Saint Mary's University
SCIENCE

LABORATORY SAFETY ORIENTATION CHECKLIST

CREATED:	09/02/2013	REVISED:	June 11, 2024

Name: _____

Email: _____

Supervisor: _____

Room #s for key card access: _____

Start date: _____

A Laboratory Safety Orientation Checklist should be completed within one month of arriving in the laboratory.
Please reach out to Leanne Lucas, Safety Advisor – Science Activities: leanne.lucas@smu.ca with any questions.

Please provide a brief summary of the type of research/work that will be conducted:

Please check all items which are to be fully explained by you (laboratory supervisor or delegate), for which you will be providing training and/or for which you have written procedures.

1. SAFETY RESOURCES (mandatory)

- ☐ Saint Mary's University Occupational Health & Safety website http://www.smu.ca/about/occupational-health-and-safety.html and the various resources within, including:
- ☐ Orientation Booklet https://www.smu.ca/webfiles/OHSOrientationBookletAugust2023.pdf
- ☐ Reporting Incidents and Injuries http://www.smu.ca/about/ohs-reporting-incidents-and-injuries.html
- ☐ Safety Advisor, Science Activities https://www.smu.ca/faculty-of-science/science-contact-us.html
- ☐ SMU Student Health Services https://www.smu.ca/healthclinic/index.html and https://www.smu.ca/student-life/healthwellnesssupports/

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2. EMERGENCY PROCEDURES at Saint Mary's University (mandatory)

- ☐ Mass Notification System http://www.smu.ca/about/emergency-management.html
- ☐ Emergency Phone Numbers and procedures http://www.smu.ca/about/ohs-fire-and-emergency.html
- ☐ Alerts and SMU Safe app https://www.smu.ca/alert/

3. BASIC LABORATORY SAFETY (mandatory)

Showed the location of the nearest:

- ☐ Fire alarm pull station
- ☐ Fire extinguisher (only to be used if trained)
- ☐ Emergency exit and have been instructed as to the evacuation route
- ☐ First aid kit and designated first aid provider(s)
- ☐ Eyewash and emergency shower and was instructed how to operate them (Do not pull the handle of the safety shower during the orientation)
- ☐ Provided instruction on proper lab attire https://www.smu.ca/webfiles/SafetyPoster.pdf and https://www.smu.ca/faculty-of-science/personal-protective-equipment.html
- ☐ Instructed to not eat, drink, or apply makeup in the lab
- ☐ Provided the following personal protective equipment (PPE) and instructed in its proper maintenance and use (select all that apply):

☐ Disposable Gloves ☐ Chemical Goggles ☐ Lab Coat ☐ Face Shield ☐ Safety Glasses

- ☐ Respirator (arrange for fit testing) _____
- ☐ Hearing Protection, specify type _____
- ☐ Other: _____

- ☐ Provided instruction to not wear lab coats and gloves out of the designated lab area
- ☐ Showed the location and purpose of Safety Data Sheets and other safety symbols and signage
- ☐ Explained the importance of good personal hygiene and proper hand washing
- ☐ Reviewed Saint Mary's University Lone Worker and Safe Walk Programs https://www.smu.ca/webfiles/Chapter6-EmergencyPreventionPreparednessandResponse.pdf (section 6.6) and https://news.smu.ca/news/2024/1/25/keeping-campus-safe-security-at-smu
- ☐ Reviewed security measures: keep lab doors locked when no one is present, avoid remote areas while alone at off-peak times
- ☐ Reviewed SMU Heat Stress Guidelines https://www.smu.ca/about/heat-stress-guidelines.html

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4. CHEMICAL LAB SAFETY ☐ Not Applicable

☐ Provided instruction on the safe handling and storage of chemicals, and transportation of cryogenic and compressed gases (SWP #14) https://www.smu.ca/faculty-of-science/science-work-instructions.html

☐ Provided instruction on the safe disposal procedures for chemicals

☐ Provided instruction on the appropriate measures to take in case of a chemical spill

☐ Provided instruction on safe chemical fume hood operation

☐ Discuss risk of wearing contact lenses while working with some chemicals – splashes can have increased chemical exposure time with contact lens use

5. RADIATION LAB SAFETY ☐ Not Applicable

☐ Successfully completed mandatory Principles of Laboratory Radiation Safety training

☐ Has been issued a Health Canada-issued radiation monitoring dosimeter

☐ Given clear instructions regarding the lab rules (i.e. in-house procedures) for radioisotope work

☐ Provided instruction on record keeping for radioisotopes as well as on their safe disposal

☐ Provided instructed on the appropriate measures to take in case of a radioactive spill or exposure

6. LASER SAFETY ☐ Not Applicable

☐ Provided instruction on the safe handling of lasers

7. HAZARDOUS WASTE DISPOSAL ☐ Not Applicable

☐ Reviewed Saint Mary's University Hazardous Waste Disposal Policy (Work Instruction #13) https://www.smu.ca/faculty-of-science/science-work-instructions.html

☐ Provided instruction on the disposal procedures for: sharps, glassware, biohazardous waste, chemical waste, and radiation waste

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8. BIOSAFETY ☐ Not Applicable

☐ Reviewed the Canadian Biosafety Standards and Guidelines https://www.canada.ca/en/public-health/services/canadian-biosafety-standards-guidelines.html

☐ Shown the following A/V materials: Lab Biosafety 101

☐ Shown the following A/V materials: Containment Level 2 Laboratories

☐ Shown the following A/V materials: Working safely in a Class II Biological Safety Cabinet

http://www.vidrl.org.au/resources/working-safely-in-a-class-ii-biological-safety-cabinet/

☐ Provided instruction on the safe handling and storage of biohazardous materials

☐ Reviewed the PHAC Biosafety in the Laboratory https://www.canada.ca/en/public-health/services/canadian-biosafety-standards-guidelines/guidance/elementary-intermediate-secondary-school-classroom/document.html#appc

☐ Provided instruction on the PHAC Procedures to Minimize Aerosol Hazards https://www.canada.ca/en/public-health/services/canadian-biosafety-standards-guidelines/guidance/elementary-intermediate-secondary-school-classroom/document.html#appe

☐ Provided instruction on the use of a biosafety cabinet and/or laminar flow hood

☐ Provided instruction on the use of an autoclave

☐ Provided instruction on the decontamination procedures for the techniques performed in the lab

☐ Provided instruction on the appropriate measures to take in case of a biohazard spill, exposure or incident

9. ANIMAL CARE PROCEDURES ☐ Not Applicable

☐ Provided animal theory and practical training

☐ Informed of the Occupational Health Program for Animal Related Activities

☐ Provided instruction on the standard procedures in place for the animal facilities that will be used

☐ Listed on supervisor's Animal Use Protocol by way of an amendment or submission of the form to the Animal Care Committee and have read the Animal Use Protocol

☐ Please attach any additional training forms required by the Animal Care Facility

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10. LAB EQUIPMENT SAFETY INSTRUCTION ☐ Not Applicable

Received instruction on the safe use of the following laboratory equipment (check all that apply)

- ☐ Acid / base baths
- ☐ Glove box
- ☐ Hotplates/stirrer
- ☐ Rotary evaporator
- ☐ Rock cutting/machining
- ☐ Sharps
- ☐ High pressure apparatus
- ☐ Microscope
- ☐ Compressed gases (handling & storage)
- ☐ Cryogenics (dry ice, liquid nitrogen)
- ☐ High voltage apparatus
- ☐ Melting point apparatus

- ☐ Centrifuge
- ☐ Bunsen burner
- ☐ Ultraviolet light
- ☐ Glassware washer
- ☐ Butane torch / heat gun
- ☐ Drying oven
- ☐ Cold storage (refrigerators and freezers)
- ☐ Vacuum manifold
- ☐ (Muffle) furnace

11. LAB SPECIFIC EQUIPMENT SAFETY INSTRUCTION ☐ Not Applicable

- ☐ Scanning Electron Microscope
- ☐ Hydraulic press
- ☐ Sputter coater
- ☐ Lab microwave digester
- ☐ X-ray fluorescence
- ☐ Carbon coater
- ☐ Freeze dryer
- ☐ Fluxer
- ☐ Critical point dryer
- ☐ Ultramicrotome

- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

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12. SAFETY TRAINING REQUIREMENTS

☐ **Not Applicable**

Laboratory Supervisors must identify which safety training provided by the Safety Advisor, Science Activities ‡ is required. Check if required.

Workplace Hazardous Materials Information System (WHMIS) ‡

Date Trained _____ Trainer _____ Certificate on File: ☐ Yes ☐ No

Hazardous Waste Management & Disposal ‡

Date Trained _____ Trainer _____ Certificate on File: ☐ Yes ☐ No

Laboratory Safety ‡

Date Trained _____ Trainer _____ Certificate on File: ☐ Yes ☐ No

First Aid (Please Specify Which Course): _____

Date Trained _____ Trainer _____ Certificate on File: ☐ Yes ☐ No

Transportation of Dangerous Goods

Date Trained _____ Trainer _____ Certificate on File: ☐ Yes ☐ No

Fire Extinguisher Training or General Fire Safety Training (Please Specify)

_____

Date Trained _____ Trainer _____ Certificate on File: ☐ Yes ☐ No

Other (Please Specify): _____

Date Trained _____ Trainer _____ Certificate on File: ☐ Yes ☐ No

* Determined by Laboratory Supervisor
‡ If not trained at the time form is completed, indicate the date of the training session you registered for.

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13. LABORATORY PERSONNEL AND SUPERVISOR ACKNOWLEDGEMENT

I _____ (lab supervisor's/delegate's name), have introduced to

_____ (student's name) all applicable points in this laboratory safety orientation checklist and confirm that they have been fully understood.

_____

Laboratory Personnel's Signature Date

_____

Laboratory Supervisor's Signature Date

Once completed and signed by both the laboratory personnel and supervisor, **a copy of the checklist should be kept by the Laboratory Supervisor and emailed to Leanne Lucas, Safety Advisor – Science Activities**: leanne.lucas@smu.ca

(Please feel free to attach any additional information)