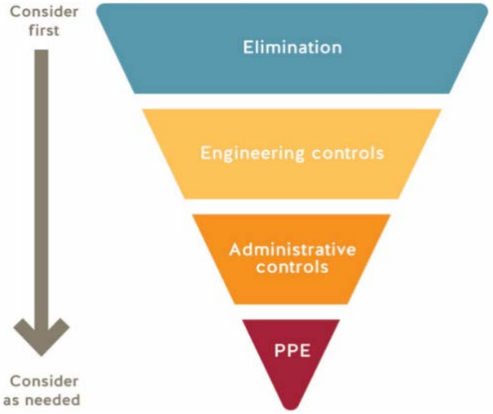
BCIT COVID-19 SAFETY PLAN
ACADEMIC SPACES

The BCIT COVID-19 Go-Forward Plan outlines the risk assessments, control measures, and the organizational process for our safe return to campus. All returning programs/courses must adhere to this process. Please refer to the BCIT COVID-19 Go-Forward Plan for additional information.

CONTACT INFORMATION

Course/Program Name:	**Technology Teacher Education Diploma (44 students)** **Mechanical Engineering, Manufacturing Technology (21 students)**		
Proportion of program offered on campus:	**40**		
Start date:	**Sept 14, 2020**	**End date:**	**May 31, 2021**
# of students:	65	**# of employees:**	**10**
Completed by:	Name Brent Dunn	Position Associate Dean	Date Sept 2, 2020 (initial) Sept 28, 2020 (amendment 1) Oct 30, 2020 (amendment 2)



ROOM INFORMATION

In this section, please identify all of the rooms that will be used by this returning program/course.
NOTE: Common areas are covered by the BCIT COVID-19 Go-Forward Plan.

Campus/ Building	Room Number Floor Plans found here	Type of Space Include washrooms and breakout rooms	Capacity Current capacity due to COVID-19
Burnaby SW9	SW9-102	Automotive lab	13 – 12 students, 1 instructor
	SW9-102B	Foundry	7 – 5 students, 1 instructor, 1 technician
	SW9-103	Woodworking shop	14 – 12 students, 1 instructor, 1 technician
	SW9-106	Machine Shop	14 – 12 students, 1 instructor, 1 technician but room capacity higher if all equipment in use
	SW9-106B	Toolroom	2 – 1 staff, 1 student
	SW9-106E	Welding lab	9 – 8 students, 1 instructor
	SW9-107	Plastics lab	8 – 7 students, 1 instructor

	SW9-117	Timetabled classroom for break room	13 – 12 students, 1 instructor
	SW9-123	Electronics lab	12 – 11 students, 1 instructor
	SW9-233	Classroom for personal effects storage	Will be used by 1 student at a time
	SW9-127	Timetabled Classroom for break room	7 students

RATIONALE FOR ON-CAMPUS ACTIVITY

Please provide a short description explaining the need for students to be on campus. Your narrative should be focused on the practical elements of the program or activity that are critical to achieving learning outcomes, and why on campus components cannot be replicated in an online or alternative environment (e.g. student bringing learning equipment home).
Hands-on training is required in many of our programs due to the practical nature of the programs. Students cannot access specialized equipment outside of the classroom.

CONTROL MEASURES

COVID-19 SAFETY PLAN: CONTROL MEASURES CHECKLIST

Directions for completing a Safety Plan:

1. *First step of this process is to review the BCIT COVID-19 Go-Forward Plan as the overall planning document for this process.*
2. *Use this checklist as a tool to assess COVID-19 control measure preparedness for students and employees and the spaces they will be using. Refer to the BCIT COVID-19 Go-Forward Plan for standardized safety guidelines and procedures.*
3. *For each control measure, state the details. If the control measure is a 'No' or 'NA', please provide a brief explanation.*
4. *The manager requests all PPE requirements by submitting this draft Safety Plan to the PPE@bcit.ca.*
5. *Implement all the safety measures in this Safety Plan.*

6. *The manager completes a site visit to ensure all control measures and safety supplies are in place.*
7. *The manager signs the completed Safety Plan and submits it to returntocampus@bcit.ca for approval.*
8. *Once approved, the COVID-19 Safety Plan is posted in all work areas identified within this plan.*

Note: The workspaces cannot be used until all applicable control measures are in place and Safety Plan is approved. For additional resources the Risk Assessment Controls Guidance and Hierarchy of Controls. For assistance email ssemohs@bcit.ca.

#	Control Measure	Yes	No	NA	Details (as per Directions)
ELIMINATION					
1.	Room(s) set up to allow for 2 metres physical distancing during instruction and practice. **Note:** Contact returntocampus@bcit.ca for room capacity and layout if needed.	☒	☐	☐	*Exceptions allowed as per BCIT COVID-19 Go-Forward Plan, Risk Matrix Summary (explain):* Please see individual room plans for barriers where 2m distancing cannot be maintained.
2.	Demonstration, work and assessment stations are set-up to allow for 2 metres physical distancing.	☒	☐	☐	*Exception allowed as per BCIT COVID-19 Go-Forward Plan, Risk Matrix Summary (explain):* Please see individual room plans for barriers where 2m distancing cannot be maintained.
3.	Identified area(s) where students wait outside of teaching space until allowed inside by instructor.	☒	☐	☐	We have been instructed that we are not to use hallways for queuing, therefore, classrooms will be opened 10 minutes prior to start of class and students will be instructed to maintain 2m distancing when entering the space.
4.	Work has been scheduled to minimize numbers of individuals on campus at one time.	☒	☐	☐	Sets are divided in half or thirds to match the capacity of the spaces. Students are scheduled to minimize trips to campus so that most instruction is online for two to three days/week. Where different programs share the same shop space, the schedule for the room has been arranged so just one program is using the room on a given day. This minimizes the number of students in the shop and the number of students in the building.
5.	In shared spaces, safety protocols have been put in place to reduce close contact between users.	☒	☐	☐	Please see individual room plans for more detail.
6.	Movement within the room is identified, such as with directional arrows, for walkways and entrances/exits.	☒	☐	☐	*Signs or arrows on the floor identifying directions.* Depending on the space, markings will be placed or walkways will be obvious due to position of barriers. In some spaces, students will be called into room in order so they can proceed to their workstations while maintaining social distance from other students. Students will be required to exit in sequential order to maintain social distance.

#	Control Measure	Yes	No	NA	Details (as per Directions)
7.	Water fountains are put out of service, and only touchless water bottle filling station available.	☒	☐	☐	One fountain in hallway (common space). The fountain has been taped off.
8.	Mobile fans have been removed or put out of service.	☐	☐	☒	No fans
7.	Washrooms have been identified.	☒	☐	☐	There are no washrooms within the lab spaces - all washrooms are in common spaces.
8.	Break area(s) for student use have been identified.	☒	☐	☐	When students are on campus for a short duration, a break has not been planned. When students are on campus for a longer duration, breaks will be included in the day schedule. In labs where students are working at workstations/desks, students will be encouraged to take breaks and/or eat lunch at their individual workstations. Hand sanitizing or sinks will be available. In labs where students are working at fixed equipment, students will be encouraged to take breaks and/or each lunch in adjacent labs where workstations are available, or in SW9-117, a classroom that has a capacity of 12.
9.	Break areas for employee use have been identified.	☒	☐	☐	Faculty will take breaks at their workspaces. These areas are covered under the Administrative Safety Plan.
10.	Other:	☐	☐	☒	
ENGINEERING CONTROL MEASURES					
11.	Barriers are implemented to separate work areas or walk ways, when physical distancing not practical.	☒	☐	☐	Please see individual room plans for barriers where 2m distancing cannot be maintained.
12.	Barriers are stable and do not introduce other safety hazards, e.g. tripping.	☒	☐	☐	
13.	The impact on ventilation requirements have been considered if there's been a significant use change for the instructional space.	☐	☐	☒	*Complete a Facilities and Campus Development work requisition for assessment, as needed.* The usage has not changed for any of the spaces.
	Other:	☐	☐	☒	
SIGNAGE (ADMINISTRATIVE) *Signage is available @ BCIT online Inventory. Guidelines for posting signs are available on ShareSpace.*					
13.	Posted: Physical distancing (2 m) sign(s) Item 1A	☒	☐	☐	Posted
14.	Posted: Hand washing sign(s) Item 29B	☒	☐	☐	Posted
15.	Posted: Health screen sign(s) Item 3C	☒	☐	☐	Posted
16.	Posted: Hand washing sink location sign(s) Item 14A	☒	☐	☐	Where handwashing sinks are available. Posted
17.	Posted: Hand sanitizing station location sign(s) Item 13A	☒	☐	☐	Posted

#	Control Measure	Yes	No	NA	Details (as per Directions)
18.	Posted: Protect yourself sign(s) Item 21A	☒	☐	☐	Posted
19.	Posted: Occupancy limit of this room sign(s) Item 37A	☒	☐	☐	Posted
20.	Posted: Other signs	☐	☐	☒	*Please list:*
ORIENTATION AND TRAINING (ADMINISTRATIVE)					
21.	Routine safety discussions held to review control measures and safety protocols.	☒	☐	☐	
22.	All students have completed the online COVID-19 Pandemic On-Campus Guidelines training.	☒	☐	☐	*How will compliance be checked:* Instructor will check each student in the cohort prior to first lab period for that cohort.
23.	COVID-19 safety Site orientation for students has been developed and posted in the Learning Hub.	☒	☐	☐	*Procedure for orientation found here.* *Student COVID-19 Orientation Checklist found here.*
24.	All employees have completed the online BCIT Pandemic Exposure Control Plan Training.	☒	☐	☐	
25.	All employees have completed the online New Employee Orientation module.	☒	☐	☐	*New and Returning Employee Orientation Checklist found here.* *Each employee to save the checklist to their online New Employee Orientation course*
26.	Other:	☐	☐	☒	
RULES AND GUIDELINES (ADMINISTRATIVE)					
27.	All unnecessary and self-serve items have been removed from the spaces. *e.g., pens, paper, etc.*	☒	☐	☐	
28.	Doors that students are to use to enter and exit have been clearly identified.	☒	☐	☐	*Signs or arrows on the floor*
29.	Handouts, papers, and items are not physically provided to students.	☒	☐	☐	
30.	Students have dedicated tools/equipment, e.g., items are not shared between students.	☒	☐	☐	Students have personal and assigned toolboxes with small tools. No sharing during a class session. For larger and/or more expensive equipment, students will be instructed to sanitize hands before and after use where cleaning is impractical between uses. In other cases such as for electronic equipment, students will be instructed to wipe common touch points with disinfecting wipes prior to and after use.
31.	If cleaning common touch points or tools/equipment not practical, then it is identified when hands are washed/sanitized before and after use.	☒	☐	☐	
32.	Work spaces/stations are dedicated for an individual or group use and not shared with others.	☒	☐	☐	*No sharing during a class session. All equipment to be cleaned between sessions where practical or students will be instructed to sanitize before and after use.*

#	Control Measure	Yes	No	NA	Details (as per Directions)
33.	Single-use (disposable) products are used where feasible.	☒	☐	☐	*Gloves will be single use. None of the equipment is single use/disposable.*
34.	Measures are in place to accommodate student sick at home.	☒	☐	☐	*Accommodation plan: Students who miss a lab will be given an alternate assignment or allowed to make up the lab at a later date.*
35.	Procedures in place to screen students on a daily basis.	☒	☐	☐	*The health screen poster is available for reference and is posted on building doors. Students and employees are expected to self assess daily, and the BCCDC self-assessment tool can be used to support this.*
36.	There is a procedure in place if a student or employee becomes ill on campus.	☒	☐	☐	*Refer to the COVID-19 Pandemic Scenario Playbook for more information. If the person is reporting symptoms, ask them to avoid others and return home. If they require immediate medical attention, call First Aid and 911.*
37.	There are procedures in place if a student or employee travels before coming to campus, or has been in close contact with someone who has tested positive for COVID-19.	☒	☐	☐	*Refer to the COVID-19 Pandemic Scenario Playbook for more information. Confirm if the person is aware of self-isolation requirements and protocols.*
38.	Provisions made for students to maintain same lab/class cohort throughout the Term.	☒	☐	☐	Students are grouped into sets of 22 and will stay in their cohort (set) for the term. Due to shop capacity limitations, sets have been further subdivided to form smaller groups of 7 to 11, depending on the capacity of the spaces and students will stay with the same smaller subset for the term.
39.	Other:	☐	☐	☒	
PERSONAL PROTECTIVE EQUIPMENT (PPE). **Refer to the PPE Flowchart to determine what PPE is required for COVID-19 purposes.**					
40.	Appropriate PPE for the hazards of employee and student tasks are available to be provided (non-COVID-19 related ppe).	☒	☐	☐	*List the ppe and tasks/activities it is required for, and provide the quantity and unit of measure, if applicable (e.g. 2 boxes of 20 each box):* Appropriate non-Covid PPE for the lab spaces and activities are unchanged from pre-Covid PPE requirements. Students are responsible for providing their own basic PPE such as safety glasses and safety footwear, however, specialized PPE for tasks such as forging, casting, and welding is provided by the institute. The program areas have enough PPE on hand for the term.
41.	Training is provided for the above PPE to students and employees.	☒	☐	☐	This is part of our normal operation. Instruction is given at the first lab session of the course and/or in safety courses. Instructors enforce PPE use continuously throughout each course.
42.	Appropriate PPE for COVID-19 is available to be provided to students and employees. Supply requests emailed to ppe@bcit.ca.	☒	☐	☐	*Based on circumstances allowed for in the BCIT COVID-19 Go-Forward Plan, Risk Assessment Matrix Summary.* *List PPE and tasks/activities required for and provide the quantity and unit of measure, if applicable (e.g. 2 boxes of 20 each box):* Most of the COVID-related PPE consists of hand sanitizer and/or sanitizing wipes near or at shared equipment. This has been ordered. For benchwork where dirt, grease, and oils are present, Spray Nine will be used to clean the benches.

#	Control Measure	Yes	No	NA	Details (as per Directions)
					Students always supply their own safety eyewear and the program has gloves in stock. The program also has a rag service so shop rags will be used to wipe down the benches and equipment after cleaning with disinfectant spray. While most activities will not require students and/or staff to be in close proximity without a barrier, some activities such as instructors assisting students with certain techniques may require students and/or instructors to be in close proximity. In such cases, all parties will be required to wear BCIT-supplied disposable masks and eye protection.
43.	PPE safe donning, doffing, disposal, and disinfecting instructional materials are available for students and employees.	☒	☐	☐	*Post applicable signs in a visible location if ppe required.* *Use the Student Orientation checklist to assist orientation/training by instructors.* *Use the Employee Orientation checklist to assist orientation/training by their supervisors.* In most spaces, COVID-related PPE is not required. In areas where COVID-related PPE is required such as masks and gloves, signs will be posted.
44.	Other:	☐	☐	☒	
CLEANING					
45.	Facilities is aware of the cleaning needs for the area. Facilities work requests have been submitted.	☒	☐	☐	*Cleaning includes common touch points and appropriate frequency for the area. This includes high touch areas. Provide FCD work request number(s)* Work requests 1450738, 1450791, and 1451135 submitted to clean common touch points in shops/labs and tables and chairs in SW9-117 classroom. A cleaning schedule was included as shops will be not be used every day.
46.	Training will be provided to faculty and students performing cleaning duties and cleaning materials have been provided.	☒	☐	☐	*Cleaning Standard Operating Procedures have been located here. What are the cleaning products/materials:* *What ppe is required:* Most COVID-related disinfecting will be performed by Facilities. If faculty or students are required to clean and/or disinfect equipment, they will use either disinfecting wipes or Simple Green. Instructions will be posted and reviewed with students.
47.	Assessment of sufficient number of hand wash stations conducted, and an appropriate number of handwashing stations are available	☒	☐	☐	

#	Control Measure	Yes	No	NA	Details (as per Directions)
48.	Handwashing station(s), stocked, easily accessed, and have been identified to students and employees.	☒	☐	☐	*Sink Location:__SW9-123, SW9-102, SW9-103, SW9-106, SW9-107* *Stocked with soap Y ☒ N ☐ paper towel Y ☒ N ☐*
49.	Hand sanitizing station(s), stocked, and have been identified to students and employees.	☒	☐	☐	***ABHS** (Alcohol-Based Hand Sanitizer): Location(s)* Hand sanitizer will be available in all spaces, even when sinks are present, in order to minimize student travel through the space. Hand sanitizer will be available at or near all shared equipment. Where students are working at individual stations, sanitizer will be made available at each station where students and instructors may need to sanitize before and after touching shared equipment e.g. when the instructor has to touch student work or tools to demonstrate technique. *Will hand sanitizer be refilled by department: Y ☒ N ☐* *If No, describe:* Hand pumps will be used and replenished with new bottles when empty. Usage will be monitored so supplies can be replenished as needed.
50.	All Safety Data Sheets (SDS) and cleaning procedures used are found here.	☒	☐	☐	*If not, describe: SDS are always available for materials normally used in the lab, however, SDS sheets are not provided for special cleaners that will be used by cleaning contractors.*
51.	The area(s) have been decluttered so that cleaning is simplified.	☒	☐	☐	
52.	Barrier cleaning process has been arranged if the barrier(s) could become contaminated.	☒	☐	☐	*Barriers can become contaminate if they are a touch point or if the contaminated with droplets by e.g. coughing or sneezing.*
53.	Common touch points and tools/equipment that must be shared are identified and cleaned between students and classes.	☒	☐	☐	*Cleaning/sanitizing procedures for common touch points and shared items are posted e.g. shared machinery, equipment, tools, etc. Identify who will clean and how often (e.g. staff and/or students):* Varies by space. In some cases, students will clean benches or shared equipment. In other spaces, facilities work requests have been submitted for between-class cleaning. Due to the quantity and variety of large, fixed equipment, it is impractical to clean the equipment between students so students will be required to sanitize before and after using the equipment. In some situations, students will be required to wipe down the equipment before and after use using provided disinfecting wipes.
54.	Storage space for personal articles have been identified and are cleaned regularly.	☒	☐	☐	*Who will clean:* Varies by space and by equipment. Students and/or cleaners. *Where is the storage:* The storage areas vary by the location/lab/space. In some areas, a separate classroom (SW9-233) is used. In others, students will take their supplies with them to their workspaces (e.g. SW9-123, 102, 107) or will place their personal articles in assigned cubbyholes and cleaned daily by FCD (MANU students using SW9-106).

#	Control Measure	Yes	No	NA	Details (as per Directions)
55.	Other:	☐	☐	☐	
AUDIT AND CONTINUOUS IMPROVEMENT					
56.	There is a plan to conduct regular inspections of all control measures and safety protocols to ensure they are in place.	☒	☐	☐	*Ensure this COVID-19 Safety Plan is posted. Who will conduct these inspections and how often?* Faculty will perform inspections on a weekly basis.
57.	Audits of inspections are planned to ensure that control measures continue to be effective.	☒	☐	☐	*Who conduct the audits and how often?* Program heads for the respective areas will audit on a weekly basis. Associate Dean will audit on a monthly basis.

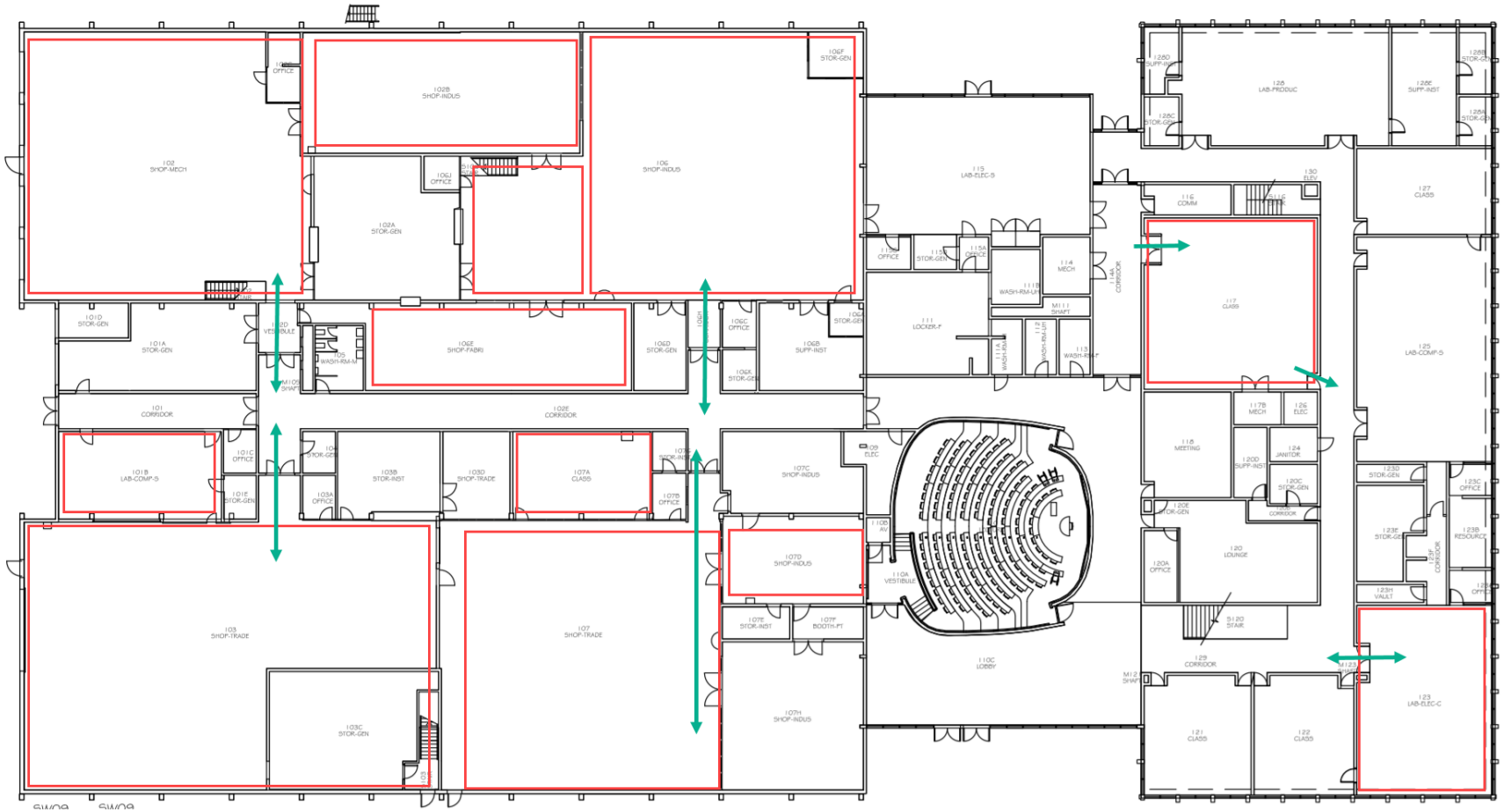
APPROVAL

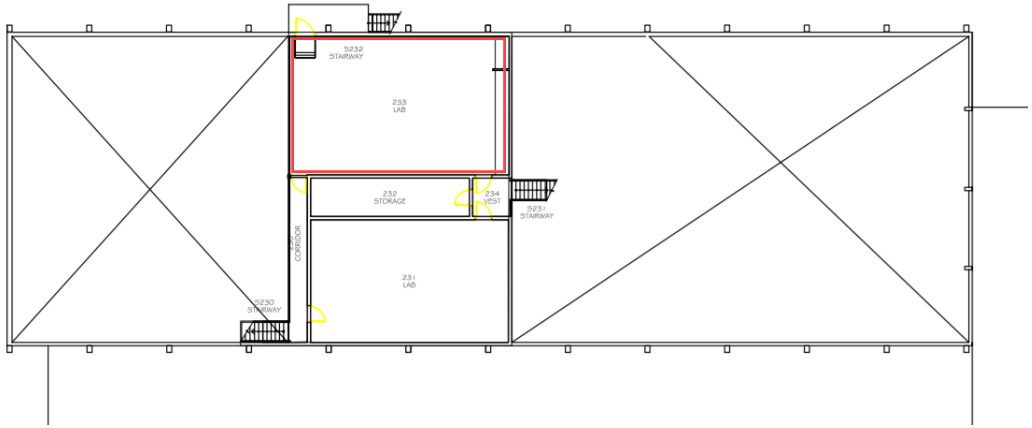
All COVID-19 risk control measures for this campus activity are in place.			
Manager	Name B R Dunn Brent Dunn	Position Associate Dean	Date Oct 30, 2020
EOC	Name *Glen Magel*	Position EOC Director	Date November 2, 2020

DOCUMENT SUBMISSION HISTORY

Oct 30, 2020	Updated end date to May 31, 2021 Updated toolroom capacity from 0 to 2 (1 student max, 1 staff as necessary) #42 – Added statement on PPE requirement when students and/or staff must be in close proximity. Added new activity for SW9-102 (Automotive Shop) for TTED4075 that starts in early November. Added new layout for toolroom (SW9-102A) to support student self-serve.	Brent Dunn, Associate Dean
Sept 28, 2020	Added room SW9-127 classroom for use as a break room for students, resubmitted for approval	Brent Dunn, Associate Dean
Sept 13, 2020	Approval by EOC	Glen Magel, EOC Director
Sept 9, 2020	Initial submission	Brent Dunn, Associate Dean

Spaces Covered by this Plan in Buildings SW09




5232
STAIRWAY
233
LAB
232
STORAGE
234
VEST
5231
STAIRWAY
CORRIDOR
231
LAB
5230
STAIRWAY

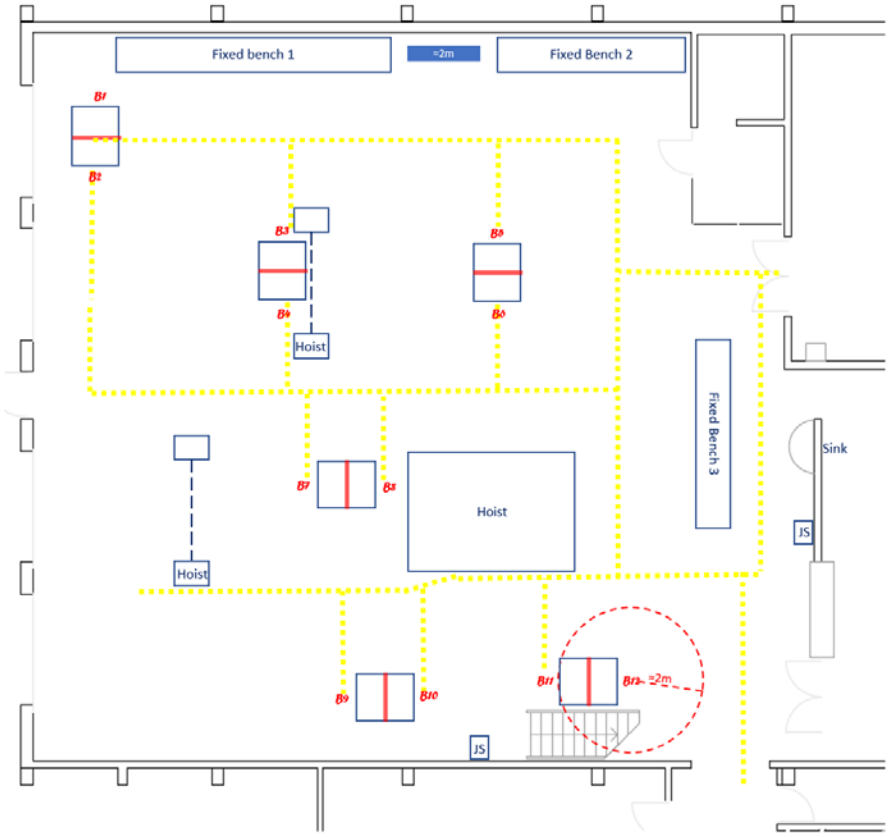
Room Schedules

	Mon	Tue	Wed	Thu	Fri
SW9-102 Auto	TTED3050 Oct 12-Dec 4		TTED4050 TTED 4075		TTED3022 TTED3044
102A Toolroom	TTED	TTED	TTED	TTED	TTED
102B Foundry			TTED3044 Oct 12-Dec 4		TTED3044 TTED 3004
103 Wood	TTED 3001 TTED 3033		TTED 3002	TTED 3001	
103C Glueup	TTED 3001 TTED 3033				
106		MANU3312	MANU3310	TTED5020	TTED3022
106E Welding				TTED5020	TTED3004 Oct 12-Dec4
107		MANU3317			
117 Classroom	TTED	TTED	TTED	TTED	TTED
123		TTED 4060	TTED3060 Oct 12-Dec 4		TTED3044
233	TTED	TTED	TTED	TTED	TTED

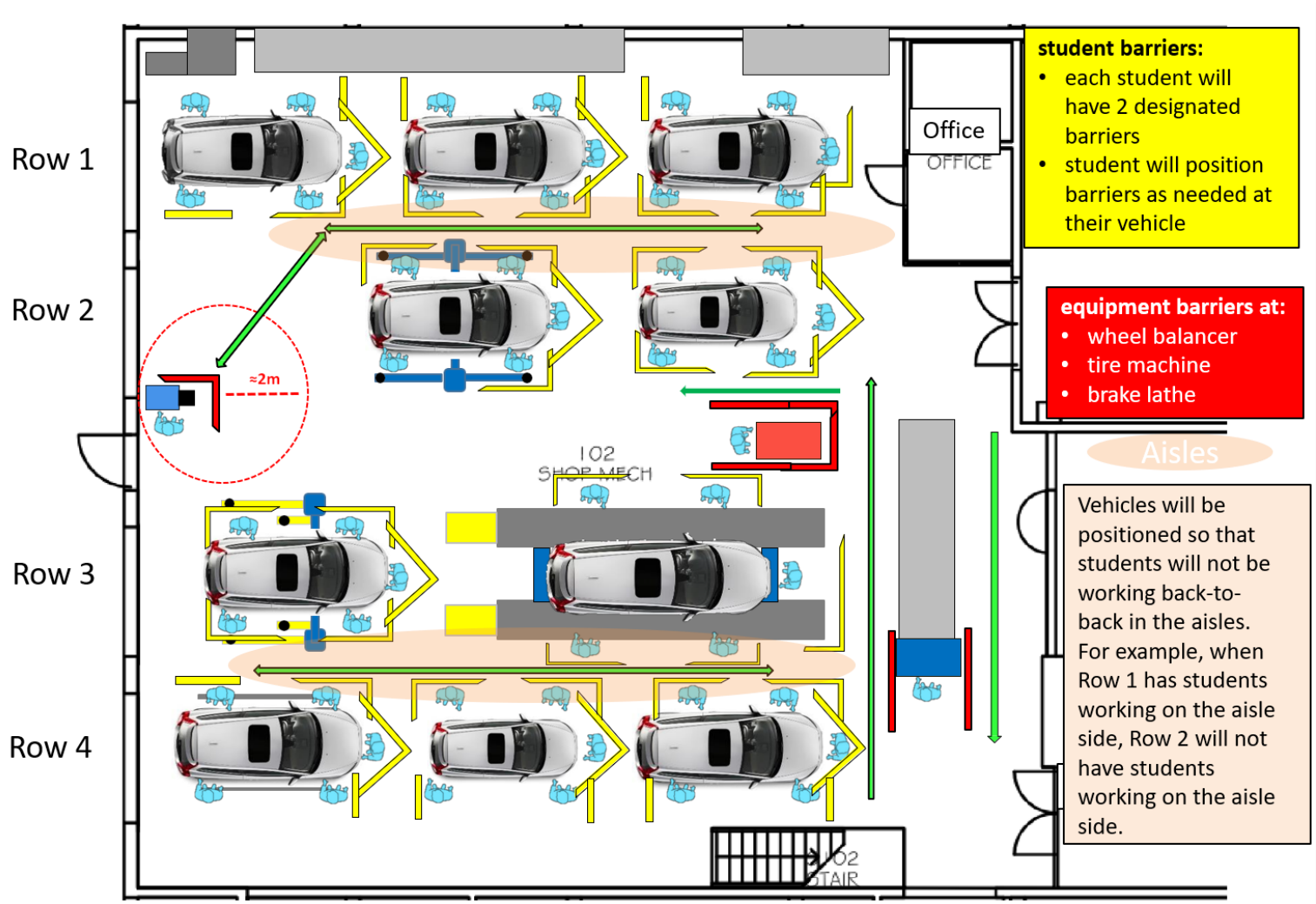
SW09-102 Safety Plan

SW09-102 is used for two different activities; benchwork to support various courses plus open shop space for automotive repair instruction.

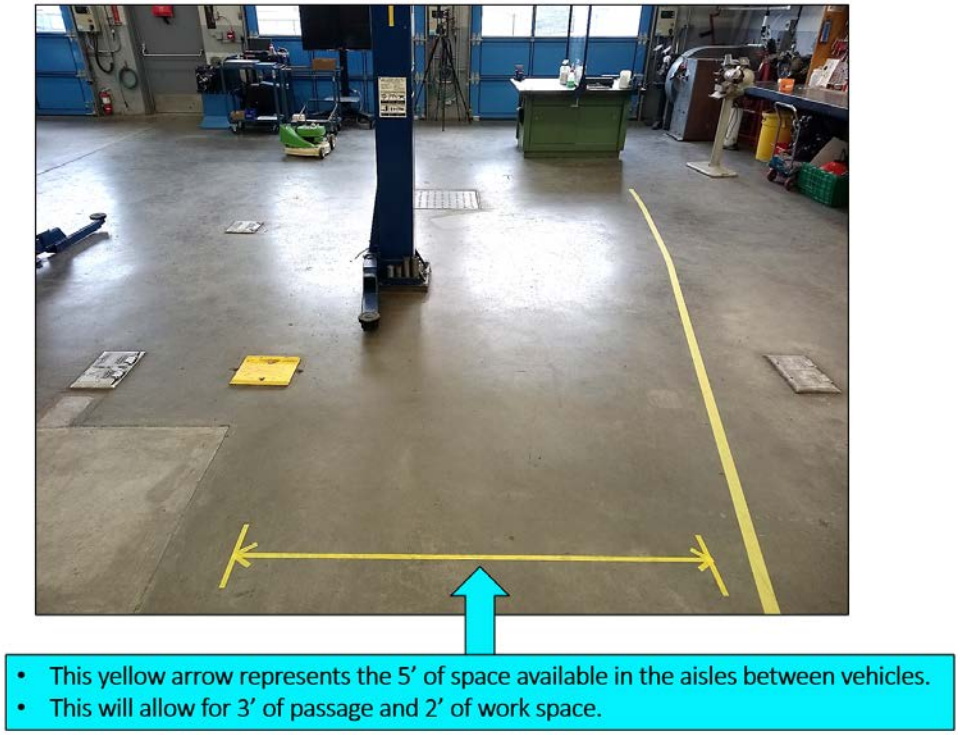
For benchwork, SW09-102 will accommodate 12 physically-distanced 4'x5' bench stations, with 4' wide barriers ( ) installed in middle of benches. Benches are varying sizes; if barriers are identical heights, consideration will be made in assigning tall students to high benches to ensure that barriers are sufficient height. Students will only use vices that are on opposite corners from each other. Each bench has stowage areas below the surface for personal belongings.



For automotive repair (TTED 4075 and TTED 5050), the benches will be removed to open the space for up to 10 vehicles for automotive instruction. Equipment used includes the wheel balancer, tire machine, brake lathe, automotive lifts, jacks, and jackstands. Students complete self-directed projects and will use a variety of hand-held equipment including diagnostic testers and hand tools.



The following image shows the spacing between vehicles. Vehicles will be strategically arranged to avoid students working in close proximity. Barriers will be used by students.



Use Description SW9-102

Course	TTED 3009 Basic Safety Foundations (Sept 9 – Oct 9)
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, most labs online)
Description of Equipment used	SW9-102 workbenches
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized equipment.

Course	TTED 3022 Tool Essentials - Metalworking
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students will attend every second week)
Description of Equipment used	SW9-102 workbenches for benchwork SW9-106 for equipment (Considered within the SW9-106 plan) • 11 lathes • 2 mills • 1 drill presses • 1 each sheet metal equipment (punch, brake, shear, notcher)
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

Course	TTED 3044 Materials Science
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students will attend every second week)
Description of Equipment used	SW9-102 workbenches for benchwork SW9-102B (Foundry) (Note: SW9-102B is considered within the SW9-106 plan) • 1 oven (1 student at a time) • 1 forge (1 student at a time)

Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

Course	TTED 5020 Teaching Metal Product Manufacturing
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students will attend every second week)
Description of Equipment used	SW9-102 workbenches SW9-106 for equipment (Note: Considered within the SW9-106 plan) • 11 lathes • 2 mills SW9-106E welding lab (Note: Considered within the SW9-106 plan)
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

Course	TTED 3050 Power Technology Foundations (Oct 13 – Dec 4)
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students will attend every second week)
Description of Equipment used	SW9-102 workbenches
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

Course	TTED 4050 Power Technology for TTED (Sept 9 – Nov 6)
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students will attend every second week)

Description of Equipment used	SW9-102 workbenches
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

Course	TTED 4075 Automotive Fundamentals (Nov 6 – Dec 4)
Program	Technology Teacher Education Diploma
Number of students per lab session	10 max (1 lab session/week, students will attend every second week)
Description of Equipment used	Hoists, jacks, jackstands, wheel balancer, tire installer, brake lathe, parts washer, miscellaneous hand and diagnostic equipment
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

Course	TTED 4075 Automotive Fundamentals (Jan – May 2021)
Program	Technology Teacher Education Diploma
Number of students per lab session	10 max (1 lab session/week, students will attend every second week)
Description of Equipment used	Hoists, jacks, jackstands, wheel balancer, tire installer, brake lathe, parts washer, miscellaneous hand and diagnostic equipment
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

PPE and Sanitizing

Item	Quantity	Consumption rate	Location	Comment
Pump bottle hand sanitizer	20	2/term	At each workbench and at each stationary table where there may be shared tools	
Disposable Face Masks	60	10/week	Near entrance	When students and/or staff need to work in close proximity
Disinfecting wipes	30 containers	2/term	At each workstation At instructor table	1 at each student and fixed bench
Spray Nine disinfectant spray				
Nitrile Gloves	Already stocked by program			
Disinfecting of common touchpoints.	Facilities work request **1450738** will have touch points such as door handles, light switches, sinks, faucets, etc. disinfected at the end of each work day.			

Technology Teacher Education (SW09-103 & 103C) - Notes: This woodworking shop features 11 physically distanced workstations, and access to various pieces of equipment. Equipemtn shown with an X will not be used. In some areas, just one piece of equipment will be used at a time to maintain social distancing. Pathways, bench placement, and barrier placement are not precise as drawn, but are 2m physically distanced while occupants are using benches/ equipment, and when moving throughout space. Students will be required to access room 103C to work on Glue-Up tables as part of their projects. 103C capacity is 2 students. Specialized tools are typically accessed by students in the 103B Tool Room, but instructor will instead sequester tools prior to instruction and leave on a cart outside this room. All other tools will be assigned to students for duration of instruction. Project storage in 103C will only be accessed prior to and following conclusion of classes.

COVID-19 SAFETY PLAN
ACADEMIC SPACES

Use Description SW09-103

Course	TTED 3001 Industrial Design
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students attend every second week)
Description of Equipment used	11 workbenches
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized equipment.

Course	TTED 3002 Precision Measurement Foundations (Sep 9 – Oct 9)
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students will attend every second week)
Description of Equipment used	11 workbenches Students supplied with individual measuring tools Some expensive tools shared
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized equipment.

Course	TTED 3033 Tool Essentials - Woodworking
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students will attend every second week)
Description of Equipment used	11 workbenches Students supplied with individual hand tools.
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized equipment.

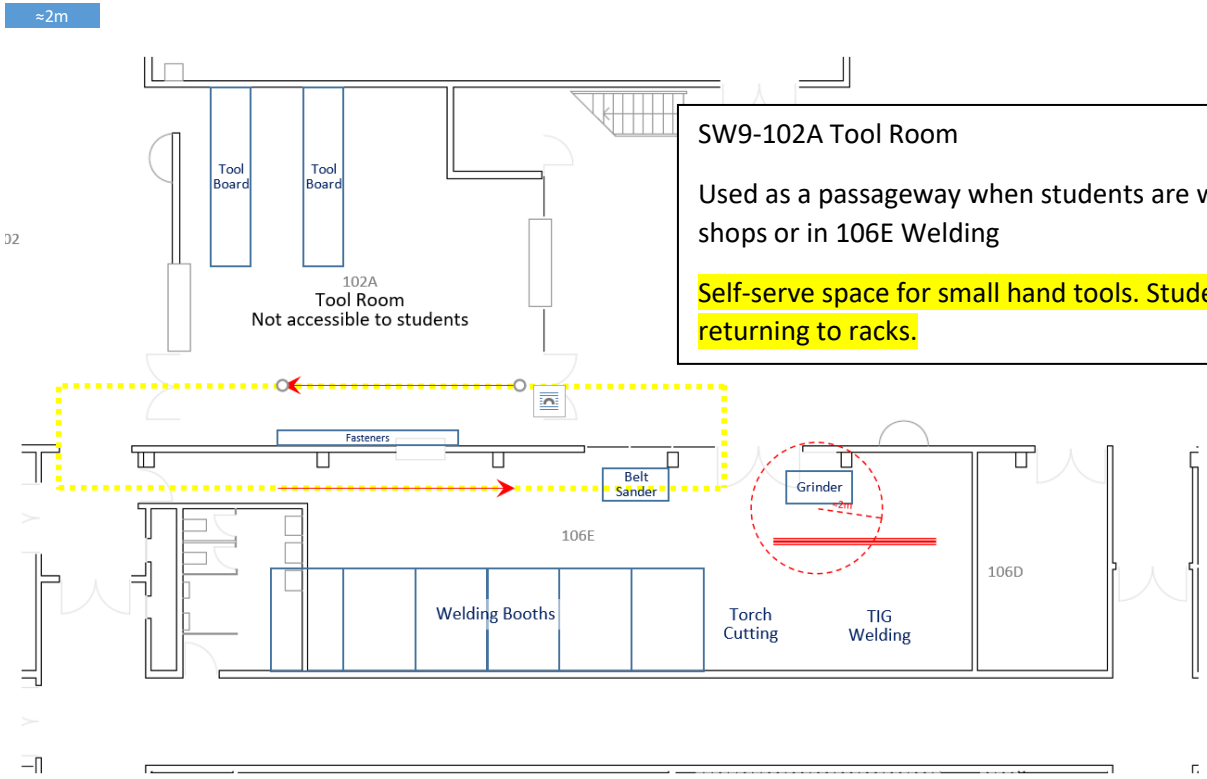
PPE and Sanitizing

Item	Quantity	Consumption rate	Location	Comment
Pump bottle hand sanitizer	16		At each workbench and at each stationary table where there may be shared tools	
Disinfecting wipes	15 Box 100		At each workstation At instructor table	

Welding Shop & Tool Room: SW09-106E & 102A

Notes: The student capacity for this shop space is 6 students, based on the number of welding booths in this space. Students may use ancillary equipment such as the Torch Cutting or TIG Welding area, but only one at a time. If space permits, a barrier can be installed between the TIG/ Torch area to permit simultaneous use of the grinder. The belt sander can only be utilized if there is no movement in the corridor, which should be unidirectional to discourage accidental physical encroachment. This traffic flow supports the need for students to access the Tool Room (102A). However, precaution will have to be exercised within the Tool Room and welding booths to prevent potential for students to bump into each other on blind corners.

Acrylic or similar barrier

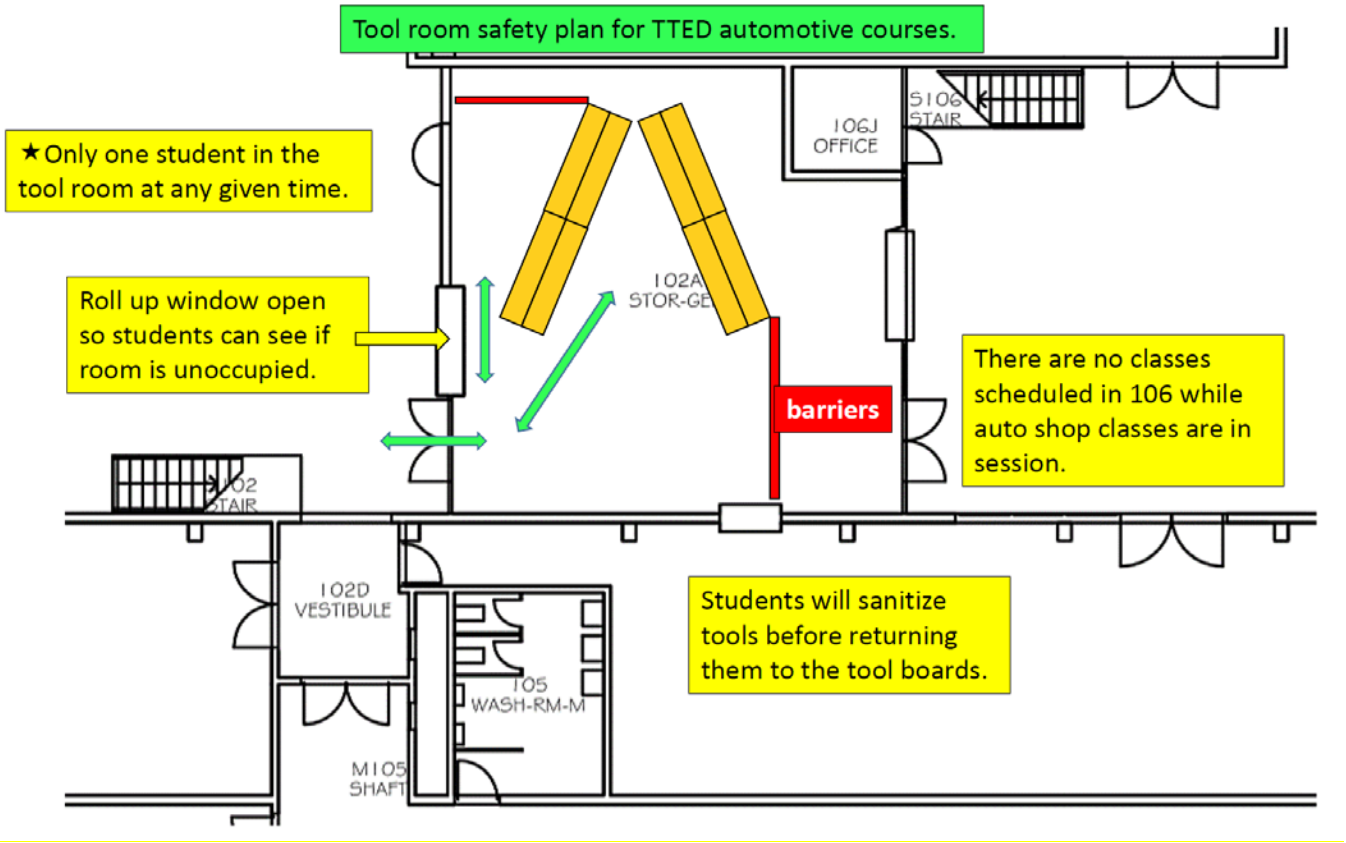


SW9-102A Tool Room

Used as a passageway when students are working in both 102 and 106 shops or in 106E Welding

Self-serve space for small hand tools. Students will clean tools before returning to racks.

When automotive classes are running, students will access tools from the toolroom and sanitize them before returning them to the tool racks. One student will be permitted in the room at a time.

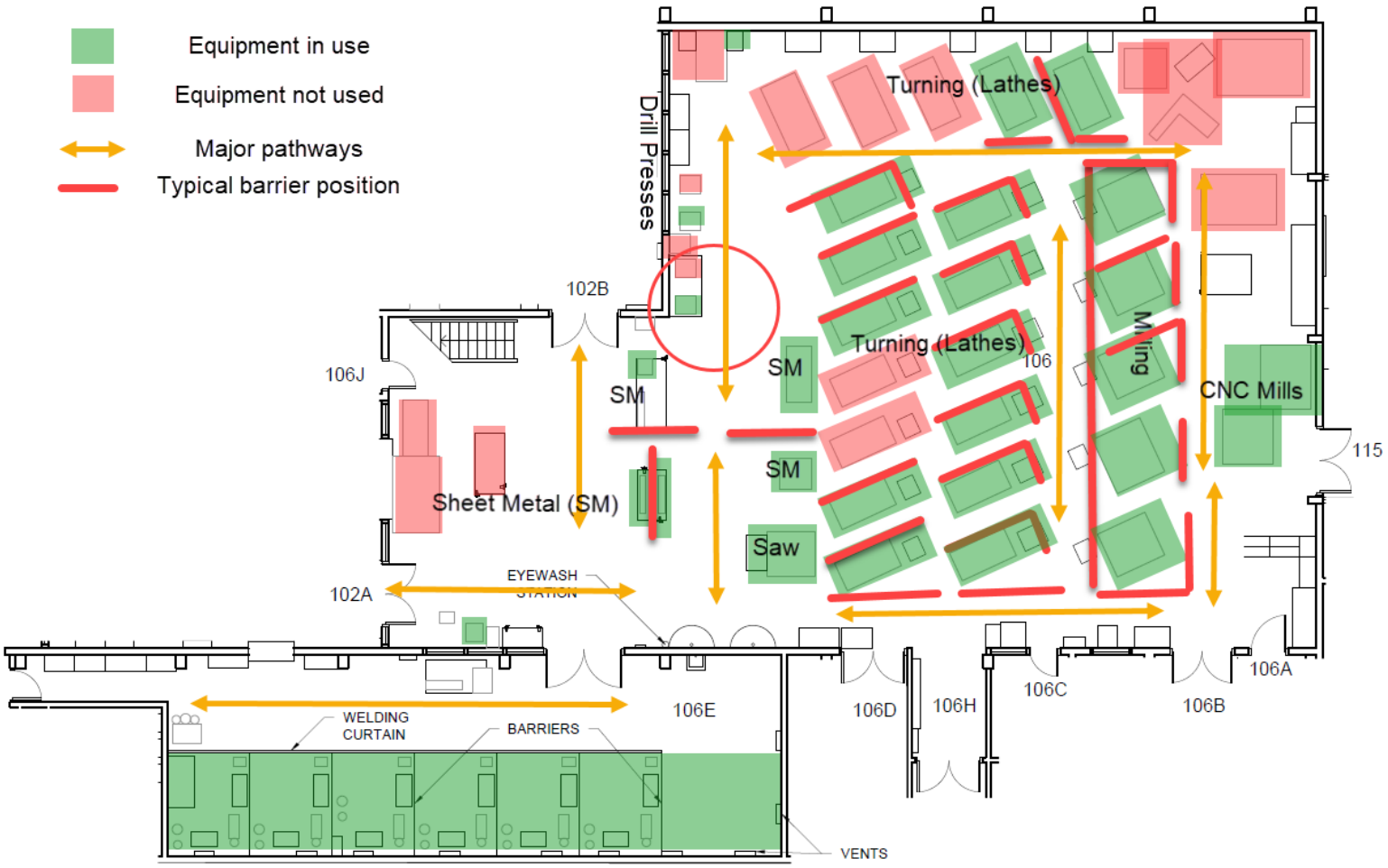


Machine Shop & CNC: SW09-106

Notes: Several distinct activities occur in this shop. Two different programs use the space, and students have been divided into smaller groups of 11 or 7. For the CNC Mills, there are typically a group of students per machine plus an instructor. However, to enforce physical distancing, only one student will operate each machine, for a total of two students plus one instructor. This activity requires the instructor to be in very close proximity to students, so other mitigating measures such as PPE be required for the instructor, provided the two students do not need to be in close proximity to each other. For the lathe and mill area, a student capacity of 11 can be achieved with discrete path markings and installation of barriers where noted is necessary to enforce physical distancing between students, given the tight spaces. Mills may be utilized by the same students that are utilizing the lathes. The CNC Mills will not be used at the same times as the Milling area. The Saw and the two pieces of adjacent sheet metal equipment (SM) will not be used at the same time as the adjacent lathes.

For benchwork, students will use the benches in the adjacent shop SW9-102. The shops are connected via several rooms which will be used as corridors.

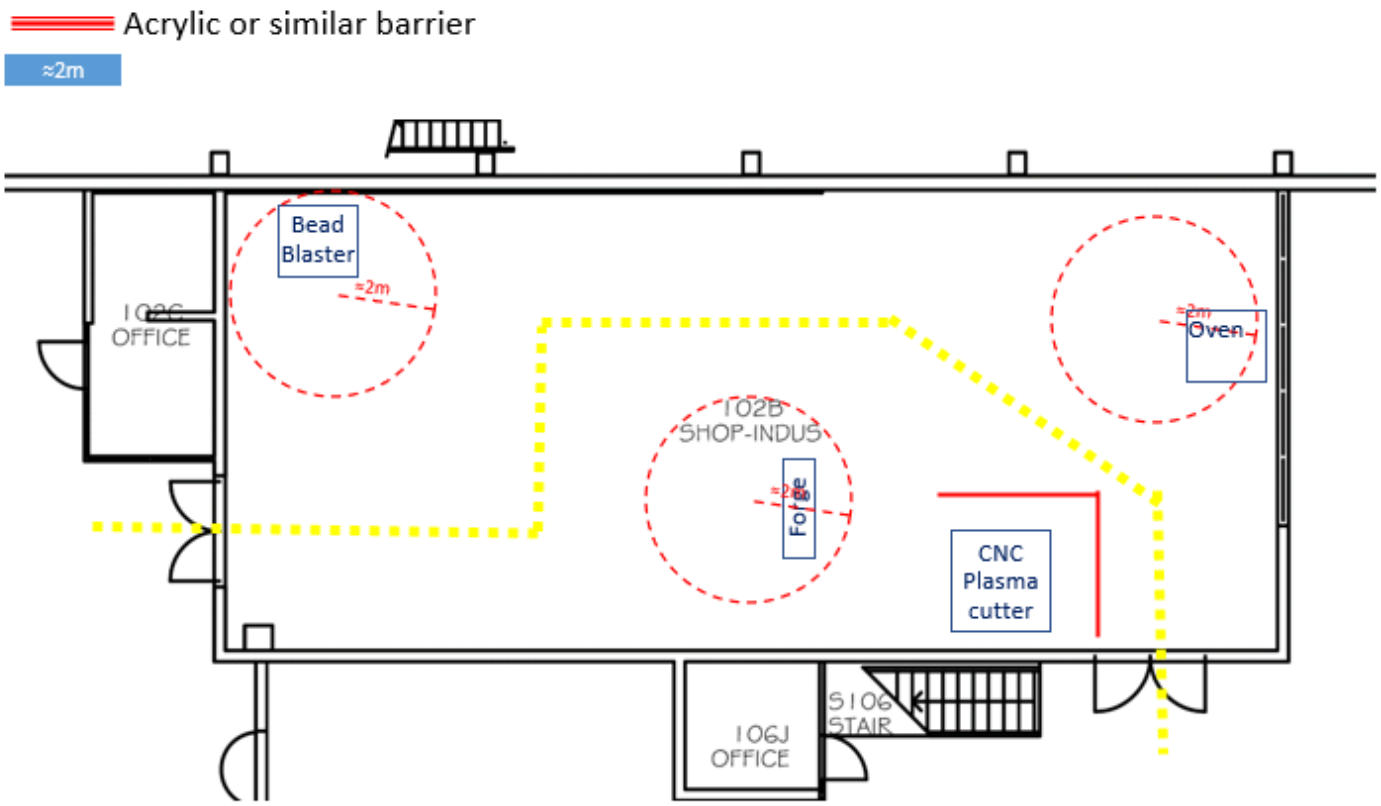
COVID-19 SAFETY PLAN
ACADEMIC SPACES



BCIT

Foundry: SW09- 102B

Notes: Students will be using four pieces of equipment in this area including one oven, CNC plasma cutter, forge, and bead blast cabinet.



Use Description SW9-106

Course	MANU 3310
Program	Mechanical Engineering Technology, Manufacturing Option
Number of students per lab session	7 max (1 lab session/week, students will attend every third week)
Description of Equipment used	5 Manual Milling machines 7 Manual lathes 1 Pedestal Grinders 2 Drill Presses
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

Course	MANU 3312
Program	Mechanical Engineering Technology, Manufacturing Option
Number of students per lab session	7 max (1 lab session/week, students will attend every third week and will be subdivide further for CNC Milling demos or setup)
Description of Equipment used	2 CNC milling machines HAAS VF2, HAAS TM1
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

Course	TTED 3022 Tool Essentials - Metalworking
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students will attend every second week)
Description of Equipment used	SW9-102 for benchwork SW9-106 for equipment 11 lathes 2 mills

	1 drill presses 1 each sheet metal equipment (punch, brake, shear, notcher)
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

Course	TTED 5020 Teaching Metal Product Manufacturing
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students will attend every second week)
Description of Equipment used	SW9-102 for benchwork SW9-106 for equipment 11 lathes 2 mills SW9-106E welding lab
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

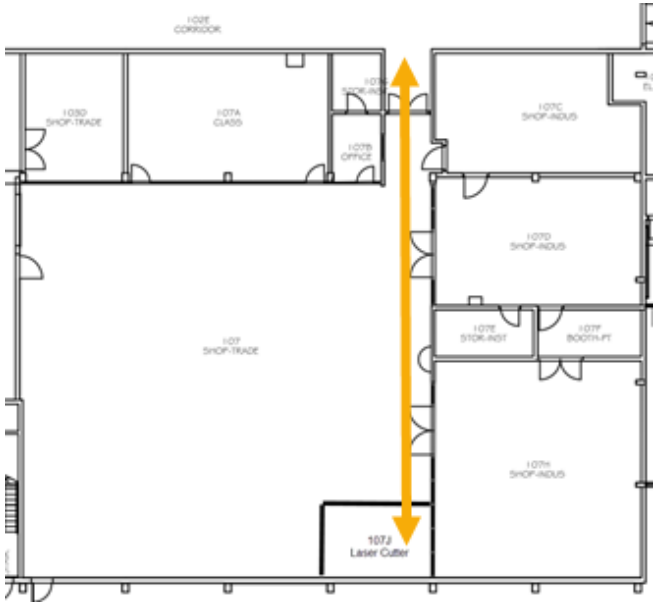
Course	TTED 3004 Joining Process Foundations (Oct 13-Dec 4)
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students will attend every second week)
Description of Equipment used	SW9-106E welding lab May need to locate some spare equipment in SW9-102B foundry
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

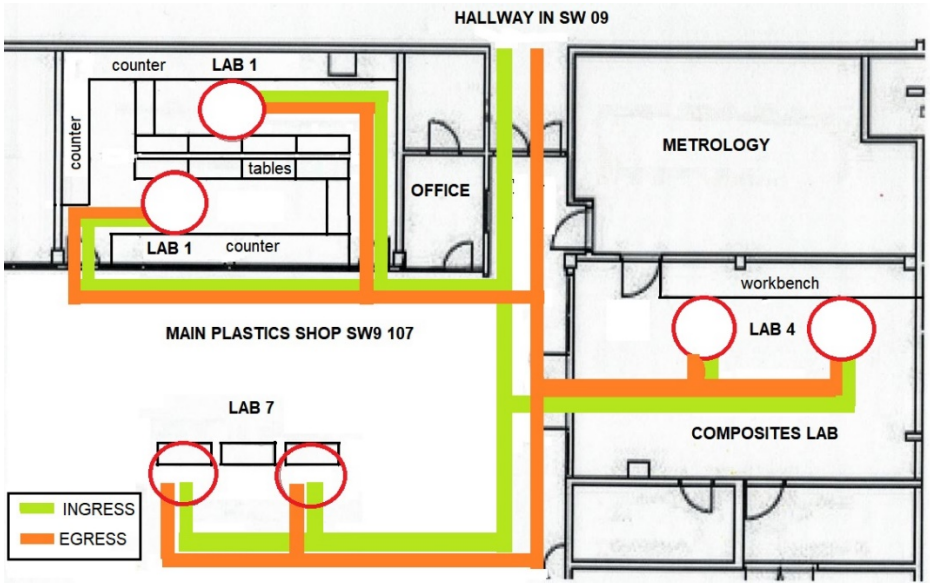
PPE and Sanitizing

Item	Quantity	Location	Comment
Pump bottle hand sanitizer	1	At lab door sanitizing location At blast cabinet	In lieu for Sanitizing station. Used upon entry and prior to exit of lab
Disinfectant Wipes	8 containers	At each CNC mill (2) At each mill (5) At each lathe (12) At each sheet metal tool (4) At each drill press (2) At CNC Plasma (1) At blast cabinet (1)	Cleaning of equipment
Spray Nine Disinfectant Spray		In central location	
Nitrile gloves (medium)	Box 100		For using Spray 9
Nitrile gloves (large)	Box 100		For using Spray 9

SW09-107 shops

This large shop has several smaller rooms. The space is mainly used by the Manufacturing option of Mechanical Engineering and will be used by 7 students; 2 in SW9-107A, 3 in SW9-107D and 2 in SW9-107. On occasion, but not at the same time, one student from the TTED program may use the laser cutter in room SW9-107J.





Use Description

Course	MANU 3317
Program	Mechanical Engineering Technology, Manufacturing Option
Number of students	7 (1 lab session/week, students will attend every third week)
Description of Equipment used	**LAB 1: TESTING:** Purpose: this lab is critical to give the students hands-on feel for the properties of plastic materials. They will test various materials according to ASTM formal test procedures. Format: two students will be admitted to the classroom in 107 through their own individual entrances. The room will be split in half by placing a row of tables down the middle. Each student will use only the testing devices on their half on the classroom and at no time will they be required to share materials, tools or space. Two meter separation between students can easily be maintained at all times. They will be required to read and/or watch documentation as to how their tests are to be performed. The instructor will visit each half of the classroom for instructional purposes only. Masks and/or face shields will be worn as advised. The lab will not be repeated for one week, therefore no disinfecting of equipment is anticipated. **LAB 4: COMPOSITE MANUFACTURING** Purpose: Composites are a huge and growing portion of the plastics industry. We have a well equipped shop which will allow us to teach students the skill of manufacturing a composite (fiberglass) part. Format: two students will manufacture parts at one time. There is sufficient space to easily maintain two meter separation. The instructor will visit each space as required, utilizing mask/shields as recommended. Each student will have their own tool kit and at no time will students be required to share tools, materials or each other's space. Students and the instructor will enter and exit the composites shop through one door. Lines and arrows will be placed on the floor to maintain flow and spacing. **LAB 7: EXTRUDER SCREW INSPECTION** Purpose: Approximately 85% of plastics undergo the extrusion process at some point. As we are unable to operate an extruder, typically done in teams, the students will have a hands-on opportunity to examine the heart of the process, the extruder screw. Format: Two students will each sit at their own table easily maintaining two meter separation. A third table will be placed between their tables. The same three extruder screws will be measured by each student in rotation. The third (separating) table will hold one screw and two hand sanitizing stations. The students therefore will share the extruder screws (each screw is one piece), but each will have their

	own toolkit and will not share tools or space at any time. The lab will not be repeated for seven days so there should be no need to sanitize the screws, tables or the tools. The instructor will visit each space as required, utilizing mask/shields as recommended.
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment so they have a meaningful educational experience.

Course	TTED 4060 Teaching Electronics 1
Program	Technology Teacher Education
Number of students	1 max in SW9-107J (Laser Cutter room)
Description of Equipment used	The Laser Cutter will be used by one student at a time
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized, expensive equipment.

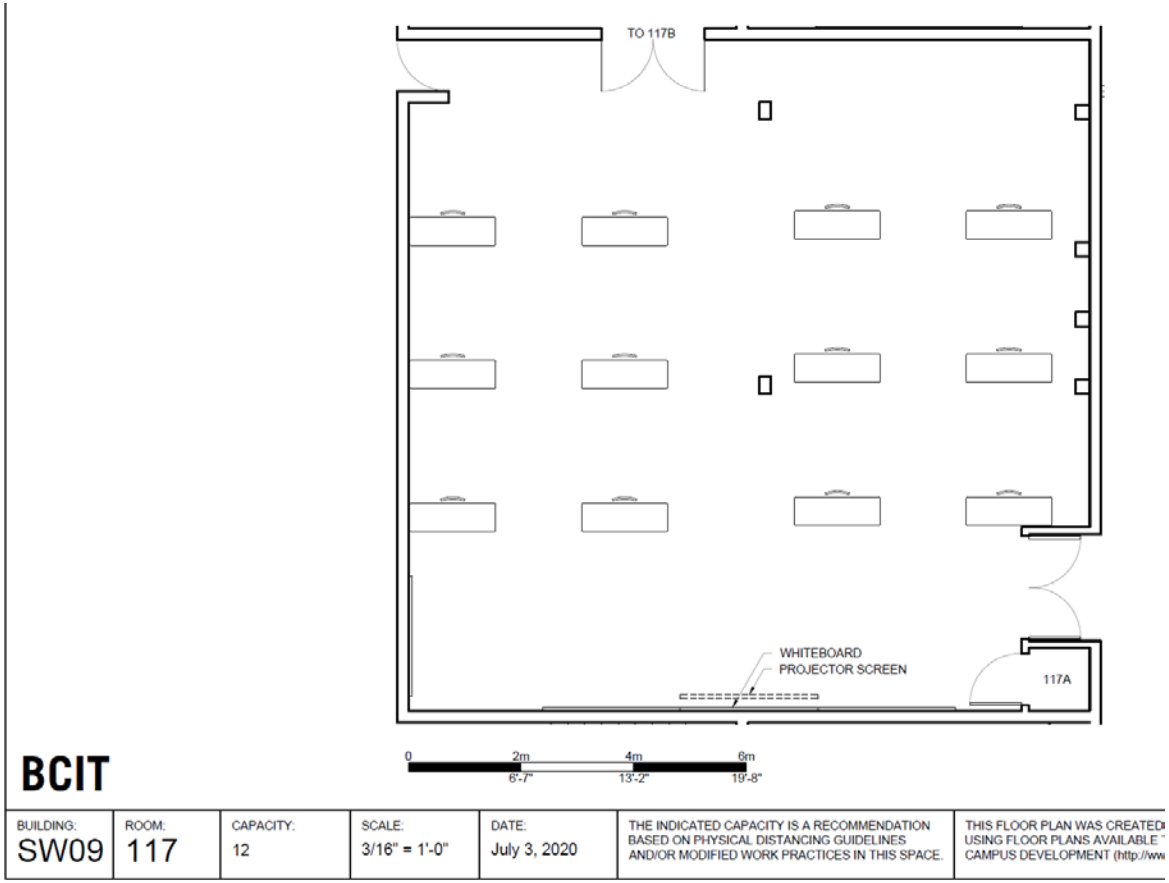
Barriers

Location	**Quantity**	**Size (WxH inches)**	**Mounting (Free standing, table top, etc.)**	**Opaque/Clear**	**Comment**
None required					

PPE and Sanitizing

Item	**Quantity**	**Location**	**Comment**
Pump bottle hand sanitizer	2	On table with shared extruder screw (lab 7) At laser cutter	
Disinfecting wipes	2	At laser cutter	

SW09-117 – Classroom



Use Description

Course	FIRE 2084, FIRE 1050, FIRE 2080 (PTS)
Program	Fire Protection Inspection and Testing Associate Certificate
Number of students	12 max

Description of Equipment used	For midterm and final exam testing only. Faculty will be required to make alternate arrangements for examinations for students who are not able to come to campus.
Why do students need to use this space? What's special that cannot be done at home?	Exams are similar to certification exams and passing an exam allows students to register with ASTTBC to practice in the area of fire protection system inspection. All parties are concerned about exam integrity.

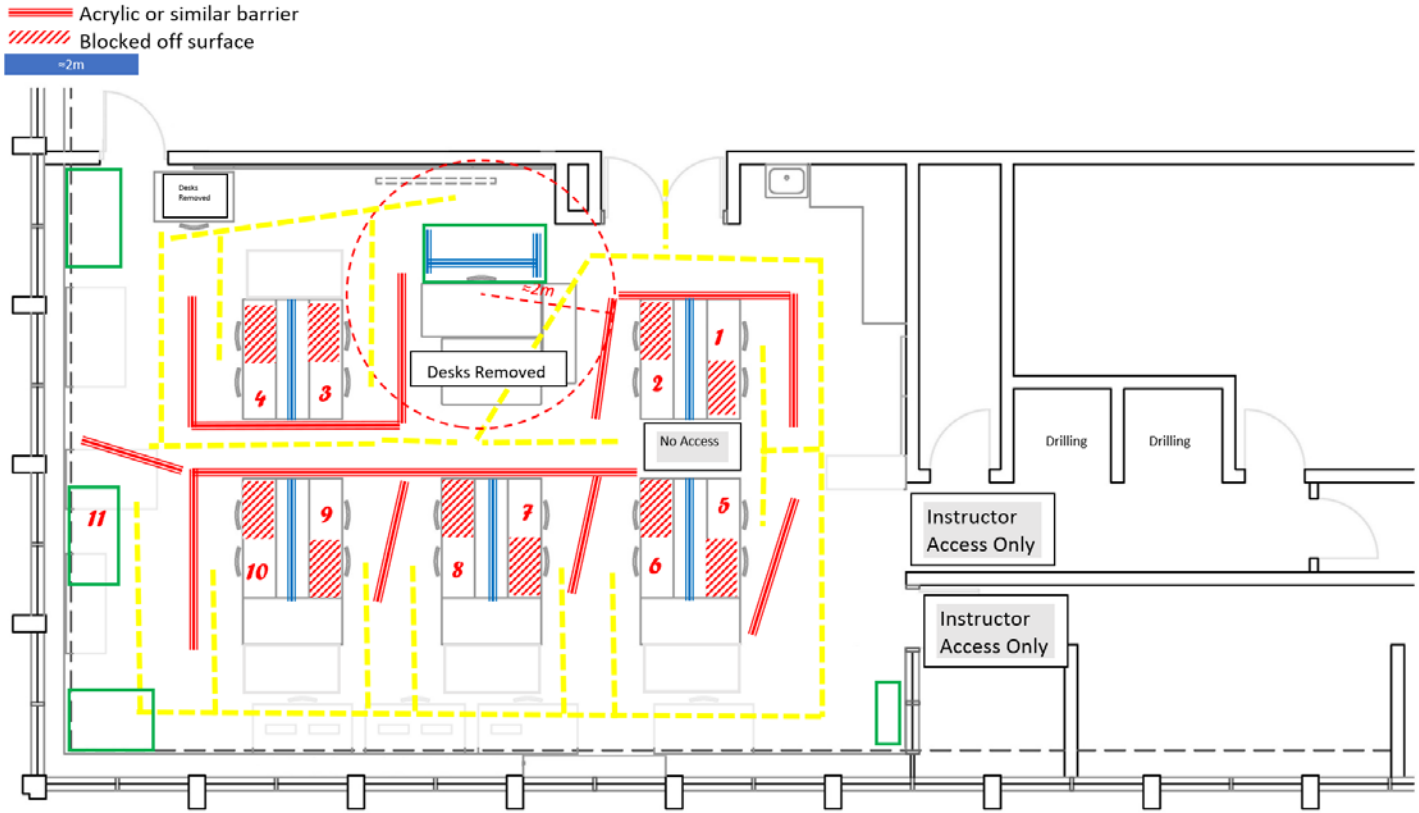
Course	TTED Program
Program	Technology Teacher Education
Number of students	12 max (11 students will be on campus at a time)
Description of Equipment used	N/A
Why do students need to use this space? What's special that cannot be done at home?	The space will be used as a lunch room for TTED students who are on campus for hands-on labs.

PPE and Sanitizing

Item	**Quantity**	**Location**	**Comment**
Pump bottle hand sanitizer	2	At entrance and exit doors	Used upon entry and prior to exit of room
Disinfecting Wipes	12	At each table, for wiping down table and chair	Will also be cleaned at end of day by custodial staff

Technology Teacher Education (SW9-123)

Notes: The student capacity for this bench lab is 11 students, provided barriers are installed in noted locations, and students access desks from noted pathway. Drilling stations will not be utilized. Parts cabinets will also be blocked off, while parts will be pre-portioned and provided to students before activities, negating the need for students to move throughout room during lesson. Instructor may be required to step aside as students 2, 3 and 4 travel to seats. Where students would typically huddle towards instructor for small-scale demonstrations, recommend use of video broadcasting equipment to a television or projector within room.



Use Description

Course	TTED 4060 Teaching Electronics 1
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, most labs online)
Description of Equipment used	11 workbenches equipped with power supply, soldering iron, SW9-107J (on occasion) • Laser cutter
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized equipment.

Course	TTED 3060 Electronic Foundations (Oct 13 – Dec 4)
Program	Technology Teacher Education Diploma
Number of students per lab session	11 max (1 lab session/week, students will attend every second week)
Description of Equipment used	
Why do students need to use this space? What's special that cannot be done at home?	Students require access to specialized equipment.

Barriers

Location	Quantity	Size (WxH inches)	Mounting (Free standing, table top, etc.)	Opaque/Clear	Comment
See plan					

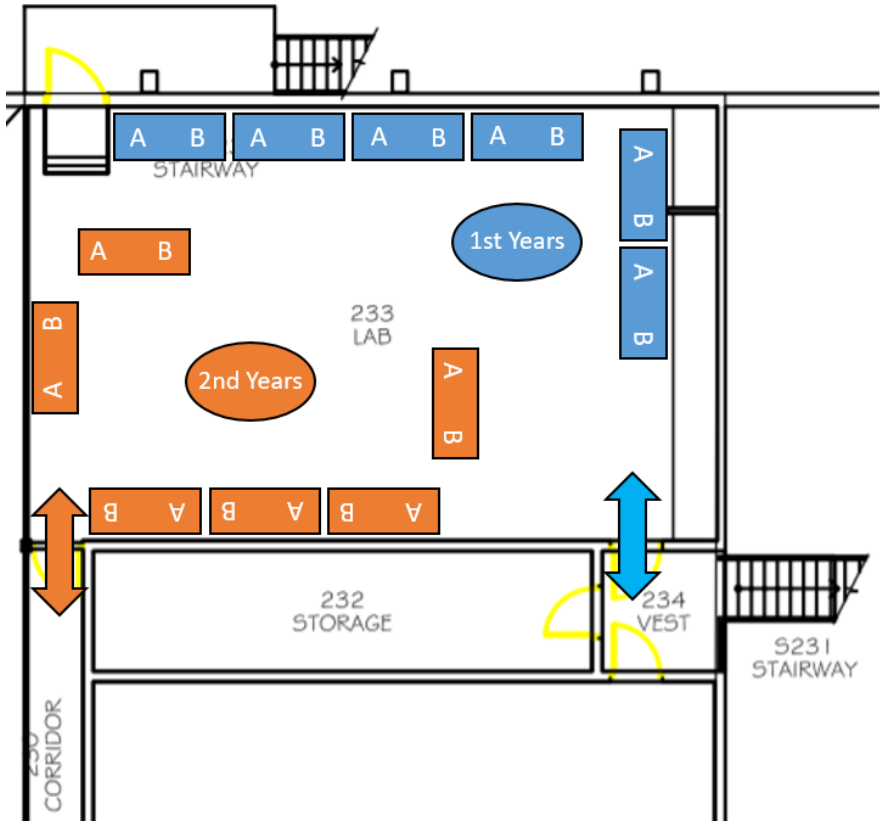
PPE and Sanitizing

Item	Quantity	Consumption rate	Location	Comment

Pump bottle hand sanitizer	16		At each workbench and at each stationary table where there may be shared tools	
Disinfecting wipes	15 Box 100		At each workstation At instructor table	Students to wipe down workspace and common touch points on equipment at start and end of class

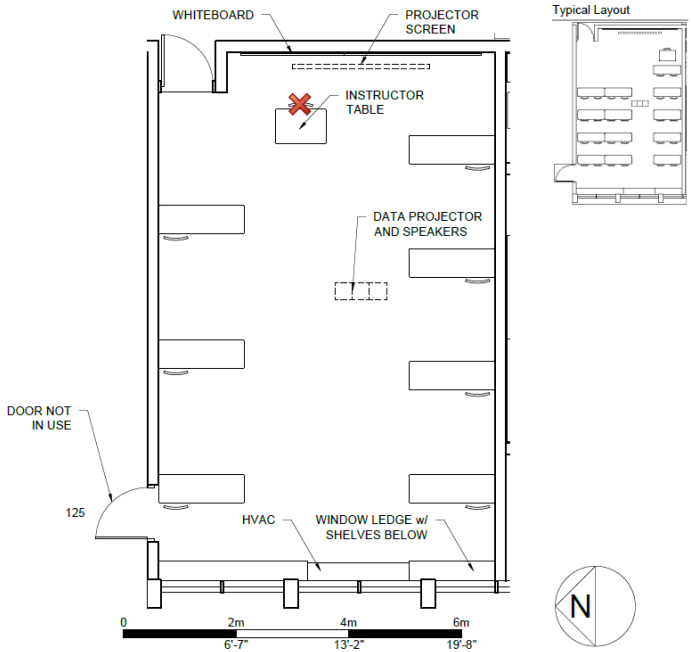
SW9-233 - Classroom

Room 233 will be used for the storage of TTED student coveralls, safety footwear and student-owned toolboxes. Students will be sent up to 233 one at a time. The "A" and "B" represents our two groups within each year. When group A is on campus, group B is at home and vice versa. So for any given day, there will only be one person accessing the items on a given table. Each table will be labelled with the student's name so they always place their items on the same table. This is being done for the students as they will no longer be able to access the lockers. Common touch points will be disinfected at the end of each day via Facilities work request **1450791**. First year students will enter and exit room 233 via the west entrance while second year students will use the east door.



SW9-127 Classroom

This classroom, with a capacity of 7, will be used as a break room for students in Mechanical Engineering who are required to be on campus but have a mixture of on-campus and online activities in the same day. Students will use the space for participating in online classes and for a lunch room. Although SW9-117 is also configured and approved for a similar activity, it is being used primarily by the Technology Teacher Education program whose students are on campus most days. This results in time conflicts and too high a chance of co-hort mixing. The room will be timetabled once the plan is approved.



Building	Room	Typical Capacity	Physical Distance Capacity
SW09	127	26	7

Capacity does not include instructor.
Please return the room to this standard configuration
and leave the space clean and orderly for the next user.

Tables	Chairs	Area Sq. feet	Area Sq. meters	Scale	Date
8	8	593	55	3/16" = 1'-0"	August 21, 2020

Use Description

Course	Mechanical Engineering; Design, Manufacturing, and Systems Options ; Mechatronics and Robotics
Program	Mechanical Engineering Technology Diploma; Mechatronics and Robotics Technology Diploma
Number of students	7 max
Description of Equipment used	N/A
Why do students need to use this space? What's special that cannot be done at home?	The space will be used as a break room and a lunch room for students who have a mixture of on-campus labs and on-line classes on the same day with not enough time to transit in between. The department will schedule the space to fit student schedules.

PPE and Sanitizing

Item	**Quantity**	**Location**	**Comment**
Pump bottle hand sanitizer	2	At entrance door	Used upon entry and prior to exit of room
Disinfecting Wipes	7	At each table, for wiping down table and chair	Will also be cleaned at end of day by custodial staff