Student Project Laboratory Work
Declaration of Compliance With Safety Procedures

To the student:
This form must be completed and signed by your supervisor before you can commence work in a laboratory. Keep it with your laboratory notebook as it must be shown to the laboratory technician before you commence work and may be requested by other staff.

The form contains information, or means to obtain it, to ensure you can start your work safely. As your work progresses you will need to reassess the safety implications. Any change in the nature of your equipment or procedures will require such assessment. You will be expected to consult relevant risk and COSHH assessments and obtain the agreement of your supervisor before any new work can commence. Keep a log of all assessments made or consulted in your laboratory note book.

To the supervisor:
please fill in the relevant details of this form and sign it after your first meeting with your project student. The form must be shown by the student to the laboratory technician before any work can commence. It informs the laboratory staff what initial training and information the student requires to work safely and also indicates that the student has your authority to do the work.

As the project progresses there will be changes necessary to apparatus and procedures. Students should record these in their log books and you should sign the relevant page to indicate you have discussed the new proposals and have agreed they are safe and adequate. Please ensure any assessments the student requires are available.

Student and supervisor should each keep a copy.
Please print in all places except where a signature is required.

Student: NISHAT TARANNUM Supervisor: ANDREW NORMAN

Project title: HEART RATE MONITORING SYSTEM

I confirm that I have met with the student named above regarding the safe use of laboratory equipment and chemicals. The student

- requires to see the following COSHH and Risk Assessments:

  N/A

  (continue overleaf if required)
  Forms and guidance for assessments requiring to be made can be obtained from the Departmental Safety Officer. Assessments must be signed by the supervisor.
- is aware of the hazards associated with prolonged use of a computer
- has a copy of the Departmental Safety Manual
- requires instruction for the following apparatus or equipment:

  N/A

Signature of supervisor: Andrew Norman Date: 12/10/18

Signature of student: Nishat Date: 12/10/18

To the lab technician:
Please initial below to confirm that you have seen this form and that you have spoken with the student regarding safety aspects of their specific work and the lab in general. The student should retain the form.

Technicians initials:_____ Date:_____ (V1.3 06/11/07)

UNIVERSITY OF LEICESTER

Department of Engineering
Risk Assessment / Method Statement

- Complete this form for each new potentially hazardous activity to be undertaken in the Department.
- It will be the authoritative means of instructing all workers using the process how to do so safely. It does not replace verbal instructions given the inexperienced by the experienced but verbal instructions will be based on its content.
- Use any means available to obtain reliable information and assistance in order to complete the form including Supplier data sheets (MSDS), authoritative texts, information from other users, and the Department and University's safety websites.
- This form must be reviewed every 2 - 5 years to ensure its validity.

1. Author, Approver, and Activity

Written by:	NISHAT TARANNUM	Signature:		Date: 12/10/18
Approved by:	A. NORMAN	Signature		Date: 12/10/18
Location:		review (2 - 5 years)		Date:
Activity:	THIRD YEAR PROJECT			

Copies of this assessment must be issued to all people involved in the work and these should sign the master copy

2. Common Hazards (X all that apply)

Machinery / Tools ☐	COSHH ☒	Falling Objects ☐	Striking object ☐	Chemical ☐	Electrical ☑
Manual Handling ☐	Fire ☐	Toxic fumes ☐	Lasers ☐	Explosion ☐	Flooding ☐
Material Ejection ☐	Noise ☐	Traffic ☐	Fall from height ☐	Lifting / Craning ☐	Abrasion ☐
Ionising Radiation ☐	Slip / Trip ☐	Vibration ☐			
Other - Specify ☒	COMPUTER SCREEN				

3. Assessing Risk from Hazards

Using the hazards identified in 2 and your knowledge of the activity, give each hazard a Risk Rating using the chart on the last page of this document. Use your judgement to arrive at a meaningful rating.

Significant hazards	No. persons at risk	Probability (1 - 5)	Severity (1 - 5)	Risk Rating
• REPETITIVE STRAIN INJURY	1	3	2	6
• EYE STRAIN	1	3	2	6

4. Substances / Materials to be used

- Include substances produced as a by product and identify the Globally Harmonised System **H**ealth hazard numbers and **P**recautiony statements (**H** or **P** with a three digit number following it) from the container or the MSDS (Manufacturers Safety Data Sheet). and attach any MSDS.
- Please indicate if there are safer alternatives and the reason they have not been used.

Substance / Chemical / Material	H / P statement codes or combinations

5. Required Protection of Personnel

Using sections 3 and 4 indicate what Personal Protective Equipment (PPE) is required or advisable. Be as specific as possible and select PPE that is appropriate - it is easy to over prescribe making the workers have to remove the PPE in order to perform the task. Use the guide in the PPE section of the Department of Engineering's Blackboard site for assistance. Required PPE must be available and in good condition. There must be adequate supplies of disposable PPE. Who is responsible for it?

Personal Protective Equipment (PPE)	Required / advisory	Standard to meet

6. Tools and Equipment Required for Process

Indicate what equipment is required for the process - e.g. fume cupboard, size of gas bottle and type of regulator, etc. Essential tools and equipment must be available with supplies of consumables. Who is responsible for maintaining them?

Tool / equipment	Essential?
◦ COMPUTER	YES

7. Disposal of Waste

List waste products from the process and how they will be disposed of safely.
Include any chemicals used in the process that remain as mixtures or on their own and any formed by reaction in the process such as exhaust gas or liquids and solids.
Ensure there is a suitable means for each to be handled and disposed of.

Waste Product	Means of disposal

8. Training

Indicate what training is required to perform this work and, if the work is performed by a group, who requires the training. State if the only training is to be aware of the contents of this assessment and be observed by a skilled worker until the trainee is competent.

Training required	Where obtained

9. Sequence of Work / Method Statement

- Based on the results of sections 3 - 7 write a method of performing the task and where the tools and personal protective clothing (PPE) are required. You should stipulate anything that is absolutely necessary, anything that is advisable and anything that should be avoided or not done - e.g. the order of doing things, what must be done, what must be worn, particular things to guard against, etc. Allow as much flexibility as possible if a process allows it.
- While all components of the operation must be mentioned allowance for personal preference should be made where it can be.
- Use a separate sheet if required and indicate below where one has been used

- WHEN USING THE COMPUTER, TAKE REGULAR BREAKS TO AVOID RSI AND EYE STRAIN

10. Emergency Procedures

- Consider what can go wrong and include Emergency Procedures to be taken if they occur. Take into account accidental spillages, being caught in machinery, and any medical attention that is required, etc.
- State what should be made available in anticipation of an emergency - e.g. a spill kit or cold water supply for burns
- Use a separate sheet if required and indicate below where one has been used

Table 1 - Risk Rating Analysis Matrix					
	Probability (Likelihood)				
Severity (Hazard Consequence)	**1 Very Unlikely** (Freak event – No known history)	**2 Unlikely** (Unlikely sequence of events)	**3 Possible** (Foreseeable under unusual circumstances)	**4 Likely** (Easily foreseeable- Odd incident may have occurred)	**5 Very Likely** (Common occurrence – Aware of incidents)
1 Negligible (No visible injury – No pain)	**Trivial** 1	**Trivial** 2	**Acceptable** 3	**Acceptable** 4	**Acceptable** 5
2 Slight (Minor cuts, bruises – No long term effects)	**Trivial** 2	**Acceptable** 4	**Acceptable** 6	**Moderate** 8	**Moderate** 10
3 Moderate (Heavy bruising, deep flesh wound. Lost time accident)	**Acceptable** 3	**Acceptable** 6	**Moderate** 9	**Substantial** 12	**Substantial** 15
4 Severe (Lost time accidents and major injuries)	**Acceptable** 4	**Moderate** 8	**Substantial** 12	**Substantial** 16	**Intolerable** 20
5 Very Severe (Long term disability or death)	**Acceptable** 5	**Moderate** 10	**Substantial** 15	**Intolerable** 20	**Intolerable** 25

Table 2 - Interpretation of the **Actions** and **Timescales** required relative to the **Risk Rating** identified using the above Analysis Matrix.	
Risk Rating	**Action and Timescale**
Trivial 1 to 2	No action is required to deal with trivial risks and no documentary records need be kept (insignificant risk). Please note undergraduates are still required to fill out this risk assessment even if an insignificant risk is determined.
Acceptable 3 to 6	No further preventative action is necessary but consideration should be given to cost-effective solutions or improvements that impose minimal or no additional cost burden. Monitoring is required to ensure that the controls are maintained.
Moderate 8 to 10	Efforts should be made to reduce the risk but the costs of prevention should be carefully measured and limited. Risk reduction measures should normally be implemented within three to six months, depending on the number of people exposed to the hazard.
Substantial 12 to 16	Work should not be started until the risk has been reduced. Considerable resources may have to be allocated to reduce the risk. Where the risk involves work in progress, the problem should be remedied as quickly as possible and certainly within one to three months.
Intolerable 20 - 25	Work should not be started or continued until the risk level has been reduced. While the control measures should be cost-effective, the legal duty to reduce the risk is absolute. This means that if it is not possible to reduce the risk, even with unlimited resources, then the work must not be started or must remain prohibited.