk Assessment table, determine the Risk Rating for each hazard, and record the priority for action (T, M, or L) in the column ‘**R**’. The risk rating number, from 1 – 6, indicates the level of priority i.e. it shows how important it is to do something about the hazard:

T	Top priority	1 & 2
M	Medium priority	3 & 4
L	Low priority	5 & 6

All hazards must be addressed using the hierarchy of control measures in the following *order of priority* - elimination, substitution, isolation, engineering, administrative, personal protective equipment (PPE) – (refer to the [UWS “Hazard Identification, Risk Assessment and Control Procedure”](#)). The best approach will be to use a combination of any or all of the control measures.

Top priority hazards must be isolated and fixed immediately. It is extremely important to do something about this hazard as soon as possible. Procedures using such hazards should not be allowed to continue.

The priority rating for medium and low priority hazards should be reduced to the lowest possible number (risk) before proceeding. Laboratory environments are inherently potentially dangerous and there will always be a level of risk associated with the work undertaken. You will need to make a judgement as to whether the level of risk is acceptable given a defined set of circumstances.

R¹ refers to the Risk Rating **before** risk control measures have been determined.

2. **R²** refers to the Risk Rating **after** control measures have been determined and implemented.

3. All personnel involved in the procedure must be satisfactorily **trained** in the required **control measures**. Such measures include engineering controls (e.g. containment, fume cupboards, isolation), administrative procedures (e.g. written safe operating procedures, job rotation to restrict hours worked in hazardous situations, appropriate staff training), use of personal protective equipment (e.g. gloves, safety glasses, respirator, laboratory coat, safety boots).
4. The **Review Date**. Regular monitoring and review is required to assess the effectiveness of the hazard assessment and control measures. A risk assessment *must* be undertaken for all new procedures, when there are substantial changes to the workplace or procedure, when new equipment is used, when new or relevant information regarding health and safety becomes available from an authoritative source, after an incident, accident or workplace illness, when there is evidence that the assessment is no longer valid, or 5 years has elapsed.
5. Please specify if a **specific procedure for spill, leak or emergency** is required, and state its nature. For example, some chemicals required specific first aid or spill procedures.
6. For procedures covered by this risk assessment that have been given approval by the **UWS Biosafety and Radiation Safety Committee (BRSC)**, attach a copy of the application to this form. Continue to complete the risk assessment for any hazards, procedures or other details not covered by the BRSC application.
7. **Biological Hazards** include microbiological hazards, pathogenic organisms, genetically modified organisms (GMOs), human tissue/fluid, animal tissue/fluid, and carcinogenic/mutagenic/teratogenic/allergenic and zoonotic hazards.
8. All work involving the use of ionising radiation sources must have approval from the **UWS Biosafety and Radiation Safety Committee (BRSC)** before commencement. If the procedure covered by this risk assessment has approval from the BRSC, specify the application number and date of approval as indicated. For work with all other sources of radiation, continue to complete the risk assessment.
9. **Radiation Hazards** include X-rays, gamma rays, alpha particles, beta particles, neutrons, protons, ultraviolet radiation, high intensity visible light sources, lasers, infrared radiation, radio-frequency radiation, acoustic and ultrasonic radiation (AS2243.4-1998 and AS 2243.5-2004).
10. **Outdoor/farm hazards** refer to all such work conducted on UWS campuses. Outdoor work conducted off campus should be considered in the **Fieldwork** section.
11. **Fieldwork** is any work, study or research authorised by the University and undertaken by staff, postgraduate or undergraduate students or authorised volunteers at sites other than the campuses of the University.
12. **Local Fieldwork** involves visits to shops, factories, buildings, galleries, hospitals etc, within the Sydney metropolitan area.
13. **Remote Fieldwork** is fieldwork in areas where it would be difficult to summon help and /or emergency assistance eg inland waterways/estuaries, woodlands, ocean, geological/mine sites, and off-road areas.

RISK ASSESSMENT TABLE

How dangerous is the hazard you've found? For each risk associated with a hazard think about:

1 – How severe are the adverse consequences or outcomes (AC) if exposed?

2 – How likely or probable (P) is it to occur?

PROBABILITY (or likelihood)

		I Very likely Could happen any time	II Likely Could happen sometime	III Unlikely Could happen but very rarely	IV Rare Could happen but probably never will
A C O N D E V Q E U R E S N C E S	A Fatality or permanent disability, or property or environmental damage over \$50,000	1	1	2	3
	B Long term illness or serious injury, or property or environmental damage between \$5,000 and \$50,000	1	2	3	4
	C Medical attention and several days off work, or property or environmental damage between \$500 and \$5,000	2	3	4	5
	D First aid needed, or property or environmental damage up to \$500	3	4	5	6

The numbers below show you how important it is to do something, and the action to take:

1 & 2 Top Priority (T) Eliminate or isolate the hazard immediately. Must fix the cause(s) immediately.

3 & 4 Medium Priority (M) Must reduce the risk to the lowest possible level using hierarchy of control measures. Regularly monitor the cause(s) and hazard to ensure level of risk remains acceptable.

5 & 6 Low Priority (L) Reduce the risk further if possible and manage by routine procedures. Regularly monitor the cause(s) and hazard to ensure level of risk remains acceptable.

Signature:

Date:

Review Date⁴: