General Risk Assessment

Management Unit:	Engineering	**Location:** (Site/ Building/ Room)	Rankine level 2 206
Assessment Date:	07/10/2013	**Review Date:**	07/10/2013
Assessors Name:	Manousos Valyrakis	**Job Title:**	Lecturer
Task / Activity:			

What are the hazards? (See list of sample hazards)	What are the risks?	Who might be harmed? (eg Staff, students, visitors)	What control measures are required to eliminate or reduce the risks?	Risk Evaluation			Risk Rating
				Consequence (1 – 3)	Likelihood (1 – 3)	Overall risk (C x L)	Low, Medium or High
Inexperienced and untrained personnel	Carrying out tasks without care due to insufficient knowledge or training	Staff and students	Read and sign code of practice for this lab. Receive training in safe use of equipment and methods.	2	2	4	Medium
Heavy sediment bins	Lifting very heavy weights causing injury and spillage as well as tripping hazard	Staff and students	Store appropriately in storage or wheelie bins. Anything above 25kg should only be moved by one person using a wheelie bin or sack barrow	2	1	2	low
Water in storage tanks in excess of 20000 litres	Drowning, flooding, accidents involving electrical equipment could cause electric shocks	Staff and students	There are large drain point in case of flooding. Do not work alone, take great care when working with the flumes.	3	1	3	Medium
Low headroom at flumes 1&2 walkways	Head injuries, trips and falls	Staff and students	Warning tape on overhead obstructions and warning signs on stairs on approach. Wear safety helmets. Good housekeeping, all areas to be kept clean and tidy.	2	3	6	high
Laser equipment	Eye injury	Staff and students	Anyone wishing to use these pieces of equipment will require specific permission from Dr. Valyrakis and will have to comply with specific health and safety requirements for use of lasers	3	2	6	high
Chemicals	Chemicals may be harmful, carcinogenic, corrosive, flammable, irritant	Staff and students	Carry out COSHH risk assessment, train all personnel in safe handling and use. Use PPE where necessary	2	1	2	low

Biological substances eg algae	Biological agents may be harmful to human health by ingestion, inhalation or skin contact	Staff and students	Carry out Biological assessment for each biological agent. Only trained staff to have access to biological agents Use PPE where necessary	1	1	1	low
Electrical	Electric shock or burns		Carry out PAT testing, only qualified electricians allowed to carry out repairs. Keep equipment away from water	2	2	4	Medium
Tripping	Injury from falling		Good housekeeping, do not leave anything lying around. Clean up spills immediately. Use wet floor signs if necessary	2	1	2	low
Solvents	Harmful to human health by inhalation and skin contact. Risk of fire/explosion		Minimise quantities stored in the lab and store in flammable solvent cabinet. Always wear gloves and lab coat	2	2	4	Medium

GUIDANCE ON COMPLETION OF RISK ASSESSMENT

1. EXAMPLE HAZARDS THAT MAY BE APPLICABLE TO THE JOB or WORK ACTIVITY			
Working at Height	Noise	Hand tools	Vibration
Falling objects	Extreme Heat / cold	Confined spaces	Repetitive hand/ arm movement
Slippery/ uneven/ worn floors	Radiation	Poor housekeeping / cleaning	Machine operation
Obstructions/ projections	Lighting	Vehicle movement	Electro Magnet
Manual handling	Compressed air	Fire / explosion	Pressurised systems
Mechanical Lifting	Substances / materials	Electricity	**Other (*specify on assessment)***

2. RISK MATRIX		Potential consequence of harm		
		1 – Minor Injury (e.g. hazard can cause illness, injury or equipment damage but the results would not be expected to be serious)	**2 – Significant Injury** (e.g. hazard can result in serious injury and/or illness, over 3 day absence)	**3 – Major Injury** (e.g. hazard capable of causing death or serious and life threatening injuries)
Likelihood of harm	**1 – Unlikely** (injury rare, though possible)	**1 – Low**	**2 – Low**	**3 – Medium**
	2 – Possible (injury could occur occasionally)	**2 – Low**	**4 – Medium**	**6 – High**
	3 – Probable (injury likely to occur, can be expected)	**3 – Medium**	**6 – High**	**9 – Extreme**

3. RISK EVALUATION

This is calculated by multiplying the likelihood against the consequence e.g. taking a likelihood of 1, which is classified as Unlikely and multiplying this against a Potential Consequence of 2, which is classified as Significant Injury, would give you and overall Risk Rating of 2, which would result in an overall evaluation as a low risk.

1 to 2 = Low risk
Low risks are largely acceptable, monitor periodically to determine situation changes which may affect the risk, or after significant changes

3 to 4 = Medium risk
Medium risks should only be tolerated for the short-term and then only whilst further control measures to mitigate the risk are being planned and introduced, within a defined time period.

6 = High risk
High risks activities should cease immediately until further control measures to mitigate the risk are introduced. The continued effectiveness of control measures must be monitored periodically.

9 = Extreme Risk
Work should not be started or continued until the risk has been mitigated. Immediate action is required to reduce exposure. A detailed mitigation plan must be developed, implemented and monitored by senior management to reduce the risk before work is allowed to commence