

Risk Assessment Details ID: RA_PESS_38986 Rev No: 1 Draft ID: 0			
User's School/ Department:	Physical Education & Sports Science	Project Title:	Risk Assesment for Human Bioenergetics Lab (HBL)
Workplace:	National Institute of Education	Other workplace:	-
Location:	NIE5-02-01	Conducted By:	Muhammad Farihin Fawwaz(farihin.talib),
Approved By:	Koh Koon Teck (koonteck.koh@nie.edu.sg)	Submitted By/Submitted Date:	Muhammad Farihin Fawwaz/08-Nov-18
Approved/Rejected Date:	08-Nov-18	Next Review Date:	07-Nov-21
Status:	Approved	Comments:	Approved

1. Hazard Identification					2. Risk Evaluation				3. Risk Control				
1a.	1b.	1c.	1d.	1e.	2a.	2b.	2c.	2d.	3a.	3b.	3c.	3d.	3e.
No.	Work Activity	Hazard	Sub Hazard	Possible Accident/III Health & Person-at-Risk	Existing Risk Control	*S	*L	*R	Additional Risk Control	*S	*L	*R	Follow Up by & date
1	Handling of ramp treadmill operation (motorized)	Physical	Trip, slip and fall on same level	Others: Bodily injuries	1) Safety harness for lab users. 2) Briefing lab users on safety precautions. 3) Emergency stop button. 4) Adequate familiarization and training. 5) Attire: > Sports attire > Covered shoes only > Shoe laces tightened > No loose clothing 6) Clear sign indication for stopping exercise. 7) Observing lab users are advised not to stand around perimeter of moving belt. 8) Caution & reminder to all lab users by faculty/lab staff. 9) Lab users will be supervised until competency is agreed by faculty/lab staff.	2	1	2	NA				
2	Handling of cycle ergometer	Mechanical	Caught in or between	Others: Foot or toe injuries, entrapment of body parts.	1) Briefing lab users on safety precautions. 2) Adequate familiarization and training. 3) Attire : > Sports attire. > Covered shoes only. > Shoe laces tightened. > No loose clothing. 4) Secure feet in pedal and strap firmly. 5) Adjusting saddle height according to person's physique. 6) No standing in front of bike. 7) Caution & reminder to all lab users by faculty/lab staff.	1	1	1	NA				

3	Handling of metabolic carts	Electrical	Others:Cables, gas tubes, calibration cylinders	Others:Leakage, tripping, foot or toe injuries	1) Adequate training for handling. 2) Keep cables fastened/covered. 3) Covered shoes only. 4) Caution & reminder to all lab users by faculty/lab staff.	1	1	1	NA				
4	Handling of gas calibration	Biological	Release to Environment	Others:Leakage	1) Close supervision of lab users to shut off gas cylinders after calibration. 2) Cylinders must kept upright and in well ventilated place. 3) No heat source. 4) Caution & reminder to all lab users by faculty/ lab staff.	2	1	2	NA				
5	Handling of oxygen consumption measurement equipment	Biological	Contact with or infection by bacteria, virus or fungal spores	Others:Transmission of disease	1) Soaking and thorough disinfecting of face mask, breathing tubes and mouth piece. 2) Caution & reminder to all lab users by faculty/lab staff.	1	1	1	NA				
6	Conducting of physiological stress test and performing blood work	Biological	Contact with or infection by bacteria, virus or fungal spores	Others:Needle stick injury, bleeding, transmission of infectious disease	Blood Work 1) Aseptic precautions (hygiene alcohol swabs). 2) Lab coats and covered shoes at all time. 3) Use disposable gloves at all times. 4) Strict adherence and training of techniques for finger pricking blood sampling. 5) Single use disposable lancet device. 6) Sharps to be properly dispose sharp container (Yellow Box). 7) Pressure with gauze/cotton wool after sampling to stop bleeding. 8) Only trained phlebotomist to perform venipuncture. 9) Caution & reminder to all lab users by faculty/lab staff.	2	1	2	NA				
		Physical	Trip, slip and fall on same level	Others:Fatigue,giddiness,muscle soreness,injuries include ankle & knee sprain,fainting	Physiological Stress 1) Provide clear instructions beforehand for exercise preparedness (sleep, hydration, diet etc). 2) Check for wellness before exercise. 3) Warm up and stretching after exercise. 4) Trained first-aider present 5) Caution & reminder to all users by faculty/lab staff.	2	1	2	NA				

7	Handling of cardio treadmill	Physical	Trip, slip and fall on same level	Others:Bodily injuries	1) Briefing lab users on safety precautions. 2) Adequate familiarization and training. 3) Supervision Attire : > Sports attire > Covered shoes only > Shoe laces tightened > No loose clothing 4) Secure all lead cables. 5) Observing lab users are advised not to stand around perimeter of moving belt. 6) Caution & reminder to all lab users by faculty/lab staff. 7) Lab users will be supervised until competency is agreed by faculty/lab staff.	2	1	2	NA				
8	Handling of skin fold calipers	Physical	Others:Clipping of skin	Others:Bruising	1) Training under supervision. 2) Use plastic calipers before using metal calipers. 3) Lab users are briefed on proper techniques. 4) Caution & reminder to all lab users by faculty/lab staff.	1	1	1	NA				
9	Handling of hospital beds	Biological	Contact with or infection by bacteria, virus or fungal spores	Others:Infections, exchange of biological fluids	1) Hygiene measures and aseptic precautions. 2) Regular cleaning with disinfectant. 3) Lab coat and covered shoes at all times. 4) Use disposable gloves at all times. 5) Strict adhere and training of techniques for blood sampling. 6) Lab users are supervised at all times. 7) Caution & reminder to all lab users by faculty/lab staff.	1	1	1	NA				
10	Handling of bio-hazardous material	Biological	Contact with or infection by bacteria, virus or fungal spores	Others:Needle stick injury	1) Prepare bio-hazard container. 2) Ensure proper disposal of bio-hazard materials. 3) Regular inspection to dispose bio-hazard materials when it is fully filled. 4) Get authorized disposal bio-hazard vendor (SembCorp). 5) Caution & reminder to all lab users by faculty/lab staff.	2	1	2	NA				