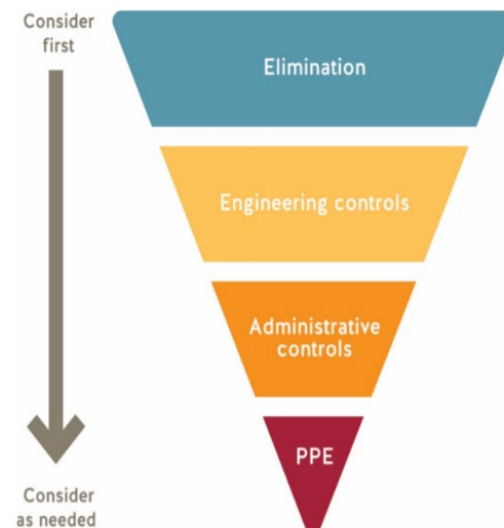


## CONTACT INFORMATION

<b>Course/Program Name:</b>	<b>Building Science Graduate Program: building environmental quality laboratory</b>		
<b>Proportion of program offered on campus:</b>	<i>100% outdoor project offer at the BCIT Burnaby Campus</i>		
<b>Start date:</b>	April 1, 2021	<b>End date:</b>	December 21, 2021
<b>Total # of students in program:</b>	25	<b># of employees:</b>	7
<b>Anticipated # of students on campus daily when scheduled:</b>	12	<b>Anticipated # of employees on campus daily when scheduled</b>	1 faculty
<b>Completed by:</b>	Rodrigo Mora	Faculty	March 4, 2021



## ROOM INFORMATION

**NOTE: Common areas are covered by the BCIT COVID-19 Go-Forward Plan.**

[illegible]

### 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).

This is an outdoor project about urban heat island and outdoor thermal comfort. The project requires taking well-planned environmental measurements of microenvironments at BCIT Burnaby campus, and collecting subjective responses from individuals about their perception of the outdoor thermal environment.

One Building Science master student and her supervisor (Rodrigo Mora) will be in charge of planning and conducting the field experiments. Two types of experiments will be conducted:

1. Environmental measurements by the master student and the supervisor. Only these two people will be involved. The student and the supervisor will share equipment, therefore the proper equipment sanitization and hand washing precautions will need to be taken.
2. Six (6) experiments will involve a group of ten (10) students that will go to a selected site, be seated or walking and respond to a 30-second questionnaire every 5 minutes. The ten (10) students will be in the same area, and more than 2-metres away from each other. During the experiment, they will respond to the questionnaire using a phone App. Therefore, they will not need to be in direct contact with any equipment or tools.

Because the second experiment involves human subjects responding to questionnaires, the whole project is under Ethics review by BCIT to make sure the project planning and execution respects the privacy and well-being of the students participating.

### 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.

## COVID-19 SAFETY PLAN ACADEMIC SPACES

4. The manager requests all PPE requirements by submitting this draft Safety Plan to the [PPE@bcit.ca](mailto: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](mailto: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](mailto:ssemohs@bcit.ca).*

#	Control Measure	Yes	No	NA	Details (as per Directions)
<b>ELIMINATION</b>					
1.	Room(s) set up to allow for 2 metres physical distancing during instruction and practice. <b>Note:</b> Contact <a href="mailto:returntocampus@bcit.ca">returntocampus@bcit.ca</a> for room capacity and layout if needed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This is an outdoor project. Therefore, maintaining 2-metre distance is not a problem.
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"/>	Desks and work modules are set up more than 2 meter apart
3.	Identified area(s) where students wait outside of teaching space until allowed inside by instructor.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
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"/>	
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"/>	
6.	Movement within the room is identified, such as with directional arrows, for walkways and entrances/exits.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7.	Water fountains are put out of service, and only touchless water bottle filling station available.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8.	Mobile fans have been removed or put out of service.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7.	Washrooms have been identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>When the sites are selected, the closer washrooms will be identified</i>
8.	Break area(s) for student use have been identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>Break area is outside</i>
9.	Break areas for employee use have been identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>Break area is outside</i>

## COVID-19 SAFETY PLAN ACADEMIC SPACES

#	Control Measure	Yes	No	NA	Details (as per Directions)
10.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>ENGINEERING CONTROL MEASURES</b>					
11.	<a href="#">Barriers</a> are implemented to separate work areas or walk ways, when physical distancing not practical.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12.	Barriers are stable and do not introduce other safety hazards, e.g. tripping.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13.	The impact on ventilation requirements have been considered if there's been a significant use change for the instructional space.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>SIGNAGE (ADMINISTRATIVE)</b> <i>Signage is available @ <a href="#">BCIT online Inventory</a>. Guidelines for posting signs are available on <a href="#">ShareSpace</a>.</i>					
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
15.	Posted: Health screen sign(s) Item 3C	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
16.	Posted: Hand washing sink location sign(s) Item 14A	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
17.	Posted: Hand sanitizing station location sign(s) Item 13A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>There will be one hand sanitizing station at the site</i>
18.	Posted: Protect yourself sign(s) Item 21A	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
19.	Posted: Occupancy limit of this room sign(s) Item 37A	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
20.	Posted: Other signs	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>Please list: Please list: sign on East door confirming no access, see photo on p7</i>
<b>ORIENTATION AND TRAINING (ADMINISTRATIVE)</b>					
21.	Routine safety discussions held to review control measures and safety protocols.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Review of the control measures and safety protocols will be held at the start of each work session
22.	All students have completed the online <a href="#">COVID-19 Pandemic On-Campus Guidelines</a> training.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>How will compliance be checked: by Rodrigo Mora</i>
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"/>	<i>Procedure for orientation found <a href="#">here</a>. Student COVID-19 Orientation Checklist found <a href="#">here</a>. There is no Learning Hub access to these research projects, therefore this material will be communicated to students via email.</i>
24.	All employees have completed the online <a href="#">BCIT Pandemic Exposure Control Plan Training</a> .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25.	All employees have completed the online <a href="#">OHS New Employee Orientation module</a> .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Course by myself and checklist with supervisor New and Returning Employee Orientation Checklist with supervisor found <a href="#">here</a>. Each employee to save the checklist to their online</i>

## COVID-19 SAFETY PLAN ACADEMIC SPACES

#	Control Measure	Yes	No	NA	Details (as per Directions)
					<i>OHS New Employee Orientation course. This course is required to be completed by new employees and by employees working on campus.</i>
26.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>RULES AND GUIDELINES (ADMINISTRATIVE)</b>					
27.	All unnecessary and self-serve items have been removed from the spaces. <i>e.g., pens, paper, etc.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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: The questionnaire will be administered through a phone App</i>
30.	Students have dedicated tools/equipment, e.g., items are not shared between students.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>For the environmental measurements tests, the master student and the instructor will share equipment. The equipment will be sanitized before and after use, hand sanitizer and alcohol wipes will be at the site.  For the experiment with students as human subjects, the students will respond to questionnaires using a phone App. So there is no physical contact with any shared equipment or through papers.</i>
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: For the equipment, students/staff will wash /sanitize their hands before and after use them. Also the equipment handles will be disinfected before and after use. There are sanitized and disinfecting spray / wiper will be located at entrance of room and near the equipment.</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: self-assessment at home before going to campus</i>
35.	Procedures in place to screen students on a daily basis.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>The <u>health screen</u> poster is available for reference and is posted on building doors. Students and employees are expected to self assess daily, and the <u>BCCDC self-assessment</u> 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 <u>COVID-19 Pandemic Scenario Response Plan</u> 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.  <a href="https://www.bcit.ca/covid-19/information-for-faculty-staff/">https://www.bcit.ca/covid-19/information-for-faculty-staff/</a> FAQ</i>

## COVID-19 SAFETY PLAN ACADEMIC SPACES

#	Control Measure	Yes	No	NA	Details (as per Directions)
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"/>	Refer to the <a href="#">COVID-19 Pandemic Scenario Response Plan</a> for more information. Confirm if the person is aware of self-isolation <u>requirements</u> and <u>protocols</u> .
38.	Provisions made for students to maintain same lab/class cohort throughout the Term.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
39.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>PERSONAL PROTECTIVE EQUIPMENT (PPE).</b> Refer to the <a href="#">PPE Flowchart</a> 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).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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):
41.	Training is provided for the above PPE to students and employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
42.	<a href="#">Appropriate PPE for COVID-19</a> is available to be provided to students and employees. Supply requests emailed to <a href="mailto:ppe@bcit.ca">ppe@bcit.ca</a> .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Based on circumstances allowed for in the <a href="#">BCIT COVID-19 Go-Forward Plan</a> , Risk Assessment Matrix Summary. PPE List for the outdoor experiments: 1 box of masks (onetime use) 1 box of gloves (onetime use) 1 bottle of spray disinfectant 1 container of wiper
43.	PPE safe <a href="#">donning, doffing, disposal, and disinfecting instructional</a> materials are available for students and employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Post applicable signs in a visible location if ppe required. Use the <a href="#">Student Orientation checklist</a> to assist orientation/training by instructors. Use the <a href="#">OHS Employee Orientation checklist</a> to assist orientation/training by their supervisors.
44.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>CLEANING</b>					
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"/>	Cleaning includes common touch points and appropriate frequency for the area. This includes high touch areas. Provide FCD work request number(s).
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"/>	Cleaning Standard Operating Procedures have been located <a href="#">here</a> . What are the cleaning products/materials: gloves, cleaning and disinfecting wipes, spray cleaning and disinfecting wipes
47.	Assessment of sufficient number of hand wash stations conducted, and an appropriate number of handwashing stations are available	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	These will be identified in the buildings closer to the outdoor sites selected.

## COVID-19 SAFETY PLAN ACADEMIC SPACES

#	Control Measure	Yes	No	NA	Details (as per Directions)
48.	Handwashing station(s), stocked, easily accessed, and have been identified to students and employees.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Sink Location: _____ Stocked with soap Y <input type="checkbox"/> N <input type="checkbox"/> paper towel Y <input type="checkbox"/> N <input type="checkbox"/>
49.	Hand sanitizing station(s), stocked, and have been identified to students and employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ABHS (Alcohol-Based Hand Sanitizer): Location(s) _____ Will hand sanitizer be refilled by department: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> If No, describe:
50.	All Safety Data Sheets (SDS) and cleaning procedures used are found <a href="#">here</a> .	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If not, describe:
51.	The area(s) have been decluttered so that cleaning is simplified.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
52.	Barrier cleaning process has been arranged if the barrier(s) could become contaminated.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The students and instructor in charge will be responsible for cleaning the equipment and tools right before and after use.
54.	Storage space for personal articles have been identified and are cleaned regularly.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No personal articles will be stored in the space
55.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>AUDIT AND CONTINUOUS IMPROVEMENT</b>					
56.	There is a plan to conduct <a href="#">regular inspections</a> of all control measures and safety protocols to ensure they are in place.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ensure this COVID-19 Safety Plan is posted. Who will conduct these inspections and how often? Rodrigo Mora will conduct the inspection periodically
57.	<a href="#">Audits of inspections</a> are planned to ensure that control measures continue to be effective.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Who conduct the audits and how often? Rodrigo Mora will conduct the audit periodically

## APPROVAL

All COVID-19 risk control measures for this campus activity are in place.			
Manager	Name Fitsum Tariku	Position Director	Date March 4, 2021
EOC	Name <i>Glen Magel</i>	Position EOC Director	Date April 3, 2021



## COVID-19 SAFETY PLAN ACADEMIC SPACES

### REVISION APPROVAL *(if applicable)*

All COVID-19 risk control measures for this campus activity are in place.			
Manager	Name	Position	Date
EOC	Name	Position	Date