Health and Safety...

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What is health and safety?

Why?
- It’s good for you
- It’s good for others
- Survive to complete your PhD!

How to work safely
- Planning
- Training
- Risk Assessment
Links to information on School Website

- [http://www.gla.ac.uk/schools/engineering/](http://www.gla.ac.uk/schools/engineering/)

Then select ‘Current Students and Staff’
[http://www.gla.ac.uk/schools/engineering/studentstaff/](http://www.gla.ac.uk/schools/engineering/studentstaff/)

Then select ‘Safety’
[http://www.gla.ac.uk/schools/engineering/studentstaff/safety/](http://www.gla.ac.uk/schools/engineering/studentstaff/safety/)

Goes to page with manuals, codes of practice, risk assessment forms etc.
Risk Assessments

- Common sense, or not?
- Potential Hazard x Chances of Hazard Occurring
- …but what’s the scale?

Web based forms - link from Safety website:

http://web.eng.gla.ac.uk/tools/risk/

Separate forms for General, Chemical and Bio’ activities
Five Steps to Risk Assessment

- Look for the hazards
- Decide who might be harmed and how
- Evaluate the risks and decide whether existing precautions are adequate or whether more should be done
- Record your findings
- Review your assessment and revise it if necessary
- Online forms guide you through this and make you think about what can be done to reduce the risk
Lots of different activities in Engineering

- Senior researchers/staff will often know where to look

- School of Engineering Safety Manual has a list of contacts

- Contact me or Doug Irons

- Be slightly wary of a fellow PhD student’s advice – sometimes it’s very good, sometimes they’re crossing their fingers!
On-line sources of information

- http://www.hse.gov.uk/risk/
- http://www.hse.gov.uk/electricity/
First aid

- ‘Cuts and bruises’ that don’t involve hazardous materials
  - School has First Aiders in each building
  - First aid boxes distributed throughout the School

- More serious incidents
  - Get First Aider
  - A & E at Western Infirmary (Dumbarton Road)

- Very serious incidents
  Emergency services  ext 4444

Let Doug Irons know – procedure and links to accident report forms are in the Safety Handbook and on the SEPS website

If you’re interested in training as a First Aider, contact Doug Irons
Main risks

- Lifting
- Electrical
- Chemical
- Biological
- Lasers
- Mechanical
- Cryogenics
- Cuts, burns, trips, falls
- Things falling over…
If you’re unsure, ask

Don’t do things if you’re unhappy about doing them

Think about all the ways things could go wrong
Electrical
Mechanical

If you’re lucky - I’m squeamish!
Lasers/Bright lights

For very bright sources, keep your hands/body out of the way too.
Chemical
In general people with a biological background work safely because otherwise their cultures die, however this only comes after a lot of training/experience.
Cryogenics
Lifting

Always lift safely.

If it’s too heavy, ask for help!
Gases

Hole in a concrete floor that was made by a gas storage cylinder that ruptured its bottom and jetted upward through the ceiling and into the room above. The gas discharge also blew out the walls of the lab where the tank was stored
Microfabrication

- Safety video on [www.jwnc.gla.ac.uk](http://www.jwnc.gla.ac.uk) and follow the internal login tab
Accidents will happen
Think, take your time and ask, understand what you’re doing, and if you’re not sure if it’s safe to do, don’t do it.

...but don’t get paranoid and enjoy what you do.