

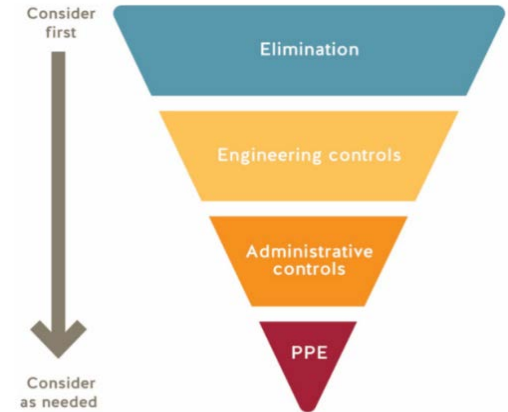


BCIT COVID-19 SAFETY PLAN ACADEMIC SPACES

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:	Biotechnology		
Proportion of program offered on campus:	Program = 13 courses for Winter Term, 8 of which will have some limited in-person component		
Start date:	Jan. 1 st 2021	End date:	April 30 th , 2021
# of students:	15 in 1 st year cohort, 19 in 2 nd year cohort	# of employees:	9
Completed by:	Name Sarah McLeod	Position Department Head	Date Nov. 14 th , 2020



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 <small>Floor Plans found here</small>	Type of Space <small>Include washrooms and breakout rooms</small>	Capacity <small>Current capacity due to COVID-19</small>
Burnaby SW09	209	Main laboratory space	10 students + 2 staff
Burnaby SW09	209C	Smaller lab space (Equipment room)	2 students or 1 student+1 staff
Burnaby SW09	207B	Tissue Culture Lab	4 students + 2 staff
Burnaby SW09	207E	Smaller lab space (Fermenter room)	2 students + 1 staff
Burnaby SW09	206	Classroom (to be used as staging area)	10 students (seated) + 1 staff (standing at door)
Burnaby SW09	208	Office	8 staff
Burnaby SW09	207H	Prep Room	2 staff
Burnaby SW09	207A	Chemical Storage	1 student/1 staff
Burnaby SW09	207C	Plant growth room	1 student/1 staff
Burnaby SE4 (Greenhouse)	122	Greenhouse	2 students + 1 staff



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Burnaby SE4 (Greenhouse)	121	Potting room	2 students + 1 staff
Burnaby SW03	2660	Lab	8 student + 2 staff

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).

The BCIT Biotechnology Program is a unique program that is joint with the University of British Columbia. Students complete 2 years of their 5 year Honours B.Sc. Degree at BCIT, where they have intensive exposure to hands on laboratory skills that are not available to students at UBC. These students then go out into the local Biotechnology Industry as co-op students and graduates and are highly sought after for their job ready skills. Certain laboratory techniques must be performed hands on in order to gain the necessary psychomotor skills to become proficient. Online demonstrations of a technique can not replace this hands-on experience. Without hands-on practice in the lab students would not gain the skills that set them apart from other undergraduate students in the Life Sciences and would not be as readily employable for co-ops and as graduates.

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.

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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 returmtocampus@bcit.ca for room capacity and layout if needed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>All student work stations/seating areas are either 2 m apart in all Biotechnology student spaces listed under room information (labs/greenhouse/classrooms) or barriers have been installed where 2m distance can not be obtained. See attached schematics for each of the Biotechnology student spaces, and the accompanying notes describing barriers that have been installed and traffic flow.</p> <p>Staff office (SW09 Room 208) cubicle seating is 2 m apart and staff will be working from home unless they are teaching or preparing an in-person lab, thus reducing the number of people in the office space. To maintain 2m of distance staff desks in cubicles will have taped areas where they can not work. Taped areas on floor outside cubicles will be “no standing/walking zones” to maintain 2m of distance. Staff will use good communication to navigate the central corridor between cubicles. The lunch table will not be used for Fall term.</p> <p><i>Exceptions allowed as per BCIT COVID-19 Go-Forward Plan, Risk Matrix Summary (explain):</i></p>
2.	Demonstration, work and assessment stations are set-up to allow for 2 metres physical distancing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>For student labs, instructors will provide all demonstrations of lab techniques as online videos for students to watch prior to coming to lab. Student work stations will be stocked with everything students need so that movement around the room is minimized. Barriers are in place in the main lab space (SW09 209) and the tissue culture room (SW09 207B) so that in the rare event that students must move around the room they can safely pass within 2m of another student’s work station. See attached schematics that demonstrate 2m of physical distance and/or barrier placement in all Biotech lab spaces.</p> <p>In staff office space, cubicle spacing allows 2m of physical distancing.</p> <p><i>Exception allowed as per BCIT COVID-19 Go-Forward Plan, Risk Matrix Summary (explain):</i></p>
3.	Identified area(s) where students wait outside of teaching space until allowed inside by instructor.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Students will use SW09 room 206 as a staging area – this will avoid crowding in the hallway while students are waiting to be brought into the main lab (SW09 room 209). Students will be brought into the lab from this room in a set order to fill the lab while maintaining 2m distance (so that students don’t congregate at hand washing stations as they move to their work station).</p>
4.	Work has been scheduled to minimize numbers of individuals on campus at one time.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Students will be in the biotechnology labs for only 1.5 days/week during winter term. Students will work in a group of only 7-10 students throughout the fall. These student groups will be coordinated with Chemistry in order keep students in the same work group for both the Biotechnology labs and the Chemistry labs.</p>



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#	Control Measure	Yes	No	NA	Details (as per Directions)
					Staff are instructed to work from home unless they must be present to work with students in the lab or they must be present to prepare labs for students.
5.	In shared spaces, safety protocols have been put in place to reduce close contact between users.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	For shared equipment, instructors will monitor so that only 1 student is working at that shared equipment at a time, and that 2m of distance is maintained. Shared equipment will be placed where it is not 2m from any space that a student may move through. If 2m from a shared piece of equipment can not be ensured, a barrier will be moved into place. Staff will monitor their own traffic flow through the office space to ensure 2m of physical distancing is maintained. Tape marks in the office indicate spots where no standing/walking should occur.
6.	Movement within the room is identified, such as with directional arrows, for walkways and entrances/exits.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Signs or arrows on the floor identifying directions.</i> Signs and arrows will indicate directional movement throughout the labs. See schematics for the placement of arrows. Mirrors have been installed in 1 corridor where it may be hard to determine if there is someone coming towards you as you enter the space. A sign will instruct students to wait and check the mirror to ensure that no one is entering this space.
7.	Water fountains are put out of service, and only touchless water bottle filling station available.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No water fountains are part of the Biotechnology space.
8.	Mobile fans have been removed or put out of service.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No mobile fans are part of the Biotechnology space.
7.	Washrooms have been identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>If yes, Washroom occupancy limit _____</i> No washrooms are designated as part of the Biotechnology space.
8.	Break area(s) for student use have been identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>If yes, what control measures are in place to maintain physical distancing?</i> Students will be using SW09 Room 206 as a break area if they have another lab on the same day. Tables will be rearranged as shown in the schematic for this room and spots where students can sit will be marked. Staff will monitor frequently for compliance and disinfect tables following student use. Staff have key access to this room. <i>Occupancy Limit ___10___ If there is an occupancy limit, is sign posted? Y <input checked="" type="checkbox"/> N <input type="checkbox"/></i>
9.	Break areas for employee use have been identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>If yes, what control measures are in place to maintain physical distancing?</i> Instructors will take breaks in the biotechnology office space (Room 208). 2m of distance is maintained and hand sanitizer will be used to disinfect hands when common touchpoints need to be accessed (such as door handles or fridge handles). The program has requested 9 500 ml bottles of hand sanitizer for employee use for Winter Term. <i>Occupancy Limit ___8___ If there is an occupancy limit, is sign posted? Y <input checked="" type="checkbox"/> N <input type="checkbox"/></i>
10.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
ENGINEERING CONTROL MEASURES					
11.	Barriers are implemented to separate work areas or walk ways,	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Barriers have been installed down the middle of lab benches (where students

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#	Control Measure	Yes	No	NA	Details (as per Directions)
	when physical distancing not practical.				would be seated facing them) and in the middle of aisles in SW09 209 (so that students who need to exit the lab during a lab can walk past another student's work station). In SW03 2660 barriers have also been installed down the middles of lab benches and in lab aisles. Barriers have been installed around student work stations in SW09 207B. See attached schematics.
12.	Barriers are stable and do not introduce other safety hazards, e.g. tripping.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13.	The impact on ventilation requirements have been considered if there's been a significant use change for the instructional space.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Complete a Facilities and Campus Development work requisition for assessment, as needed. No use change has occurred.
	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14.	Posted: Hand washing sign(s) Item 29B	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15.	Posted: Health screen sign(s) Item 3C	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Will be posted at entrance of building, so Biotechnology not responsible for this posting
16.	Posted: Hand washing sink location sign(s) Item 14A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.	Posted: Hand sanitizing station location sign(s) Item 13A	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	There are many hand washing sinks in the Biotechnology lab spaces (5 in SW09 room 209, 1 in room SW09 209B, 2 in SW09 room 207B, 3 in SW03 2660), so hand sanitizing stations are not necessary. In the greenhouse a handwashing sink has been installed in September 2020.
18.	Posted: Protect yourself sign(s) Item 21A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Will be posted at the entrance of the building, so biotechnology not responsible for this posting
19.	Posted: Occupancy limit of this room sign(s) Item 37A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
20.	Posted: Other signs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please list:</i> Signs to indicate directional flow have been obtained and will be posted.
ORIENTATION AND TRAINING (ADMINISTRATIVE)					
21.	Routine safety discussions held to review control measures and safety protocols.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The Biotechnology Staff have had frequent discussions since the beginning of May 2020 around planning for in-person labs.
22.	All students have completed the online Pandemic Exposure Control Plan training.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>How will compliance be checked:</i> Students will email a copy of their certificate to the Biotechnology Program Head, who will keep them on file. They will need to have completed the training in order to start in the lab.
23.	COVID-19 safety Site orientation for students has been developed and posted in the Learning Hub.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	In Fall 2020, Biotechnology students were required to complete a module on the Learning Hub around COVID-19 Safety designed by the Department that specifically applies to the Biotechnology lab spaces. Students will be instructed to watch the safety

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#	Control Measure	Yes	No	NA	Details (as per Directions)
					videos and review the content again before starting in person labs in January 2021. 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 .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25.	All employees have completed the online New Employee Orientation module.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>New and Returning Employee Orientation Checklist found here. Each employee to save the checklist to their online New Employee Orientation course</i>
26.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
RULES AND GUIDELINES (ADMINISTRATIVE)					
27.	All unnecessary and self-serve items have been removed from the spaces. <i>e.g., pens, paper, etc.</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>All supplies asked for prior to class and stocked at each workspace</i>
28.	Doors that students are to use to enter and exit have been clearly identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Signs or arrows on the floor</i>
29.	Handouts, papers, and items are not physically provided to students.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>If items are provided, they are cleaned between student use or disposed, or other control measures are in place – Describe: Students will be each given a paper copy of their labs, since they will need this when they are working through the labs at their work stations. These will be placed in their designated containers in the lab that they will use for storing their lab coat at least 48 hours before the start of their lab.</i>
30.	Students have dedicated tools/equipment, e.g., items are not shared between students.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
31.	If cleaning common touch points or tools/equipment not practical, then it is identified when hands are washed/sanitized before and after use.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Explain: Students will always wear gloves within the lab. They will disinfect gloves before and after accessing common touchpoints with 70% Ethanol. Spray bottles of 70% Ethanol will be placed near to any common touchpoints, as well as at each student work station. This way, common touchpoints which might be difficult to disinfect will be protected because the gloves touching these will be disinfected.</i>
32.	Work spaces/stations are dedicated for an individual or group use and not shared with others.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
33.	Single-use (disposable) products are used where feasible.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
34.	Measures are in place to accommodate student sick at home.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Accommodation plan: Students will complete an online version of the lab and instructors will make sure that hands-on skills that were missed will be made up for at a later date.</i>
35.	Procedures in place to screen students on a daily basis.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>The health screen poster is available for reference and is posted on building doors.</i>

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#	Control Measure	Yes	No	NA	Details (as per Directions)
					<i>Students and employees are expected to self assess daily, and the BCCDC self-assessment tool can be used to support this.</i>
36.	There is a procedure in place if a student or employee becomes ill on campus.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>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.</i>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Refer to the COVID-19 Pandemic Scenario Playbook for more information. Confirm if the person is aware of self-isolation requirements and protocols. If students must self quarantine they will complete an online version of the lab and instructors will make sure that hands-on skills that were missed will be made up for at a later date.</i>
38.	Provisions made for students to maintain same lab/class cohort throughout the Term.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Each cohort of Biotechnology students (1st and 2nd years) will be split into 2 groups. Students will remain with this group for all labs for the entire term. Biotechnology students will also be completing some in-person Chemistry labs – we are coordinating with Chemistry to ensure that the same groups are used for both Biotechnology and Chemistry.</i>
39.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
PERSONAL PROTECTIVE EQUIPMENT (PPE)					
40.	Appropriate PPE for the hazards of employee and student tasks are available to be provided (non-COVID-19 related ppe).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>List the ppe and tasks/activities it is required for: Students in the biotechnology lab typically use disposable nitrile gloves while working in the lab. These are purchased as part of the Biotechnology Program budget and are already obtained for Winter Term. Students working in SW03-2660 will need to wear gloves more frequently than in previous years due to COVID-19 – for this space we have requested 7 boxes of gloves for Winter Term from ppe@bcit.ca.</i>
41.	Training is provided for the above PPE to students and employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>This training is already part of the biotechnology lab safety course (non-COVID).</i>
42.	Appropriate PPE for COVID-19 is available to be provided to students and employees. Supply requests emailed to ppe@bcit.ca .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Based on circumstances allowed for in the BCIT COVID-19 Go-Forward Plan, Risk Assessment Matrix Summary. List PPE and tasks/activities required for: All staff in the Biotechnology Program will wear disposable procedural masks, and if they desire, face shields, while working with students. Students will be strongly encouraged to wear masks (as per BCIT policy) and will be provided with a disposable mask when they enter the lab. Students and staff will be instructed in the proper donning and doffing procedures for these masks. Biotechnology has requested 25 boxes of procedural masks and 1 pack of 10 face shields from ppe@bcit.ca for 2021 Winter term.</i>
43.	PPE safe donning, doffing, disposal, and disinfecting instructional materials are available for students and employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Post applicable signs in a visible location if ppe required. Use the Student Orientation checklist to assist orientation/training by instructors.</i>

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#	Control Measure	Yes	No	NA	Details (as per Directions)
					Use the Employee Orientation checklist to assist orientation/training by their supervisors. Students and staff will be instructed on the proper use of gloves and masks.
44.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CLEANING					
45.	Facilities is aware of the cleaning needs for the area. Facilities work requests have been submitted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Cleaning includes common touch points and appropriate frequency for the area. This includes high touch areas. Provide FCD work request number(s).</i> Facilities work request has been submitted for all rooms that will be used for 2021 winter term – Facilities work request #1456577
46.	Training will be provided to faculty and students performing cleaning duties and cleaning materials have been provided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Cleaning Standard Operating Procedures have been located here. What are the cleaning products/materials:</i> In order to control the risk of COVID-19 infection from surfaces, students will be instructed to spray down equipment at their work station with 70% Ethanol in order to disinfect it before other students use that workstation. Instructors will monitor for compliance. Instructors will be instructed to clean common touchpoints like door handles and sink handles with disinfectant wipes/70% Ethanol before students enter the lab and after students leave. A checklist system will be used to ensure that this has taken place before and after students are in the lab. Biotechnology has purchased enough Ethanol to use for Winter term and this will be made available to students and staff as a 70% solution in spray bottles. <i>What ppe is required:</i> Biotechnology has requested 12 containers of disinfectant wipes for 2021 Winter Term from ppe@bcit.ca. 70% Ethanol will be made by the program, sufficient Ethanol has been obtained for Winter term.
47.	Assessment of sufficient number of hand wash stations conducted, and an appropriate number of handwashing stations are available	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Consider time it will take for hand washing to take place, to determine what is e.a. sufficient number of hand wash stations. Some areas find a ratio of 8:1, students to sink, effective. The minimum amount of hand washing required is once before class starts, after class ends and before and after breaks.</i> Students (no more than 10 students at a time for winter term) will enter SW09 room 209 and wash their hands immediately before proceeding to their work stations and putting on their lab coats. There are 5 handwashing sinks in this room. Time will be allotted at the beginning of labs to allow for sufficient handwashing. Students working in room 209B (no more than 2) have access to 1 handwashing sink. Students working in room 207B (no more than 4) have access to 2 handwashing sinks. Students will wash their hands again before leaving the lab.
48.	Handwashing station(s), stocked, easily accessed, and have been identified to students and employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Sink Location: SW09 209 (5), 209B (1), 207B (2), SE04 Room 121 (1), SW03-2660 (2)</i> <i>Stocked with soap Y <input checked="" type="checkbox"/> N <input type="checkbox"/> paper towel Y <input checked="" type="checkbox"/> N <input type="checkbox"/></i>

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#	Control Measure	Yes	No	NA	Details (as per Directions)
49.	Hand sanitizing station(s), stocked, and have been identified to students and employees.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>ABHS (Alcohol-Based Hand Sanitizer): Location(s)_All staff desks, beside photocopier, near entry door of office_(SW09-208)_____</p> <p>Will hand sanitizer be refilled by department: Y <input checked="" type="checkbox"/> N <input type="checkbox"/></p> <p>If No, describe:</p> <p>Due to the large number of hand washing stations in the Biotechnology labs and the use of nitrile gloves in the lab, hand sanitizing stations are not necessary in the labs. The exception is the staff office (SW09-208) where staff will have access to hand sanitizer supplied by ppe@bcit.ca</p>
50.	All Safety Data Sheets (SDS) and cleaning procedures used are found here .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If not, describe:
51.	The area(s) have been decluttered so that cleaning is simplified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
52.	Barrier cleaning process has been arranged if the barrier(s) could become contaminated.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Barriers can become contaminate if they are a touch point or if the contaminated with droplets by e.g. coughing or sneezing.</p> <p>Barriers in SW09 room 209, SW03 room 2660, SW09 room 207B and SW03 room 2660 will be disinfected with 70% Ethanol.</p>
53.	Common touch points and tools/equipment that must be shared are identified and cleaned between students and classes.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>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):</p> <p>At the end of lab, students will disinfect any common items at their workstations with 70% Ethanol. All student workstations will be equipped with a 70% Ethanol spray bottle for this purpose. Instructors will be responsible for disinfecting common touchpoints such as sink handles before and after students are in labs with either 70% Ethanol or disinfectant wipes (wipes already obtained from ppe@bcit.ca)</p>
54.	Storage space for personal articles have been identified and are cleaned regularly.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The biotechnology labs in SW09 are Biosafety level 2 labs. Student's personal articles can not come into the lab. For that reason, Biotechnology is using SW09 Room 206 as a staging area for students and a storage area for their personal articles.</p> <p>In the biotechnology labs students will need to store their lab coat while not in use. They can not remove them from the lab due to Biosafety reasons. Plastic containers have been purchased for each student and these will be used to store the lab coats. Each student will be responsible for disinfecting the exterior of their container with 70% Ethanol at the end of each lab period. They will be instructed not to touch any other student's container.</p>



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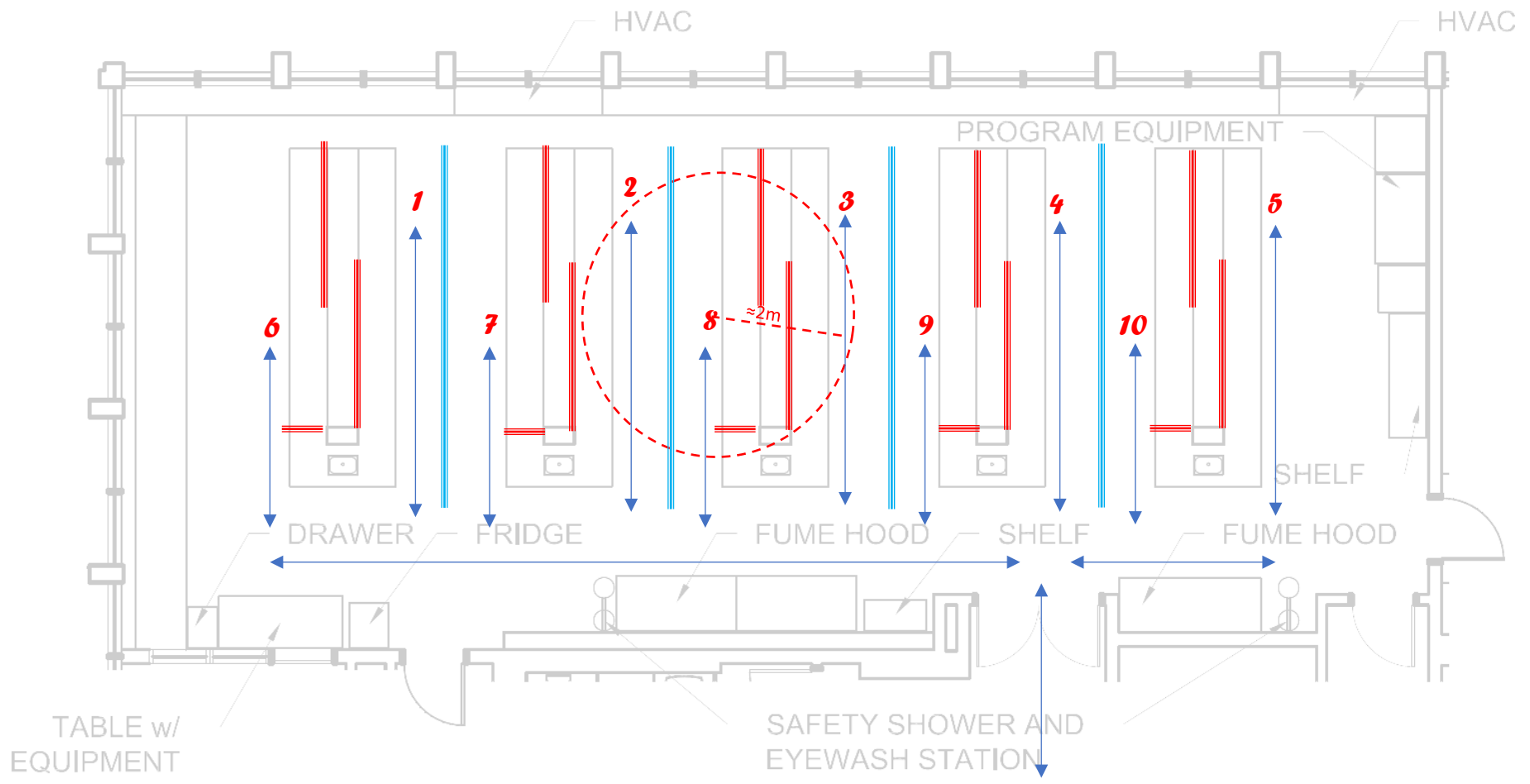
#	Control Measure	Yes	No	NA	Details (as per Directions)
55.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
AUDIT AND CONTINUOUS IMPROVEMENT					
56.	There is a plan to conduct regular inspections of all control measures and safety protocols to ensure they are in place.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><i>Ensure this COVID-19 Safety Plan is posted. Who will conduct these inspections and how often?</i></p> <p>Program head will walk through areas in use by students before the start of in person labs in order to ensure everything is in place. Instructors/Assistant Instructors will be expected to perform an inspection before the start of each lab.</p>
57.	Audits of inspections are planned to ensure that control measures continue to be effective.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><i>Who conduct the audits and how often?</i></p> <p>Program Head will inspect the Biotechnology lab operations and complete audit forms <u>once per month</u> during 2021 Winter Term in order to ensure measures continue to be effective.</p>

APPROVAL

All COVID-19 risk control measures for this campus activity are in place.			
Manager	Name <i>Cheryl Isaak</i>	Position Associate Dean	Date November 18, 2020
EOC	Name Glen Magel	Position EOC Director	Date November 25, 2020

SW09-209 – Main Lab

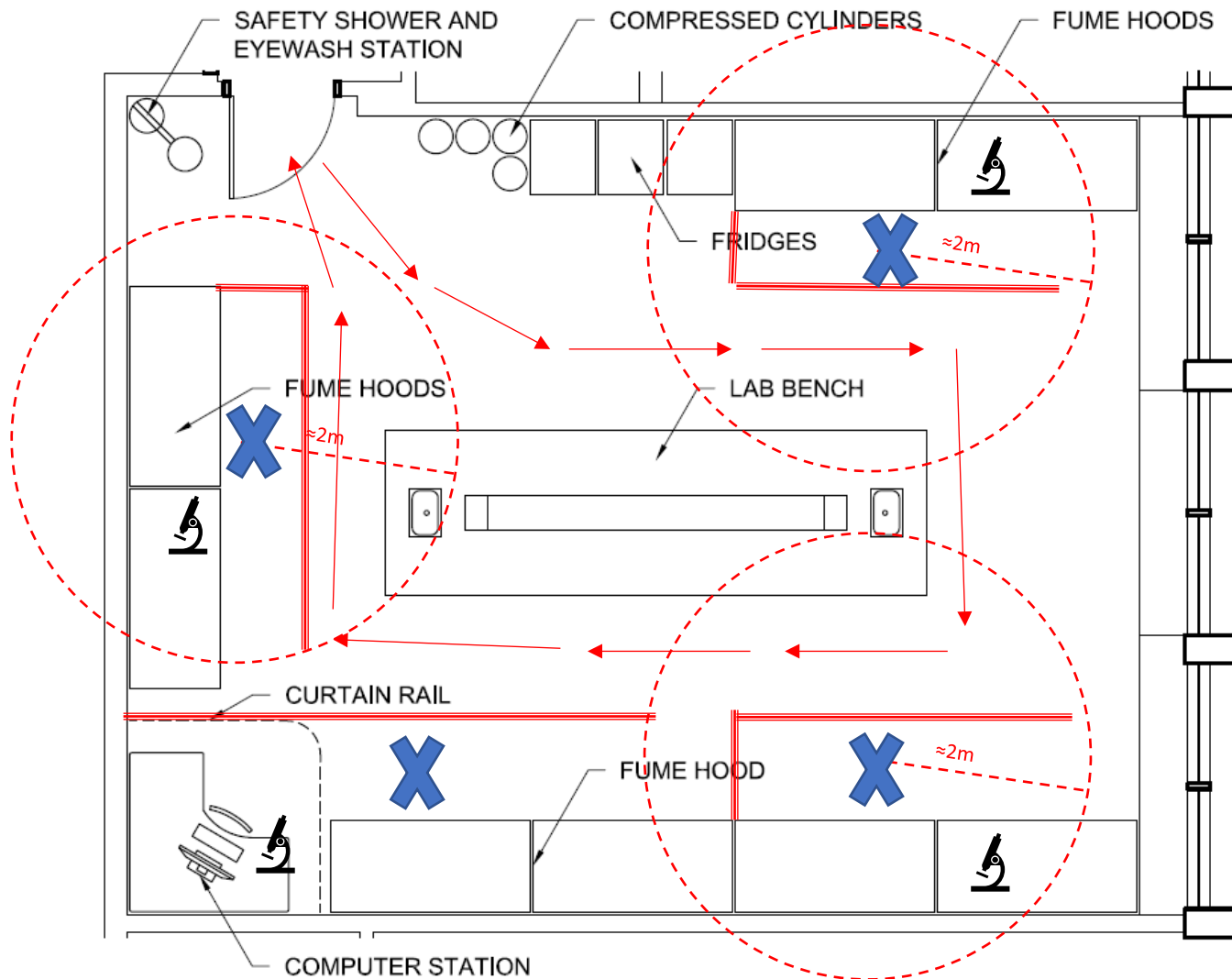
Capacity of 10 students + 2 instructors. The blue lines represent 17 foot long X 6.5 foot tall barriers composed of metal stanchions covered in clear plastic taped in place. The metal frames are only 6 feet tall and will be extended by another foot using plastic piping attached to the metal bars and more plastic. The use of these metal frames was recommended by David Pereira, and supported by Jasper Tam. They are currently awaiting delivery by BCIT facilities and Biotechnology will be installing the plastic. The longer red lines are clear plastic standing barriers provided by BCIT (each barrier is 48 inches wide x 32 inches high). 20 of these barriers are awaiting delivery (the order has been confirmed) and will be installed. Their height will need to be extended by 1 foot using plastic sheeting and supporting rods at each end of the barrier. The biotechnology program will also be consulting with BCIT facilities to determine whether facilities could supply barriers of the appropriate size, but if this is not possible staff will build these barriers themselves. The shorter red lines are pre-existing barriers fabricated by Biotechnology staff. Blue arrows indicate the 2-way traffic that would allow students to enter and exit their work stations while maintaining 2m of physical distance from other students who are working at their work stations. Students would be brought into the lab in waves (1-5 first, followed by 6-10) in order to prevent any congestion at the hand washing stations.



SW09-207B – Tissue Culture Room

Notes: Capacity of 4 students + 2 instructors. Students would occupy the 4 work stations (indicated by blue Xs) and have access to a Biosafety Cabinet and a microscope at each station. Barriers would need to be transparent for instructors to view students at BSC and microscopes. These barriers have been requested from ppe@bcit.ca by Jasper Tam in OHS.

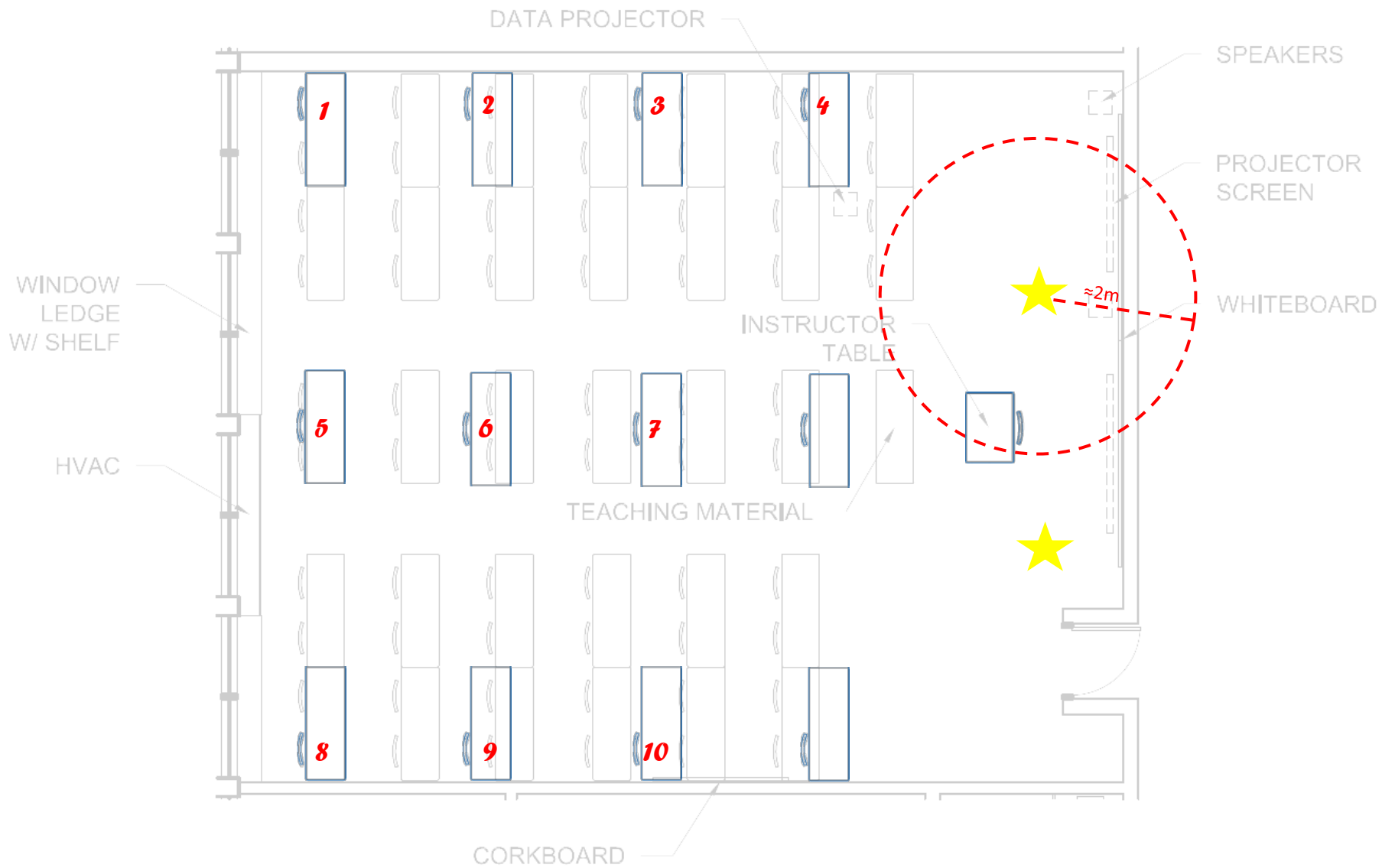
≈2m



SW09-206 – Staging and Break Area

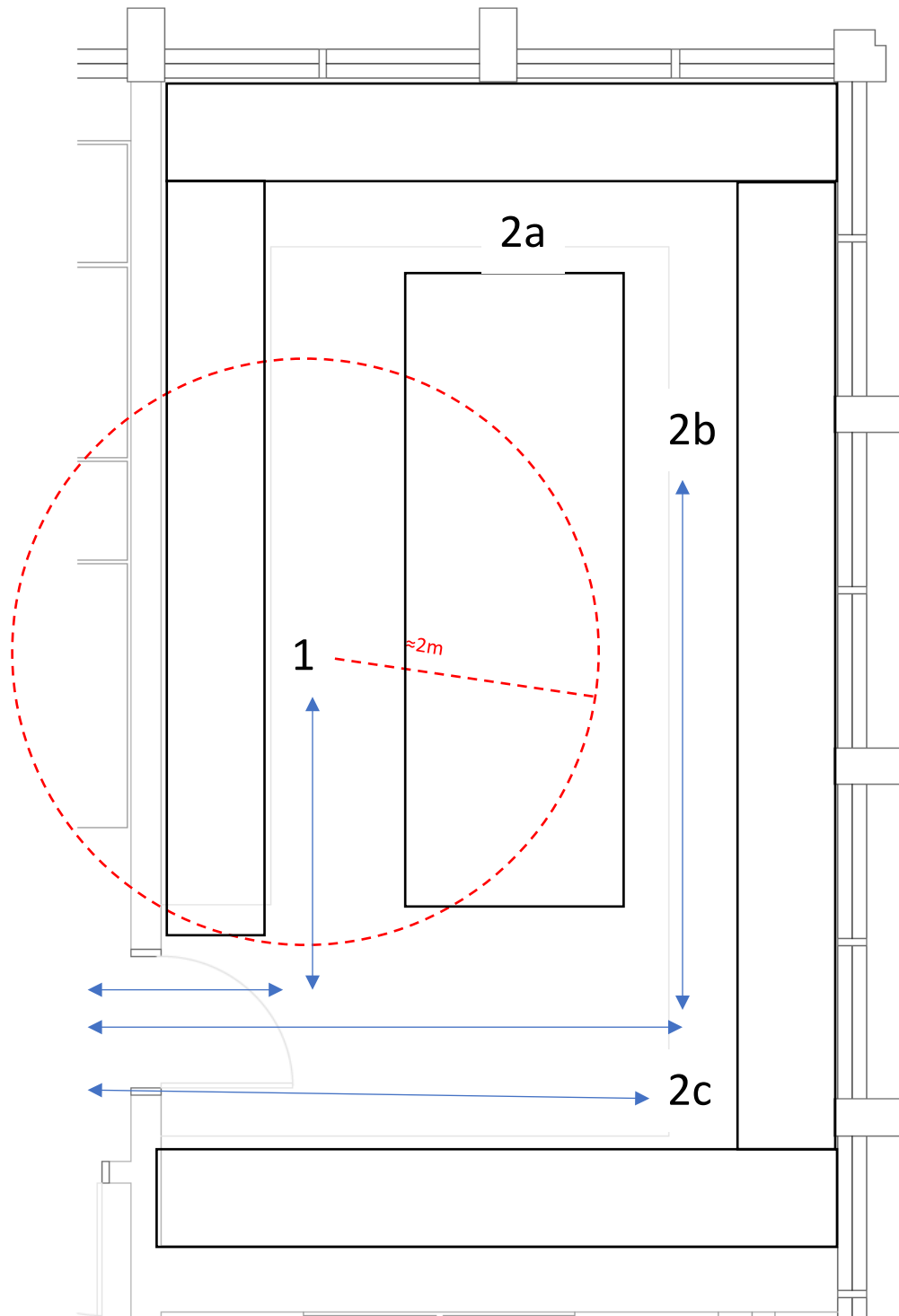
Notes: Capacity of 10 students (seated at tables) and 2 instructors (yellow stars, standing at front of the room, not seated at tables). This room will be used as a staging area and break area for students.

~2m



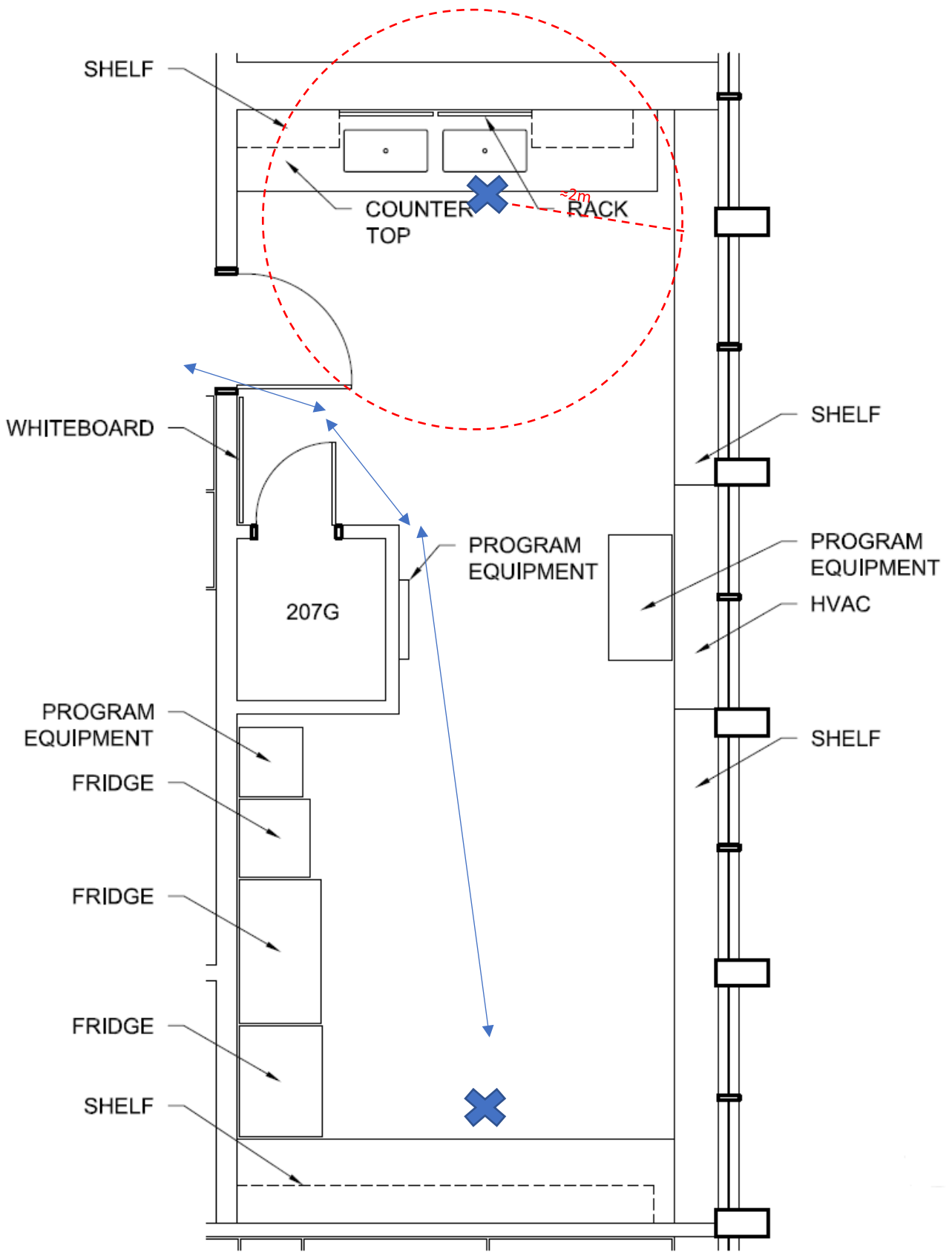
SW09-209C - Equipment Room

Notes: Maximum Capacity = 2 students, or 1 instructor + 1 student. Station 1 is an analytical balance station. Station 2a is the Envision work station. Station 2b is the microtome work station. Station 2c is the 2nd analytical balance. Students could use Station 1, and one of Station 2a, 2b or 2c. If an instructor needed to be in the room to supervise a student at station 2a or 2b they would be at station 1. Blue arrows indicate student movement. However, 2 students would not be passing through the door at the same time.



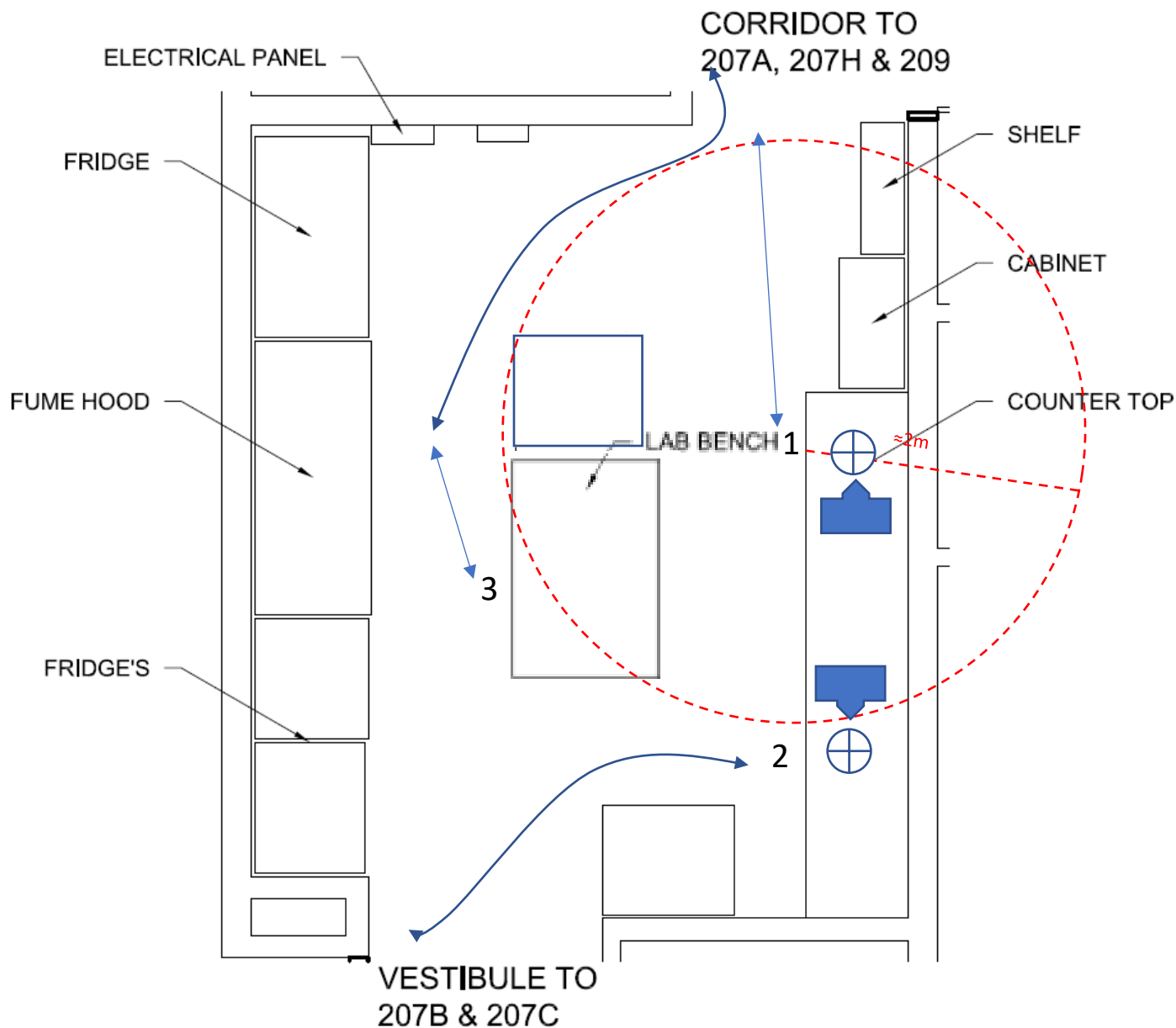
SW09-207H – Prep Room

Notes: No more than 2 staff would occupy this space at the same time. A staff member working at the wash up area near the door may sometimes need to move aside in order to let another staff member leave the room while maintaining 2m of distancing. A staff member working farthest from the door would leave/enter the room by following blue arrows indicated on schematic in order to maintain distancing (note that door will swing open all the way, does not need to be at 90 degree angle as indicated in the schematic). These arrows will be marked with tape on the floor of the room.



SW09-207E – Fermenter Room

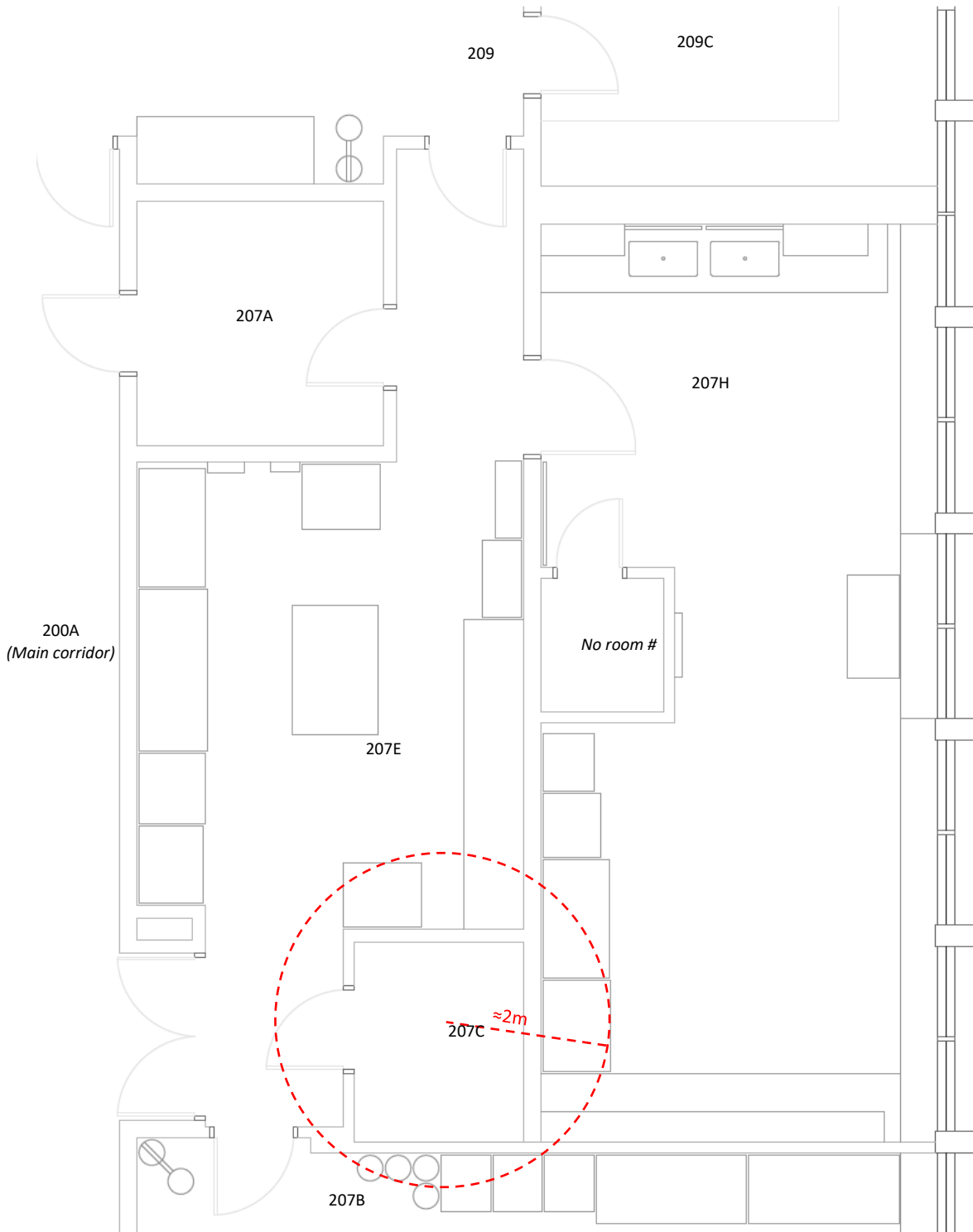
Notes: Maximum capacity would be 2 students and 1 instructor. Lab bench and centrifuge (blue rectangle) have been moved North to position shown below. Main student work stations would be #1 and #2. Station #3 would be either another student station or an instructor station. No barriers needed in this space.



SW09-207 area – rooms A (chemical storage) and C (growth room)

Notes: Rooms A and C would have no more than 1 staff member or 1 student at a time.

≈2m



SW03-2660 lab

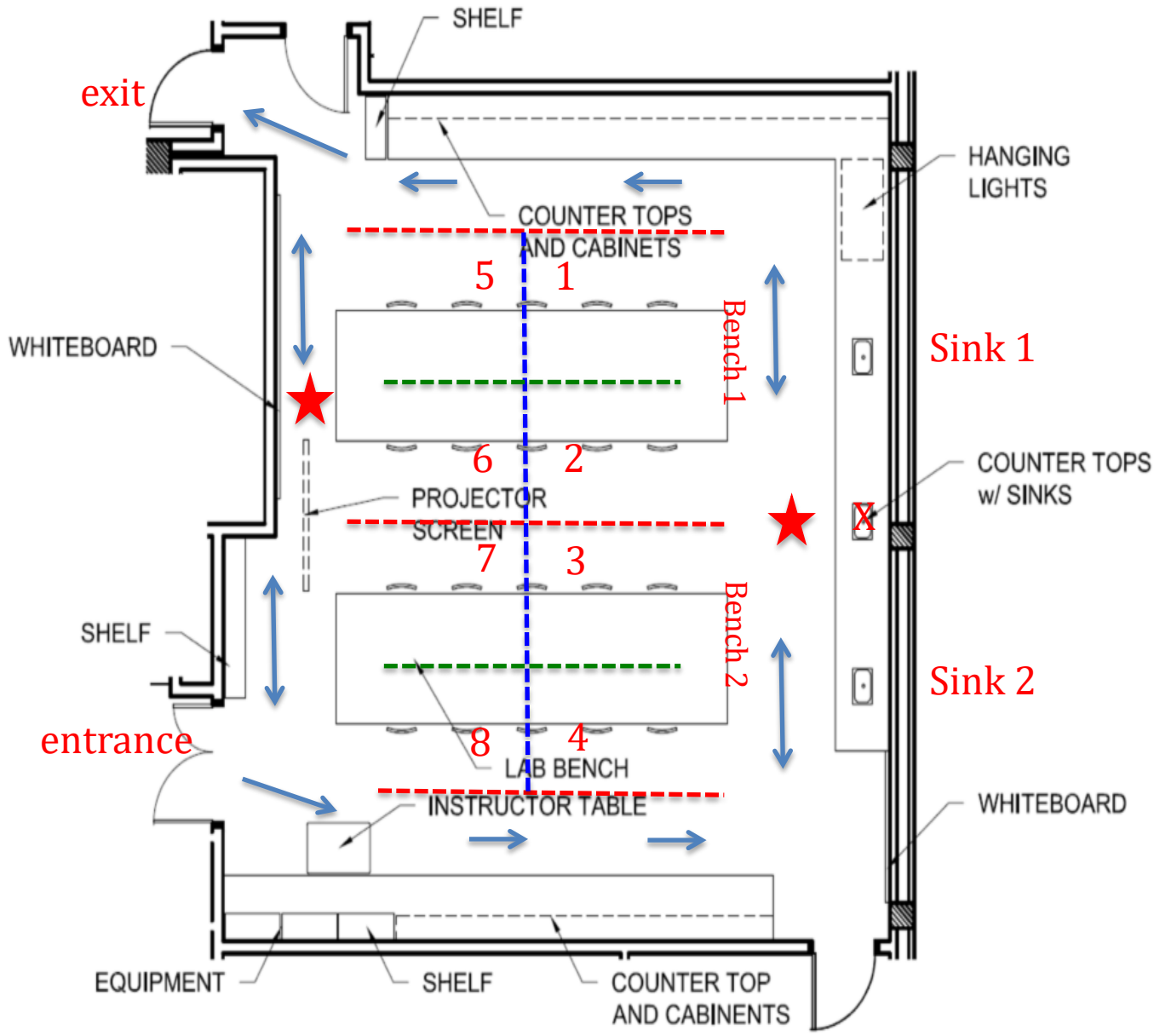
Capacity of 8 students (labelled 1 to 8) + 2 instructors (red stars).

Students 1–4 will enter first and about 5–10 min later students 5–8 will enter. Students on Benches 1 and 2 will use sinks 1 and 2, respectively.

BCIT will make barriers with plastic PVC frames and plastic panels. Floor and bench top barriers will extend up to 7 feet height from the floor, with floor barriers starting ~1 foot from floor.

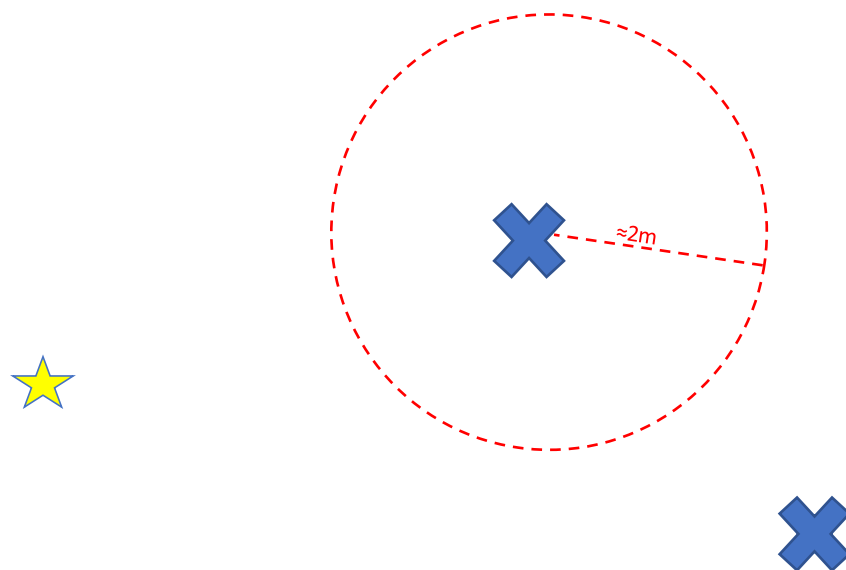
There are three barrier regions:

- (i) floor barriers extending lengthwise between benches (red dotted lines)
- (ii) bench top barriers extending lengthwise on two central benches (green dotted lines)
- (iii) floor and bench top barriers extending perpendicular between (i) and (ii) (blue dotted lines).



SE04-122 - Greenhouse

Notes: Capacity would be 2 students (blue Xs) and 1 instructor (yellow star). Students work at stations facing outer wall. Instructor steps to side if students need to exit.



SE04-121 – Potting Room

Notes: Capacity is 2 students (blue Xs) and 1 staff (yellow star). The 2 students would only need to wash hands before starting work and after finishing work, therefore a corridor of access to the sink was deemed unnecessary in this space by David Pereira and Jasper Tam. 2 additional students in SE04-122 would need to wash hands at the sink as well but would do this before the 2 students enter SE04-121 or after the 2 students leave SE04-122. Once again, due to the very small number of students in SE04-121 and SE04-122 access to the sink was deemed easy to manage without an access corridor to the sink.



~2m

