



Finalist Briefing

- ▶ Future Opportunities and Careers (Siobhan Qadir)
- ▶ Final year project module (Steve Boyd)
- ▶ Computing Resources (Michal Kreps)
- ▶ Health and Safety for Projects (Kate Thompson)



Siobhan Qadir

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Careers, Employability and
Skills

Career Support for you



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**UNIVERSITY
OF WARWICK**

Skills you are developing on your degree

- **Problem-solving** and a pragmatic and analytical approach
- **Critical thinking**, reasoning skills and the ability to construct a logical argument
- Research and **data analysis**
- Numeracy skills, helpful for finding solutions to scientific problems, **mathematical modelling and interpreting** and presenting graphs
- Practical skills, such as using technical equipment
- Ability to **communicate complex ideas**, use technical language correctly, discuss ideas and consider different viewpoints
- **Teamworking** and **project management skills**
- Effective **time management and organisational skills**
- Use of specialist software packages and programming.

How do you stand out?

- Simply by being you
- By knowing yourself and articulating your skills and experiences
- Have you considered what is important to you?
- What do you need from a career?
- There are so many choices out there, what do you know?
- 'A survey by Universum found that 58% of leading employers value work experience among graduates more than grades or the name of their university'

Jobs directly related to your degree

Academic researcher

Acoustic consultant

Astronomer

Clinical scientist, medical physics

Geophysicist

Higher education lecturer

Meteorologist

Nanotechnologist

Radiation protection practitioner

Research scientist (physical sciences)

Sound engineer

Technical author

Jobs where your degree skills help:

Actuary

Applications developer

Clinical technologist

Data analyst

Diagnostic radiographer

Nuclear engineer

Operational researcher

Patent attorney

Prosthetist/orthotist

Software engineer

Telecommunications researcher

Careers Supports:

<u>International Students</u>	<u>Criminal Convictions</u>
<u>Race and Ethnicity</u>	<u>Gender</u>
<u>Neuro Diverse</u>	<u>LGBTQUIA+</u>
<u>Care leavers</u>	<u>Social Mobility</u>
<u>Mental Health</u>	<u>Dyslexia</u>
<u>Disabilities</u>	<u>Religion</u>
<u>Carers</u>	
<u>Mature students</u>	

Access myAdvantage



myAdvantage is your portal to browse graduate roles and work experience, and book events, workshops and one-to-one careers advice appointments.

Browse myAdvantage



CareerSet: support for your applications

Applying for jobs or work experience?

CareerSet is an online platform that provides personalised, AI-powered feedback on your application materials. The platform helps you improve and tailor your existing CV and cover letter, and review your LinkedIn profile.

Find out more



Get interview ready with Graduates First



An online resource where
you can practice video interviews
and free psychometric tests.

Login with your University of Warwick
email address



Access Student Circus



Student Circus is a **job search platform for international students** that brings you filtered visa job listings, internships, and placement opportunities. Student Circus saves you time in your job search by showing you job opportunities with employers who hire and value international students.

- **If you want to stay and work in the UK**, find Skilled Worker Visa opportunities for you in UK-based organisations on the platform.
- **If you're looking to return home and work in a high-impact organisation**, the platform handpicks top employers who value your global outlook and international experience.
- **If you're looking to plan an international career**, look at Student Circus's home country career guides, which exist for 16 countries outside of the UK

Experimenting with general work experience

Why not try:

Forage (theforage.com)

Springpod (springpod.com) "

Bright Network

GradSims:([CareerConnect/
TARGETjobs](http://CareerConnect/TARGETjobs) login)

Shortlist.Me Workplace
Simulations, 30+ simulations
across different industries

Don't forget the skills
developed via part-time work.

WARWICK VOLUNTEERS

What is Warwick Volunteers?

Warwick Volunteers supports students at the University of Warwick to volunteer in the communities around campus.

Benefits for you?

Developing Soft Skills:

You can communication, leadership, project management skills and more

Boost Employability:

Your volunteering hours count towards the Warwick Award.

Meet New People:

Meet other students from different courses and get to know the local community!

**Find your
volunteering
opportunity here**



Thrive



Bookings are now open for Thrive – our award-winning personal development programme, designed to support you in building your confidence, resilience and agency.

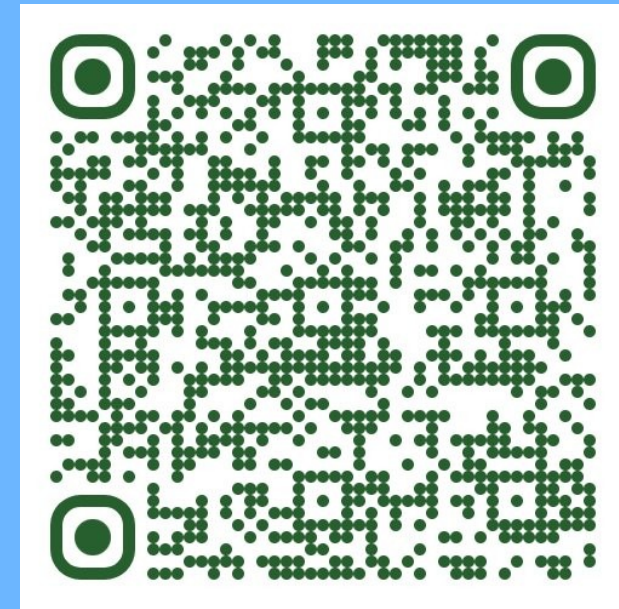
Thrive is delivered in person, on campus and is open to all students.

Find out more and apply:
warwick.ac.uk/thrive



Warwick Award

- A free university award programme to help you develop core skills during your time at Warwick.
- Develop the 12 Core Skills that employers see as crucial in the workplace
- Recognises skills that students gain at Warwick through academic modules, societies, volunteering, work experience and much more
- Completed throughout your entire time at Warwick; designed to be achievable across your degree programme
- Officially recognised by the University; you'll receive a certificate to share with employers on completion to help you stand out and recognition on your HEAR
- Got a question? Drop-in sessions running weekly throughout term 1. **Find out more at warwick.ac.uk/warwickaward or email us at skills@warwick.ac.uk**



Scan the QR code to sign up/sign in





Final Year Projects

Steve Boyd / Claire Hurley



Welcome Back!

- ▶ Final year research projects start this week!
- ▶ Student Support
 - ▶ Prof Steve Boyd / Dr Claire Hurley (for projects)
 - ▶ Personal Tutor
 - ▶ Senior Tutor (Dr Duffy)
 - ▶ Warwick Wellbeing
 - ▶ SSLC
 - ▶ Student's Union



Final year modules

- ▶ In the final year, many of the modules catch up to the present day and you start looking at fields on the edge of current research
- ▶ e.g. PX445 Frontiers in PP looks at 3 active areas of investigation in particle physics
- ▶ e.g. PX3A8 Physics of Life and Medicine investigates the interdisciplinarity of physics and medicine
- ▶ Many modules will pose questions we haven't been able to answer fully yet
- ▶ This may well be the case with the final year project module.



The Final Year Project

- ▶ This is the largest module this year:
 - ▶ **PX3A0/3A1 : 35 CATS / PX402/452 : 45 CATS**
- ▶ Projects are in areas of your supervisor's current research
 - ▶ Supervisors have designed them to take the allocated time and expertise into account
 - ▶ Work *with* the supervisors – they are there to help and guide.
- ▶ **BUT:**
- ▶ You are on the cutting edge – sometimes research throws up unexpected results and problems.
 - ▶ The project may have to adapt to circumstances
- ▶ That's just research!



Where are we?

PX402/452 – Final year of the Mphys degree

- ▶ Allocation was done before the summer break
- ▶ Projects start today. Please see your supervisor on or before Thursday this week (if you haven't already done so).

PX3A0/3A1 – Final year of the BSc degree

- ▶ At least 24 people have not submitted any project choice, either as part of a pair or alone. You should do this as soon as possible!!!!!!!!!!!!
- ▶ There is a Teams call at 12:00 on Thursday for those working alone to see if we can match up a few more project teams.
- ▶ Allocation should be public by Tuesday October 13th, although I hope to have it done this week(end).
- ▶ Those who have not submitted their choices by Thursday will be randomly allocated a project from those left over after allocation to everyone else is done.
- ▶ See your supervisor on Thursday October 15th next week.



Key Items and Dates

Item	Credit	Date/Deadline	Feedback
Risk Assessment Submission	1 CAT	<u>PX402/52</u> : 5 pm Thursday 15th October <u>PX3A0/A1</u> : 5 pm Thursday 22nd October	From H&S team Late penalties apply Discuss with supervisor
Monitoring Interviews	0 CAT	PX402/52 : (Week 4) 26-30th October PX3A0/A1 : (Week 5) 2nd-6th November	Short timetabled interview
Interim Report Briefing	0 Cat	Week 7 Term 1	Online
AI Moodle Quiz	1 Cat	Week 7 – Week 9 Term 1	Online
Term 1 Work done; Supervisor assessed	3 CATs	Mon W1T2 (11/1/2027) Midday	By Thurs W2T2
Interim Report; Supervisor assessed	3 CATs	Mon W1T2 (11/1/2027) Midday	By Mon W4T2



Key Items and Dates

Item	Credit	Date/Deadline	Feedback
Term 2 Briefing	0 CATs	W3T2 (????)	
Final Report; independently assessed	10/12 CATs	Thurs W10T2 (19/3/2026) midday	Online marker feedback
Final Supervisor Assessment of Work Done	3 CATs (T2 Work Done) 4 CATS (Overall achievement)	Assessed at end of Term 2 with submission of final report	Week of April 5th 2027
PX3A0/3A1 : Project Viva	10 CATs	Provisionally W3T3 (May 10 th 2027)	Final Report Assessors. Feedback directly after viva.
PX402/452 : Project Poster+Viva	12+6 CATs	Provisionally W8T3 (June 14th 2027)	Final Report Assessors. Feedback directly after viva.



Assessment

- ▶ You will be assessed on scientific understanding, work done and communication
- ▶ You work as a pair, but are assessed individually – you will both succeed if you work as a team.
- ▶ Manage your workload : Projects should take up **2 working days a week** (11am – 5pm on Monday and Thursday).
- ▶ Meet all deadlines (which will be shown on the Moodle site)
- ▶ University late penalty is absolute 5% per working day. It will be applied!



Documentation

- ▶ Every researcher has a log book!
- ▶ This is a day-to-day working record of your work – it contains sketches of apparatus, datasheets, notes of ideas and reading, graphs, risk assessments etc
- ▶ Everything relevant to the project should be in this book.
- ▶ It is your **individual** record. Use a separate shared notebook or filespace or whatever to share results with your partner. Fine to cross-reference other electronic records (e.g. large datafiles, pdfs of papers).
- ▶ You should be able to write your reports using the information in your logbook
- ▶ It's up to you to decide how to document your work



Documentation

- ▶ **Always make regular back-up copies of your key project data and work. Don't be caught out by computer/disk failures. Records in the cloud can be lost too. Distribute backups.**
- ▶ Default log book : **OneNote** – provided and maintained by the University as part of Office365.
- ▶ However, other forms can be used as well by agreement with your supervisor (even, dare I say, old as I am, paper notebooks).
- ▶ Whatever you use, make sure everything is in it for later reference.
- ▶ Your supervisor will want to see your logbook every 2-3 weeks – either bring it to them during regular meetings, or send a link so that they have access to your online notes.



Supervision

- ▶ You and your partner should arrange a **regular, scheduled, weekly progress meeting** with your supervisor. You can have more if you like, but there must be **one per week**.
- ▶ This also puts the meeting in your supervisor's schedule!
- ▶ Meetings can be moved/cancelled by you or your supervisor in negotiation.
- ▶ Your supervisor will inform me if two meetings are missed with no prior explanation.
- ▶ Follow Laboratory and associated Safety instructions with particular care. When in doubt, ask - esp. concerning health & safety.
- ▶ If you don't feel something is safe – ask questions.



Monitoring Interviews

- ▶ Everyone will attend a monitoring interview in Week 4 (MPhys project) or Week 5 (BSc project).
- ▶ Probably quite short (15 mins?). Your interviewer will not be your tutor or supervisor.
- ▶ Not an assessed part of the course
- ▶ The goal is to make sure the work has started, that you are happy with the team, the supervision and to give you a chance to comment on anything about the project so far.
- ▶ This is your opportunity to make sure that the project is working for you!
- ▶ Comments from interview go back to me and Claire.
- ▶ There will be a lighter-touch follow-up in Term 2.



Risk Assessment

- ▶ Your first task is to fill in the risk assessment
- ▶ This is required and is assessed
- ▶ This is *your* task, but your supervisor can and should help
- ▶ Risk assessment submission online (see Moodle site)
 - PX402/452 : 5pm Thursday 15th October
 - PX3A0/3A1 : 5pm Thursday 22rd October
- ▶ A late penalty of 5% per working day will be applied
- ▶ Risk assessments will be reviewed by the Health & Safety Team
- ▶ They may be returned for revision if more info is needed
- ▶ See Health and Safety talk
- ▶ Risk assessments can be downloaded from and submitted to the project Moodle site.



Interim Report

- ▶ Length: 10 pages plus references
- ▶ Introduction of project with main aims, literature review and project background/motivation, with references
- ▶ Summary of achievements in Term 1 (2 pages max)
- ▶ Realistic work plan for Term 2 (1 page max)
- ▶ A LATEX template will be provided.
- ▶ Material from the interim report can be used in the final report – view the interim report has a draft of the introduction for the final report.
- ▶ **There will be a Teams briefing on the interim report in Week 7 of Term 1.**



AI Guidelines

- ▶ AI has quickly become a factor in doing, and reporting, projects.
- ▶ Your supervisor may recommend you use AI in parts of your project. This is up to them.
- ▶ AI can be used to help write your interim/final reports, but under specific rules and guidelines.
- ▶ These guidelines can be found on the Moodle site.
- ▶ In Week 7, we will require you to read them and to pass a short Moodle quiz for 1 CAT. The quiz will be open for two weeks.



It's all going a bit wrong.....

- ▶ Your supervisor is the first point of contact for project issues or perceived problems in the group
- ▶ If you can't go to your supervisor, come to me or Dr Hurley
Steve Boyd, s.b.boyd@warwick.ac.uk, Humanities H1.21
Claire Hurley, C.R.Hurley@warwick.ac.uk, Physics 542
- ▶ If you feel that you can't approach either supervisor or module leaders, please go and talk to your tutor. They will be able to advise what to do, or intercede on your behalf.
- ▶ Claire can also help with Moodle/Tabula questions



Have Fun!

MAKING SCIENCE

INSTRUMENTAL





Computing

Michal Kreps

Notable

WARWICK

Easy access to Jupyter notebooks for project work

▼ Scientific Computing and Resources

Many projects will need access to computing resources different to, or more powerful than, a laptop or workroom PC. There are two options available to project students.

- **Notable:** A web based service available to all students. It uses a Jupyter notebook interface familiar from earlier computing modules and can be accessed via Moodle by clicking the link below. The Python 3 notebook option will provide access to the familiar NumPy and SciPy packages plus many others. The Astronomy notebook also includes astropy and other specialist packages.
- **Scientific Computing Research Technology Platform (SCRTP):** This is the University of Warwick research computing facility. It is available to projects that need more computing power than Notable can provide. You must discuss this with your supervisor before using it, and be aware that using it inappropriately can cause significant disruption to the work of others.

Notable should be the default option for projects that just need "somewhere to run Python code".



Notable - quick access to a Jupyter notebook for Physics projects



Direct access from Moodle



SCRTP survival guide for Physics projects  

This document provides the key information for students to avoid problems when using the Scientific Computing RTP. More detailed information can be found on docs.scrtp.warwick.ac.uk, including:

- [Using computers remotely](#)
- [The Linux command line](#)
- [Accessing and installing software](#)
- [Batch processing](#)



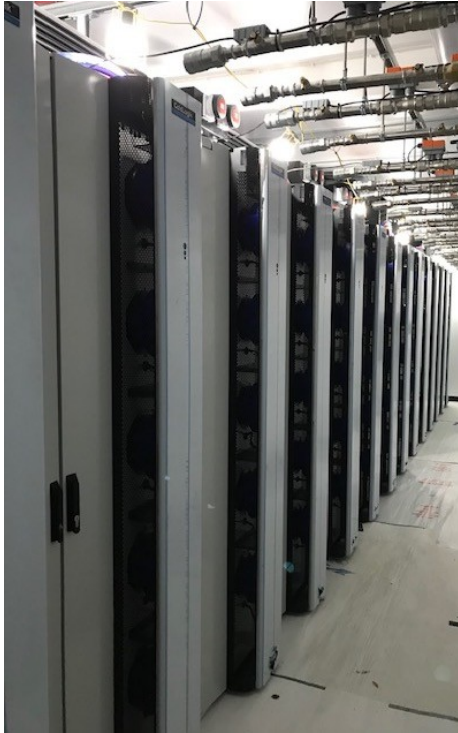
Scientific Computing RTP

An introduction

<https://warwick.ac.uk/scrtp>
<https://docs.scrtp.warwick.ac.uk>

Dr. Michal Kreps
Director, Scientific Computing RTP

Scientific Computing at Warwick



- ▶ Provided by **Scientific Computing Research Technology Platform (SCRTP)**
 - ▶ Linux-based research computing environment
 - ▶ A distributed computing infrastructure (the taskfarm)
 - ▶ A group storage for data
 - ▶ Two large high-performance clusters for parallel computing
 - ▶ Research Software Engineering (RSE) expertise

Think of these facilities as research equipment, just like experimental kit. Do not use them without **explicit** permission from your supervisor. Using them inappropriately can *very easily* disrupt other (important) research within the university!



Getting started

- ▶ Read the “*Survival guide*” PDF
- ▶ Apply for a desktop account
 - warwick.ac.uk/research/rtp/sc/desktop/gettingstarted/
- ▶ Read the acceptable use policy
 - warwick.ac.uk/research/rtp/sc/policies/aup
- ▶ Sign up for the `scrt`p-`linux`-user email list
 - listserv.warwick.ac.uk/mailman/listinfo/scrt-p-linux-user
- ▶ Read the documentation
 - docs.scrt.p.warwick.ac.uk (use your ITS username/password)



Remote access

Access from ITS workrooms or your own PC is available via Remote Desktop Protocol (RDP), via web browser or using ssh (terminal)

Remote desktop hosted by `hammer.scrip.warwick.ac.uk`



- ▶ This is a *shared resource*, there may be dozens of people logged in at any time
- ▶ To be used for editing files, compiling code, plotting simple graphs or submitting computational jobs to the taskfarm *only*
- ▶ You must **NOT** run significant computations of any kind on hammer. This includes calculations within Matlab / Mathematica and Python notebooks
- ▶ Very strict 'three strikes' policy on this



The taskfarm

- ▶ System of batch processing calculations
- ▶ Mostly suitable for serial, low I/O computations (i.e. not millions of files)
 - Generally available (taskfarm) nodes (14 nodes, 48 cores per node)
 - Some research groups have their own dedicated servers, supervisors will tell you
 - If you need to process more data, copy to local disk on node before processing

```
#!/bin/bash
#SBATCH --ntasks=1
#SBATCH --mem=3700
#SBATCH --time=08:00:00

module purge
module load GCC/11.3.0 OpenMPI/4.1.4
module load SciPy-bundle/2022.05 matplotlib/3.5.2

srun python myscript.py
```

Submit job script to the queue, it will run on the next available server



Final Points

- ▶ Read and obey the usage policy!
 - Don't do anything illegal
 - Don't do anything stupid
- ▶ Don't run calculations on desktops/servers without explicit permission
 - Don't assume currently idle machines are fair game!
 - Don't be afraid if calculation in batch system takes hours
- ▶ If in doubt – help is available!
 - First point of call is always your supervisor
 - Read the docs: docs.scrtp.warwick.ac.uk
 - Support pages: warwick.ac.uk/scrtp/user_support/
 - SCRTP drop-ins:
warwick.ac.uk/research/rtp/sc/user_support/research-computing-drop-in/



University of Warwick Physics Department

Final Year Project Health and Safety

Kate Thompson- Health and Safety Adviser

Health and Safety Responsibilities at Warwick

All Students:

- Take reasonable care for themselves or others who might be affected
- Use any equipment, substances or safety devices provided by the University in accordance with any training or instructions which have been provided, and report any defects or problems.
- Tell someone (manager, supervisor, the health and safety team) if you think work is putting anyone's health and safety at serious risk.
- Follow any local instructions or signage, such as notice boards, and wear any personal Protective Equipment (PPE) provided correctly.

The Basics

Health and Safety is everyone's responsibility.

Do not assume any activity is safe, especially when working in research laboratories.

Challenge poor behaviour and practice.

Risk assessments help us identify hazards and control measures to make the University a safer place to work and study.

When you spot a new hazard:



STOP

If you notice a hazard that could potentially injure someone or cause property damage, stop what you are doing. There is no task that could be more important than preventing an injury from occurring. It could make a huge difference to you and your coworker's life.



THINK

Take a moment to observe the hazard and absorb all the information. Ask yourself some questions that will help you make the right decision. Ask yourself:

- Is anyone in immediate danger?
- Is it safe for me to intervene?
- Who should I report this hazard to?



ACT

After you get enough information about the hazard, take the action that would eliminate or prevent injury or property damage. If you realize this is beyond your means, be sure to report it to your supervisor.

Risk Assessments

You need to take responsibility for your actions and work during your final year project.

Three types of [risk assessments](#) used at the University:

Space

Helps identify training that is needed for the space

Equipment

Defines safe operating procedures for equipment

Project
(Activity/Task)

Asks you to think about potential risks and what you will be doing to minimise that

Lab / Space ref no. P1.29		Lab Work - Description of Research							
Space Owner Martin Lees		Furnace room							
Principal Investigators Marin Alexe Geetha Balakrishnan									
Lab Rules  Do not enter without permission or reason to do so  									
Emergency Contact(s) Information									
Name	Contact No.	Name	Contact No.						
Martin Lees	See Quemis								
Marin Alexe	See Quemis								
Principal Hazards  									
University Hazard Categories									
Biological	Chemical	Lasers & Radiation	Mechanical						
	MEDIUM	MEDIUM							
Gas Cylinders Present Yes		Piped-In Gases Yes							
<table border="1"><tr><td>Flammable</td><td>Toxic</td></tr><tr><td>Oxidising</td><td>Inert</td></tr></table>		Flammable	Toxic	Oxidising	Inert	<table border="1"><tr><td colspan="2">Details: Oxygen, Nitrogen Isolation points: Adjacent to P1 (outside);</td></tr></table>		Details: Oxygen, Nitrogen Isolation points: Adjacent to P1 (outside);	
Flammable	Toxic								
Oxidising	Inert								
Details: Oxygen, Nitrogen Isolation points: Adjacent to P1 (outside);									
Unattended equipment / Overnight Reactions Yes		Information for Cleaners							
<table border="1"><tr><td>Further details: See white board next to door</td></tr></table>		Further details: See white board next to door	<table border="1"><tr><td>In an emergency contact Security 024 7652 2222</td><td>Estates Helpdesk 024 765 75100</td></tr></table>		In an emergency contact Security 024 7652 2222	Estates Helpdesk 024 765 75100			
Further details: See white board next to door									
In an emergency contact Security 024 7652 2222	Estates Helpdesk 024 765 75100								

A3 General Lab Notice Board Version 2.0 July 2018

Remember Risk Assessments are required BEFORE activities can go ahead.



Risk Assessments

Depending on your project you will need to complete **ONE** of the following:

1. Student project theory & computing form

- For those who are undertaking **non lab-based activities** such as computational work, data analysis.
- This form includes a DSE (display screen equipment) checklist. The checklist is intended to enable you to self-assess your workstation area and make suitable adjustments to minimize stress and strain on your body.

2. Experimental based student project risk assessment

- For those who are undertaking **lab-based activities**. Including working with non-ionising radiation, hazardous chemicals, ionising radiation (radioactive sources, electron microscopes).
- The first part of the risk assessment includes a DSE checklist as well.

Student project theory & computing form



Student Project – Theory and Computing Based

Title of Project

Date of assessment

Location of work areas

End date of project

Description of project

Assessment carried out by

Additional information for those undertaking work with display screen equipment

As you are undertaking a theory or computing based project you will be working from a computer or other display screen equipment (laptop, tablet). DSE (display screen equipment) training will apply to you as you will be working with DSE equipment continuously for more than 60 minutes a day.

The following checklist is intended to enable you to self-assess your workstation area and make suitable adjustments to minimize stress and strain on your body.

If you have responded "No" to any of the questions, please follow the [workstation guidance](#) and adjust your set up. You can also speak with your supervisor. Alternatively speak with the Health and Safety Officer (Stephanie Brown) who will be able to offer guidance.

No matter how well the workstation is designed or set up, problems can arise if you are working at a computer for long periods as lack of movement can lead to muscular aches and pains. Follow the link [here](#) for some stretch to follow

For more information on computer work follow the link [here](#).

University of Warwick

1. Desk Set-Up

Are all items on your desk necessary, can they be removed to off-desk storage such as filing cabinets, cupboards, and shelves to make more space? Position frequently used items close to hand to avoid having to reach or twist but make sure the keyboard and mouse do not get moved out of position.

Is there enough space on your desk for the flow of work?	Yes or No
Is there adequate leg room (height, width and depth)?	Yes or No

2. Chair

Adjust the chair height so your elbows are roughly the same height as the desk edge. If, after adjusting your chair you have noticeable pressure under your thighs at the front of the chair cushion you probably need a footrest.

Is your chair at a height that puts your elbows at approximately desk height when you are using the keyboard.	Yes or No
Is the seat cushion a suitable length for your upper leg length, so you are able to sit fully upright and back in the seat without your knees hooking the front of the cushion.	Yes or No
If fitted, are the armrests at a suitable supportive height when you are sitting upright?	Yes, No or not applicable (N/A)
Can you get the chair close enough to the desk to type with your elbows vertically under your shoulders?	Yes or No
Is the chair stable and undamaged?	Yes or No

3. Monitor

Adjust the monitor so that the top of the screen is level with your eyes. If your monitor is too low, a screen riser can be used. If you are getting a lot of problems with dry sore eyes you can set it a little lower but be careful not to place it too low as this will affect your head position and can trigger neck pain.

Is the top of the visible area of the monitor at eye height when you are sitting upright?	Yes or No
Is the monitor at a suitable distance from your eyes?	Yes or No

Experimental based student project risk assessment

Experimental based Student Project – Risk Assessment

Title of Project Risk Assessment	<i>Enter the title of your project risk assessment</i>	Date of assessment	<i>Insert</i>
Location of work areas	<i>Insert details of where you will be carrying out your project.</i>	End date of project	<i>Insert</i>
Description of project	<i>Insert a short description of what is involved in carrying out the project.</i>		
Assessment carried out by	<i>Student and Project supervisor name (If you have a project partner, please include their name)</i>		
Additional information	What type of project will you be carrying out? • Experimental. • Experimental including non-ionising radiation (lasers, broadband/UV sources). • Experimental including hazardous chemicals. • Experimental including ionising radiation. E.g., radioactive sources, electron microscopes (scanning microscopes). If you are solely undertaking a desk based/theory project, please refer to the 'Theory Project' form as you do not need to complete this risk assessment.		

University of Warwick Risk Assessment Form

What is a risk assessment?

A risk assessment is the process of identifying what hazards exist or may appear and how they may cause harm and to take steps to minimise harm.

There are 5 steps to a risk assessment:

1. **Identify hazards.**
 - a. a potential source of harm
2. **Decide who might be harmed and how.**
 - a. users, contractors, others in the vicinity, members of the public etc
3. **Assess the risk and evaluate the control measures.**
 - a. Risk is the likelihood of the hazard causing harm.
 - b. Control measures are actions taken to reduce the potential harm.
 - c. likelihood x severity = risk level
 - d. More information on this can be found in the risk matrix at the bottom of the risk assessment.
4. **Record your findings** (in the form of a risk assessment)
5. **Review periodically.**
 - a. Whenever there has been a change to activities e.g. processes, procedures or equipment. When an incident has occurred.

Chemical Risk Assessments (COSHH – Control of Substances Hazardous to Health)

Are you going to be working with any hazardous chemicals or substances as part of your project? You may need to complete an additional chemical risk assessment.

Discuss with your Supervisor what substances you would like to use. Supervisors should already have in place COSHH assessments covering any chemicals actively being used in their laboratory spaces, which could already control the risks of chemical/s you might be using. For example, IPA and Acetone. In these circumstances you do not need to duplicate the COSHH assessment, but please ensure that you read, understand, and follow the control measures.



The below information can be used to help with the identification and classification of hazards involved your in project. The below is not an exhaustive list but it may help you prioritise the main hazards associated with an activity.

Location and Physical Hazards	Continued...
Remote working	Pressure systems: autoclaves (steam steriliser for lab instruments and instruments), gas regulators, air compressors, (A pressure system is one that contains or is likely to contain a relevant fluid over 0.5 bar)
Lighting conditions	Needle sticks
Cryogenic gases – burns, asphyxiation	Uneven surfaces

Recording your risk assessment

[illegible]

Chemicals

Are you going to be working with any hazardous chemicals or substances as part of your project? **You may need to complete an additional chemical risk assessment.**

Discuss with your Supervisor what substance/s you would like to use and why.

Supervisors should already have in place chemical risk assessments covering any chemicals actively being used in their laboratory spaces, which could already control the risks of chemical/s you might be using. For example, IPA and Acetone and gases.

In these circumstances **you do not need to duplicate** the assessment, but please ensure that you read, understand and follow the control measures.

If your project involves substances that have not got a chemical risk assessment, or you are using an existing substance in **new a process/task** you will need to risk assess the chemical.

All chemical samples must be labelled with the chemical name, composition and prepares name.



Hazardous substances contain warning labels which warn of health effects!

Ionising and Non-ionising Radiation

Ionising

You need to receive specific instrument training for equipment that can produce ionising radiation (e.g., electron microscopes) or for a source that will be used.

Once you have completed training to ensure you are competent your name will be added to the list of authorised users.

Complete the registration form available within the experimental project risk assessment. It needs to be signed off by:

1. The person responsible for the instrument

AND

2. By the Radiation Protection Supervisor Jon Duffy (J.A.Duffy@warwick.ac.uk)

Please only request training when you are nearing the time you need to use the equipment! This is to ensure that training is fresh in your mind.

Non-ionising (Class 3B & 4 and UV sources)

All users of class 3B or 4 lasers must undertake appropriate training. You must register as a laser user, complete the online laser safety awareness training and receive local training by the person responsible for the laser to ensure you are competent to use it.

Required training and registration is detailed in the experimental project risk assessment (page 7).

Good Lab Practice & Lone Working Policy

- Follow all H&S signage, training and PPE requirements
- Take regular breaks
- Keep your workspaces clutter free and tidy
- Remember to **label your samples**
- Stop notices will be issued if areas are messy and unsafe and you will not be able to continue with your project until issues are rectified.
- **Lone working** is defined as working where you cannot easily and quickly be heard or seen in the event of an accident. Lone-working in laboratories and workshops should be avoided wherever possible.
- Undergraduates **must never work alone**
- Postgraduates may not work alone unless they have prepared a lone working risk assessment together with their supervisor.



[Link to the Department's Lone Working Policy](#)

[Link to the University Good Lab Practice Guide](#)

What to do now?

Select the appropriate form or risk assessment for your project:

1. Student project theory & computing form **OR**
2. Experimental based student project risk assessment

Additional Training for experimental based student projects involving hazardous chemicals:

- Chemical Assessment and Laboratory Safety Awareness
- Local Exhaust Ventilation (LEV) system user training – for those who will be using fume cupboards or other mechanical ventilation systems e.g. flow cabinet, glove boxes etc

Worth Considering:

- RA, COSHH and SSOW Workshop – Useful for practical lab/workshop projects.



[Link to Training Courses](#)

Useful Links

[Physics Department H&S Webpages](#)

[UoW H&S Services Webpages](#)

The screenshot shows the Warwick Department of Physics website. The header includes the Warwick logo, a search bar, and navigation links. The main content area is titled 'Health and Safety' and features four colored boxes: Hazards (yellow), Risk Assessment (blue), Administration (green), and Emergencies (red). Each box contains brief information and a 'More >' link. Below these boxes is a paragraph about the department's safety policy and a link to the 'Leadership and Management of H&S' document. At the bottom, there is a section for 'Accidents, Incidents and Near Misses' with a link to a 'Report form'.

WARWICK
Department of Physics

Admissions | Current Students | Research | Impact | People | News & Events | Equality, Diversity & Inclusion | Vacancies | Physics A to Z | Contact Us

Health and Safety

COVID-19 Return to Campus | Hazards | Risk Assessment | Administration | Training | First Aid | Mental Health First Aiders

Health and Safety

Hazards	Risk Assessment	Administration	Emergencies
Information and training for specific hazards, Quemis Hazard Grid	Forms and guidance for risk assessments, including travel risk assessment.	Departmental Health and safety committee, policies, rules and procedures.	In case of an emergency contact security on: x22222 on landline or 024765 22222 on mobile. Evacuation procedure Departmental first aiders
More >	More >	More >	

All students and staff are responsible to one another for their personal safety and for the safety of the others. While working in the Department you must be made aware of our Health and Safety policy, rules, procedures and guidance which have been produced for our laboratories, work areas and offices.

The University document on [Leadership and Management of H&S](#) sets out the responsibilities that each person within the organisation has for maintaining the safety of the workplace.

Health and Safety - Departmental Safety Policy

Accidents, Incidents and Near Misses
Fill out the [Report form](#)

The screenshot shows the Warwick Health & Safety Services website. The header includes the Warwick logo, a search bar, and navigation links. The main content area is titled 'Health & Safety Services' and features a large banner for 'Fire Safety Training'. The banner includes the University of Warwick logo, a fire safety icon, and text about a new course replacing previous training packages. Below the banner is a navigation bar with links to various services.

WARWICK
Health & Safety Services

A-Z Health & Safety | Health & Safety Advice | News and Information | Risk Assessment | Safety Alerts & Bulletins | Internal Department Pages

Accidents & Near Misses | Health & Safety Services Contacts | H&S Committees | Staff Wellbeing

Fire Safety Training

This new course replaces the previous: [Fire Safety Awareness](#), [Fire Extinguisher](#) and [Fire Warden Moodle](#) training packages.

UNIVERSITY OF WARWICK

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Useful Department Contacts

- Health and Safety Officers – Lorraine Blackwell (Lorraine.Blackwell@warwick.ac.uk), Neil Porter (Neil.Porter@warwick.ac.uk)
- Health and Safety Adviser – Kate Thompson (Kate.Thompson.1@warwick.ac.uk)
- General Enquires (PhysicsHealthSafety@warwick.ac.uk)
- Radiation Protection Supervisor John Duffy (J.A.Duffy@warwick.ac.uk)
- Chair of Safety Committee Tom Hase (T.P.A.Hase@warwick.ac.uk)

