

Department of Physiology
New Personnel Safety Orientation Checklist Package
Version 2.2 (May 2024)

Trainee:	Sign: _____
Designation: _____ Student / RA / RF / Collaborator / Visitor / Others:	
Trainer:	Sign: _____
P.I.: _____	Sign: _____
Date: _____	

SAFETY POLICY & OBJECTIVES

- Department Safety Policy, Objectives & Programs
- Lab Safety Objectives

- Ultra-low temperature freezer (cryogloves etc.)
- Faulty equipment (reporting, lockout, inclu. common equipment)

COMMON SAFETY LAB PRACTICES

- Lab safety requirements (no food & drinks, tied hair etc.)
- Lab coats & gloves in public areas (building to building etc.)
- Lab coats (laundry)
- Basic Personal Protective Equipment (lab coat, gloves, safety eyewear, closed footwear)
- Safety documents (SOP, RA etc.)
- Housekeeping (lab duty roster, spring cleaning etc.)
- After-hours work (avoid high-risk work, PI notification, risk assessment, communication channels, emergency response)

BIOLOGICAL SAFETY

- Biological safety cabinet (operation, sash level, UV lamp cleaning etc.)
- Common disinfectant (70% ethanol, chlorine, VirKon, preparation etc.)

CHEMICAL SAFETY

- Fume hood (operation, sash level etc.)
- Legal legislations & ORMI (poisons, PFM, EPMA, EP etc.)
- LMMS (inventory, log)
- LMPRS (Purchase)
- GHS Labels

SECURITY AND ACCESS

- Card access hours (x-ref department card access guidelines)
- Card access safety directives
- Contractors/visitors access
- Visitors' log book

- Storage (segregation, sec container, lock etc.)
- Safety Data Sheets

RADIATION/LASER SAFETY

- Not Applicable
- Training by PI/Competent personnel
- License (e.g. N3, R1 user License via LicenseOne)

EQUIPMENT SAFE USAGE & TRANSPORTATION

- Centrifuge safety (safety cups, balancing, emergency lid release etc.)
- Cryogenic tank (cryogloves, face shield, lift, buddy system etc.)

WASTE DISPOSAL MANAGEMENT

- General waste (black bag)

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- Biological waste** (double yellow bags, weekly disposal, liquid waste, green mobile bin)
- Chemical waste** (hazardous waste label, GHS label, quarterly disposal, ChemSafe Trolley)
- Cytotoxic waste** (double purple bags, liquid waste, green mobile bin)
- Empty chemical bottles** (label, storage, disposal)
- Sharps disposal** (sharps bin, broken glass disposal box)
- Labels for waste generated** (chemical identity, GHS labels, Name, PI, Date)

DEPARTMENT COMMON EQUIPMENT

- Online Facilities Booking System
- Equipment in-charge
- Logbook
- Cleaning up
- Autoclave operation (only authorized personnel, timings)
- Training by IC/competent personnel

TRAINING NEEDS

- Hands-on spill management training (mandatory for new staff and students)
- RCULA for animal work (OH number; online & hands-on training etc.)
- Structured Safety Training System (SSTS) (x-ref to Appendix A & B)

MEDICAL SURVEILLANCE

- Occupational Health Program (authorization form; Animal Work Health Questionnaire etc.)
- Tetanus vaccination (animal work; doctor's memo)
- Hepatitis B vaccination (human origin: blood, cell line; doctor's memo)

EMERGENCY RESPONSE (ER)

- Fire ER (response, fire wardens, call points, fire extinguisher, after office hours)
- Spill ER (response, spill responders, spill kits, after office hours)

- Unsafe O₂ level ER (response, gas monitoring panel, O₂ detectors)
- First aid response (first aiders, first aid box, after office hours)
- Emergency contacts
- Emergency evacuation announcement (single stage/2-stage)
- Emergency escape route
- Emergency assembly point (during office hours)
- Emergency shower
- Emergency eyewash
- Emergency air purge button (locations, use)
- Emergency door release button (locations - inclu. Cold Room, use)

ACCIDENTS/INCIDENTS

- AIMS report (within 24hrs)
- Reporting system (LT/LE, PI, Department Safety Chairperson, HOD)

MEETING THE DEPARTMENT

- Admin office, LT/LEs
- Lab members from the same floor
- Faculty safety officer
- Department safety chairmen
- Department safety website
- ORMC portal

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A. Guide to accessing ORMC modules in CANVAS

- (1) Please access CANVAS via **Google Chrome** at <https://canvas.nus.edu.sg/>
- (2) Login using your NUS user ID and password, go to 'Courses' on the left taskbar, scroll down and select 'All courses'. Select 'Browse more courses'.
- (3) Search for the course by inputting the course title into the search bar. Click 'Join this course'. Click 'Enroll in course' in the pop-up window.
- (4) A new pop-up window will appear. Choose to return to dashboard to enroll in more courses or go to the course to start the training.

B. Accessing CANVAS for Visitors/Guests

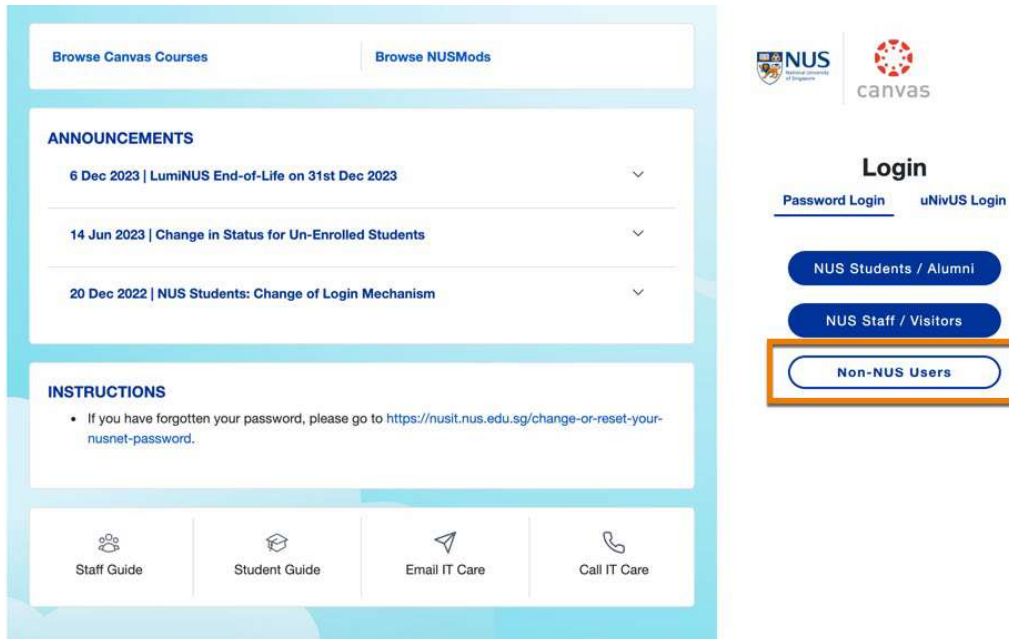
NUS Visitor Account

- (1) Please approach your Department Admin for them to submit a request to create a visitor account via the **IAM Visitor Portal** (<https://iam.nus.edu.sg/>).
- (2) Once your account has been created, install the **VIP Access** app on your chosen 2FA device (<https://inetapps.nus.edu.sg/2fa/start.html>).
- (3) Register your 2FA device at <https://2fa.nus.edu.sg>.
- (4) Once the 2FA registration is completed, you can proceed to use your visitor account to access CANVAS, using the NUS Staff/Visitors link to log in (see below)

Without NUS Visitor Account

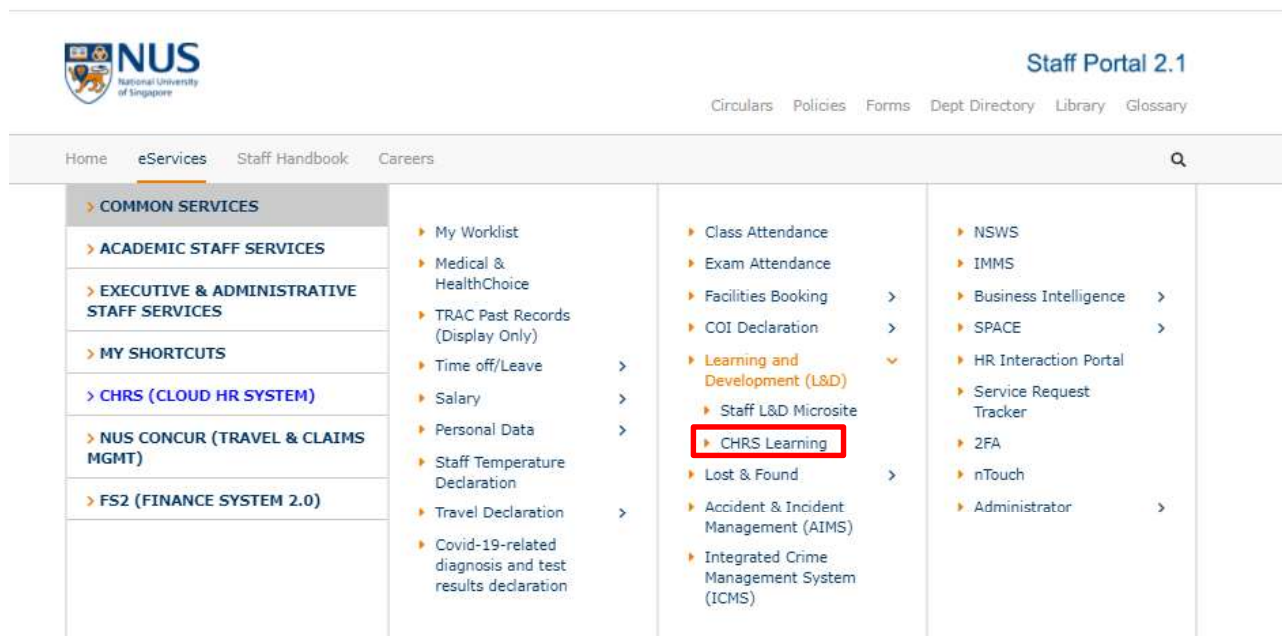
- (1) NUS users can apply for CANVAS accounts for non-NUS users through this form (<https://forms.office.com/r/bApRn68RdN>). Fill in the provided excel template and submit to the form.
- (2) You may refer to this page for more info:
<https://nus.atlassian.net/wiki/spaces/canvasstudent/pages/74645559/Log+in+to+Canvas+on-NUS+users>.
- (3) After the visitor completes the registration process via an email sent to them, they should use the **Non-NUS Users** link to log in (see below).

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C. Instructions to assess CHRS courses

- (1) Log on to staff portal <https://staffportal.nus.edu.sg/>
- (2) Under “eServices” tab, select [Learning and Development \(L&D\)](#) → [CHRS Learning](#)



- (3) After entering the CHRS Learning portal, on the right, search for the course that you need to attend.

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Find Learning

What do you want to LEARN today? [Go](#)

[Browse all courses >](#)

(4) Assign the course to yourself



[See Classes](#)

[Assign to Me](#) [↓ More](#)

(5) Follow instructions once you are in the course to complete it.

COMPULSORY TRAININGS FOR NEW PERSONNEL

Designation	Course	Course Code [Course Platform]	Training Validity	Check	Date completed DD.MM.YY	To be completed
Principal Investigator/ Research Staff	NUS Requirements on Safety, Health and Emergency Management	OSHGEN03 [CHRS]	one-time			within one-month on joining NUS
	Online Fire Safety Training Course	OSHFS01 [CHRS]	one-time			
	Laboratory Safety Induction Training	OSHGEN01 [CANVAS]	one-time			PRIOR to performing activities in the laboratory
	Chemical Safety	OSHCHM01 [CANVAS]	3 years			
	Biosafety for BSL-2 Laboratories	OSHBIO08 [CANVAS]	3 years			

Lab Technologist/ Lab Executives	NUS Requirements on Safety, Health and Emergency Management	OSHGEN03 [CHRS]	one-time			within one-month on joining NUS
	Online Fire Safety Training Course	OSHFS01 [CHRS]	one-time			
	Laboratory Safety Induction Training	OSHGEN01 [CANVAS]	one-time			PRIOR to performing activities in the laboratory
	Chemical Safety	OSHCHM01 [CANVAS]	3 years			
	Biosafety for BSL-2 Laboratories	OSHBIO08 [CANVAS]	3 years			
	Fire Safety Education Course (FSEC)	Classroom Training [CHRS]	3 years			

Postgraduate Students	Chemical Safety	OSHCHM01 [CANVAS]	3 years			PRIOR to performing activities in the laboratory
	Biosafety for BSL-2 Laboratories	OSHBIO08 [CANVAS]	3 years			

Undergraduate / Internship Students	Introduction to Laboratory Safety and Health in NUS - Policy, Principles and Practice	OSHGEN02* [CANVAS]	one-time			PRIOR to entry into the laboratories
	Chemical Safety	OSHCHM01 [CANVAS]	3 years			PRIOR to performing activities in the laboratory
	Biosafety for BSL-2 Laboratories	OSHBIO08 [CANVAS]	3 years			

Collaborators & Visitors [^]	Laboratory Safety Induction Training	OSHGEN01 [CANVAS]	one-time			PRIOR to performing activities in the laboratory
	Chemical Safety	OSHCHM01 [CANVAS]	3 years			
	Biosafety for BSL-2 Laboratories	OSHBIO08 [CANVAS]	3 years			

General note:

E-certificate email notification for ORMC S&H courses will only be sent out 2-3 days after your fulfilment of all course requirements.

***Note for OSHGEN02:**

(1) No e-certificate will be issued by ORMC for this module.

[^]Note for collaborators & visitors:

(1) PI shall identify the training needs for his/her collaborators & visitors. Highly recommended that collaborators working in the laboratories undertake equivalent type of training as those of NUS counterparts.

(2) Staff or students holding valid chemical safety training certificates from A*STAR, NTU, Singhealth or SIT and conducting research in NUS would not need to undergo NUS chemical safety training module.

(3) Staff or students holding valid biological safety training certificates from A*STAR, NTU, NYP, Singhealth or SIT and conducting research in NUS would not need to undergo NUS biological safety training module.

Name of trainee: _____

Appendix B COMPULSORY ACTIVITY-SPECIFIC TRAININGS

Supervisor/PI should determine what supplementary training modules should be taken by individuals.

Courses to be completed prior to performing activities

Designation	Course	Course Code [Course Platform]	Training Validity	Check	Date completed DD.MM.YY	Remarks
For relevant personnel	Safe Use & Handling of Hydrofluoric Acid	OSHCHM02 [CANVAS]	one-time			Individuals working with hydrofluoric acid.
	Safe Use & Handling of Pyrophoric Chemicals	OSHCHM03 [CANVAS]	one-time			Individuals working with pyrophoric chemicals.
	Safe Handling of Human Tissue and Fluids	OSHBIO03 [CANVAS]	one-time			Individuals working with materials of human origin eg. tissue, cell line, body fluids etc.
	Safe Needle Usage in Research Laboratories [^]	OSHBIO06 [CANVAS]	one-time			Individuals working with needles when conducting life science research.
	Safe Handling of Non-human Primate Derived Materials	OSHBIO09 [CANVAS]	one-time			Students and staff members who will be handling Macaque-derived materials.
	Viral Vector Safety and Regulations Training	OSHBIO10 [CANVAS]	one-time			Individuals working with viral vectors.
	Laser Safety	OSHRAD02 [CANVAS]	3 years			Individuals performing activities involving use of Class 3b or Class 4 lasers.
	Safe Handling of Radioactive Materials	OSHRAD03 [CANVAS]	3 years			Individuals performing activities involving use of radioactive materials or equipment containing radioactive materials (eg. Gauges, Gamma Irradiators).
	Safe Handling of X-ray Machines	OSHRAD04 [CANVAS]	3 years			Individuals using X-ray machines or machines that can produce X-rays.
	Respiratory Protection Programme Training	OSHGEN04 [CANVAS]	1 year			Individuals who are required to wear respirators in the course of their teaching and research work on the correct use of respirators. Refresher course: Respiratory Protection Programme training for returning users [CANVAS]
Fire Safety Education Course (FSEC)	Classroom Training [CHRS/CES]	3 years			Individuals who will be handling PFMs in the lab and any other laboratory personnel identified by their Principal Investigators (PIs) are required to attend this course. (eg exchange students, visiting scientists and researchers) Refresher course: Fire Safety Refresher Course	

General note:

E-certificate email notification for ORMC S&H courses will only be sent out 2-3 days after your fulfilment of all course requirements.

^Note for collaborators & visitors:

(1) staff or students holding valid safe needle usage training certificate from Singhealth and conducting research in NUS would not need to undergo NUS Safe Needle Usage in Research Laboratories training module.