Reopening and Operation of Physics Technical Services

Purpose
The purpose of this document is to outline the procedures for the opening and operation of the Physics Technical Services (PTS) group. PTS consists of the Machine Shop, Graphics and the Electronics Resource Center (PERC).

Weekly Review
This plan will be reviewed weekly and if changing circumstances warrant, be revised. This will be done in consultation with Environmental Health & Safety (EHS), The Faculty of Arts and Sciences (FAS), University of Toronto (UofT) Guidelines and with approval of the Chief Administrative Officer (CAO) of the Department of Physics.

Principles
- Paramount will be the health, safety and protection of PTS staff and all users including faculty, librarians, students, post-doctoral fellows, staff and clients
- Applicable EHS, FAS and Departmental directives and guidelines will guide the restart and operation of technical services.
- Machine shop, Graphics and PERC planning and implementation will follow the principles described in this document and revisions.
- The Department will provide reasonable accommodation to staff members for personal circumstances while balancing the needs of the University and its members and adhering to agreements, policies, procedures, guidance documents and legislation.

General Preparation for Reopening
This section outlines general guidelines for all the shops. Each shop may have specific requirements which are outlined below. Shops will not reopen until these measures are in place and have been inspected and approved by the Technical Services Director (Director) and a certified member of the Physics Joint Health & Safety Committee or EHS or designate.

- All shops will have prominent notices located at the corridor entrances outlining rules for clients. There will also be a COVID hygiene poster.
- All sinks will be equipped with soap, paper towels and a garbage container for handwashing. Posters an signs will encourage staff and clients to wash frequently.
- All standard shop safety practices are to be followed (for example personal protection equipment when required, equipment guards and shields).
- Face masks will be made available but are not required in non-public parts of the facility unless physical distancing cannot be maintained.
• Ropes and/or barriers will be used to restrict user access (for example the back area of PERC or main machine shop machining areas)

• It will be the responsibility of the shop supervisor ensure that the signs are in good condition, barriers are in place and maintaining the supplies. These will be inspected at least daily and more frequently as required.

• Directions on how to access PTS services will be posted to the PTS website and circulated to the department through the email system

• A reservation system will be setup for the Student Machine Shop, the Main Machine Shop, PERC, PERC student workshop and Graphics using Microsoft Booking. The PTS website will have links and instructions. This information will be circulated to the department

General procedures for all Staff

• Staff members are to practice physical distancing at all times, keeping a minimum of two meters apart. Work apart as much as possible.
  o If this is not possible (i.e. needing help with moving materials) then a face mask is required. All areas of common contact are to be cleaned afterwards.
  o Avoid sharing of tools, machines or work areas. If they are shared then they must be cleaned between uses

• Hands are to be washed with soap frequently, especially after contacting materials and surfaces others may have handled

• Re-wash hands when re-entering the shop

• All personal work areas such as cubicles are to be cleaned at the start of the workday. This includes desks, counters & benchtops, phones, keyboards, tools, etc. Any tools, equipment etc. entering or leaving a personal workspace must be cleaned.

• Report hazards and concerns to your Supervisor

• Review and follow specific COVID protection procedures for your shop

• Use equipment and/or PPE as defined for your shop

• Consider changing your clothes when arriving and leaving work

• Stay home if you feel unwell or are experiencing symptoms, and follow the process outlined by Human Resources & Equity. Report any absences to your Supervisor as soon as possible

General procedures for Facility Users

• Anyone wishing to visit the facility will be strongly encouraged to reserve time using the reservation system or make advance arrangements with the Supervisor.

• Clients will informed of the user guidelines and expected to abide them.

• Clients will be asked to leave if they deliberately behave in a manner not consistent with this document. Anyone refusing to comply with these guidelines will not be allowed access to PTS facilities and repeated behaviour will be reported to their Supervisor.
• Clients may have their entry delayed or asked to return later or make an appointment if in the opinion of the Supervisor, physical distancing will be compromised.
• All shop tools, equipment, etc. touched by the facility users must be left on a bench so that the staff member can clean them for the next user

**Student Machine Shop**

The Student Machine Shop Supervisor in co-operation with the Machine Shop Supervisor will have responsibility for the safe operation of the Student area. They will ensure that all procedures in this document are being followed and will report any deliberate infractions to the Machine Shop Supervisor.

**Preparation**

In addition to the general items above:

• Classes are suspended until further notice. Practicing physical distancing compromises the instructor’s ability to monitor student’s safety practices or to be able to demonstrate skills and procedures effectively.
• Any forms, waivers, etc. need to be updated with these new procedures
• Signs will be displayed at the Student shop entrance with check-in procedures for using the shop.
• Shop procedures and general COVID procedures will be made available to the users
• All tools, keys, bits, etc. need to be cleaned and secured. These will be issued to users on request to minimize the amount of cleaning necessary after the student leaves.
• Frequent handwashing will be encouraged by sign placement.

**Practice**

In addition to the general items above:

• The washroom will be for the exclusive use of the machine shop staff and the current user of the student workshop
  o Only one person at a time will be allowed to use it
  o No outside users will be allowed access
  o Hands must be washed after its use
• Students who have already completed the Student Workshop course or have demonstrated skills to the Supervisor’s satisfaction may continue to use the Student Workshop.
• Only one user will be allowed to use the shop at a time
• Users should supply their own tooling as much as possible
• Shop tools are only available upon request
• Shop time must be reserved in advance using the reservation system or with the Supervisor.
• The user must check-in and check-out with the Student Workshop Supervisor
• To be fair to others the time slot is strictly enforced.
  o Showing up late will not extend the end time.
  o If the user runs out of time then another session will have to be booked.
• Users are expected to clean up shavings, scrap and waste and clean tools and machinery used
• Any tools, material, equipment, etc. touched by the user are to be left on the workbench so that it may be cleaned for the next user.
• Reservations will be spaced apart to allow time for the Student Workshop Supervisor to prepare for the next user. Any tools used, machine controls, knobs and levers, worked surfaces shall all be cleaned by the Supervisor before allowing the next user to enter.
• Any user deliberately not complying with these requirements will be asked to leave, losing their remaining time. Repeat offenders will not be allowed to use the shop and their behaviour will be reported to their supervisor.

Main Machine Shop
The Machine Shop Supervisor will have responsibility for the main area of the machine shop and the staff using it. The Supervisor will also in co-operation with the Student Shop Supervisor share responsibility for the Student Machine Shop. The Supervisor will ensure that all staff are following the procedures in this document and general health and safety practices. The Supervisor will report deliberate infractions to the Director.

Preparation
In addition to the general items above:

• Notices will be displayed at the Main shop entrance with the procedure for accessing the shop. Also a general COVID awareness poster.
• Staff will wash hands frequently.
• Nitrile gloves or equivalent and face masks will be available to staff. These type of gloves are not to be used when machining or work related tasks as they offer no protection in these situations and are potentially dangerous.
• The machine area of the main shop is to have a barrier to discourage users from going on the main floor.

Practice
In addition to the general items above:

• No more than six people (including staff) will be allowed in the shop at any one time.
  o Additional persons will have to wait in the hallway until someone leaves, return later or make an appointment
  o The Supervisor may lower this limit if in their opinion physical distancing cannot be maintained
• Machine Shop staff will meet with their Supervisor at the start of each day while maintaining distancing
  o The purpose will be to review shop safety, assess how the procedures are working and suggest changes to the Director, share Departmental news, assign work or any other matter the Supervisor feels is relevant
• At the start of the day the Supervisor, assisted by the staff, will inspect the shop to make sure there are adequate supplies and that the shop is in compliance with this document
• Any materials/supplies received are to be segregated until cleaned or the accepted incubation period has passed.
• Clients are strongly encouraged to reserve time using the reservation system or make advance arrangements with the Supervisor.

Graphics
Until the vacant position is filled, the responsibility of safe operation for the Graphics Shop will fall upon the Learning and Research Services Director (Director). This responsibility will transfer to the staff member when this position is filled. They will report any deliberate infractions to the Director.

Preparation
In addition to the general items above:
• Procedures will be posted outside the corridor door
• Staff and clients will be required to use the hand wash facility at the sink

Practice
In addition to the general items above:
• Until the Graphics Position is filled, Graphics will be available by appointment only, either by using the reservation system or contacting the staff member
• Users will be strongly encouraged to submit their work remotely and only go to Graphics to pick up their work
• Only one visitor will be allowed in the room at a time. Others must wait in the corridor, come back later or make an appointment
• Clients will not be allowed in offices or cubicles
• Users will be strongly encouraged to pay using FIS account numbers. Availability of card payment is dependent on the Physics Stores policies and procedures. Cash and Cheques will not be accepted.
• At the start of the day, staff will inspect the shop to make sure there are adequate supplies and that the shop is in compliance with this document. Staff will also clean contact surfaces
PERC

The responsibility for the safe operation of the shop and user compliance with this document will fall to the most senior staff member on duty. Any deliberate infractions will be reported to the Director.

Preparation

In addition to the general items above:

- Face masks, nitrile gloves or equivalent will be made available to staff however these type of gloves are not to be used when soldering or working with circuitry as they would be unsafe
- The back of the room will be cordoned off and only staff will be allowed access. Any tools, equipment, objects not relevant to the student work area will be moved to the back of the shop or made inaccessible to users

Practice

In addition to the general items above:

- One PERC staff member will be on-site during normal working hours. Scheduling will be coordinated by the Director with the PERC staff members.
- No more than three people are allowed in PERC at any one time, including staff
  - Anyone wishing to visit the facility will be strongly encouraged to reserve time using the reservation system or make advance arrangements with staff
  - Clients are not allowed in staff cubicles
  - As much as possible, clients are encouraged to correspond remotely with staff
  - Should there be three people in the room, clients will have to wait in the hall or return another time
- No more than two people at a time will be allowed to use the student bench, one at each end. The middle two chairs and equipment will be removed
  - Anyone wishing to use the workshop will be required to reserve time using the reservation system or make advance arrangements with the Supervisor.
  - The user must check-in and check-out with the Student Workshop Supervisor. Staff may deny access to the student area if the user does not have the requisite skills or distancing cannot be maintained
  - Staff are required to maintain physical distancing and will not be allowed to assist users in close proximity
  - Any user not complying with these requirements in a deliberate manner will be asked to leave. Repeat offenders will not be allowed to use the facilities and their behaviour will be reported to their supervisor.
  - Users should supply their own tooling as much as possible
  - Shop tools are only available upon request
To be fair to others the time slot is strictly enforced.

  - Showing up late will not extend the end time.
  - If the user runs out of time then another session will have to be booked.

Users are expected to clean up after themselves

- Any tools, material, equipment, etc. touched by the user are to be left on the workbench so that it may be cleaned for the next user.

- Reservations will be spaced apart to allow time for the staff to prepare for the next user. Any tools used, machine controls, knobs and levers, worked surfaces shall all be cleaned by the Supervisor before allowing the next user to enter.

- Any user deliberately not complying with these requirements will be asked to leave losing any remaining usage time. Repeat offenders may not be allowed to use the shop and their behaviour will be reported to their supervisor.

- At the start of the day the staff on duty will inspect the shop to make sure there are adequate supplies and that the shop is in compliance with this document. Staff will clean any common areas in addition to their own work area