COVID-19 Child (Workspace) Plan

Change log:

<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
<th>Writer</th>
<th>Change Description</th>
<th>Approved By</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020.10.16</td>
<td>1.0</td>
<td>Matthew Kutarna; Technical Services, Facilities, and Safety Manager</td>
<td>Document first approved</td>
<td>Steve Wilton; Department Head</td>
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<tr>
<td>2020.10.22</td>
<td>2.0</td>
<td>Matthew Kutarna; Technical Services, Facilities, and Safety Manager</td>
<td>Updated document to match Child Plan Template v2</td>
<td>Steve Wilton; Department Head</td>
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This workspace safety plan will assist faculty and staff who wish to resume academic activities including the services that directly support teaching & learning, as well as revenue generating activities. This plan will include a review of activities to be undertaken in the workspace to ensure effective controls are in place to prevent the spread of COVID-19. The applicants are responsible for ensuring this document reflects current government guidance and notices which can be found, along with information about UBC’s response to the pandemic at https://covid19.ubc.ca/.

This plan must be reviewed by your Local Safety Team, and signed by your Unit Head/Director.

<table>
<thead>
<tr>
<th>Name of applicant</th>
<th>Department/School/Unit</th>
<th>Faculty</th>
<th>Building(s)</th>
<th>Lab(s)/workspace(s) location</th>
<th>Proposed Re-opening Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matthew Kutarna</td>
<td>ECE Engineering Services</td>
<td>The Faculty of Applied Science</td>
<td>LIFE, ECE spaces on the 2nd floor</td>
<td>Primarily: 2517, 2514, 2508, 2106, 2105, 2101</td>
<td>2020.10.16</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>With occasional access to all other ECE assigned spaces</td>
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Introduction to Your Operation

1. Scope and Rationale for Opening

The research and teaching mission in the Department of Electrical and Computer Engineering (ECE) in the Faculty of Applied Science requires specialized equipment and laboratories that can only be accessed on campus at UBC. The COVID-19 shutdown is having a significant effect on graduation times, grant-mandated project completion, career progression, teaching preparation, and lecture delivery.
The Department of Electrical and Computer Engineering will open only those buildings and facilities necessary to conduct on-site work. This includes, but is not limited to, basic laboratory operation, teaching, instrument facilities, support facilities, and custodial service.

- **ECE Research** will continue to operate remotely where possible. Some experimental research teams will operate in Kaiser, Wesbrook, ICICS and Brimacombe.
- **ECE Teaching** will operate remotely with provisions for filming labs and using office space for lecture delivery. *Child plans will be developed for Faculty Office usage. Protocols for filming of teaching labs are encompassed by this plan.*
- **ECE Engineering Services** will have limited daily presence in the Kaiser, Wesbrook and 2nd Floor Life Building ECE facilities. *This child plan describes the proposed activities of this group within the LIFE building only.*
- **ECE Stores** which currently serves ECE and the Department of Mechanical Engineering will have a staff member onsite weekdays to receive orders required for onsite research and teaching support. *A child plan will be developed for ECE Stores Operations.*
- **ECE Administration and Student Services Offices** will remain closed for onsite work. *A child plan will be developed for occasions when onsite work is required.*
- **ECE Management** will regularly review and consider adjustments to staff and service levels.

The initial Return to Research (R2R) Stage 1 mandated a cap of 33% (or 1/3) of total occupancy which accommodated physical distancing protocols. The gradual, yet wider Return to Campus (R2C) to support additional essential operations is triggering a revised and increased building and/or room capacity of 66% (or 2/3) of total occupancy in cases where the space accommodates required physical distancing protocols. Stage 3 will be 100% of total occupancy in cases where the space accommodates physical distancing protocols. Each workspace, room, lab, office, etc. is unique and requires its own consideration. The timing of these stages is fluid and will align with provincial guidance.

At the request and with significant consultation with the Department Head, this plan was developed by the Technical Services, Facilities, and Safety Manager. The draft plan has been reviewed by the full Kaiser LST, Engineering Services Team Lead, and Kaiser Building Local Health and Safety Team Co-Chairs and has been confirmed by the Department Head.

This document describes safety considerations for the Department of Electrical and Computer (ECE) Engineering’s Engineering Services group working within the LIFE building. The 2nd floor of the UBC Life Building is serving as swing space for the Department of Electrical and Computer Engineering during the MacLeod Building capital renovation project. The MacLeod Building is ECEs teaching facility and includes classrooms, informal learning spaces, teaching lab spaces as well as fabrication rooms and technical staff offices.

The ECE-LIFE space is not expected to be used by undergraduate students in the Fall of 2020 and the Spring of 2021. At this time the space is required for: a) Fall 2020 and Spring 2021 teaching preparations in which Instructional staff are expected to develop and deliver high quality courses in an online format, b) fabrication services offered by the Engineering Services group in support to research activities, c) facilities support for the ECE Department and management of swing space deficiencies.

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related to the MCLD renovation project, d) safety support across all ECE facilities. In normal circumstances the students would be attending regularly scheduled labs to complete hands on activities and lab work. Due to COVID 19, the students will need to complete labs sessions virtually for ECE courses. In addition to the Engineering Services staff working at LIFE, it is expected that a limited number of instructional staff and supporting personnel will need to occupy space to record lectures, tutorials, and lab demonstration videos.

The main staff work will take place in designated staff offices 2517, 2514, 2508, 2106, additional on a need-basis work will take place in fabrication spaces 2101 (Electronic prototyping) 2105 and 2104 (3D Printing and Powel tools), and 2201 (Maker space). None of these spaces are shared with any other ECE group nor will be open to students. Occasionally, Engineering Services staff will also access other ECE spaces in the LIFE building as-needed to support on campus facilities requests, research activities, and safety related tasks. Some common areas of LIFE second floor as well as two classrooms are currently open to onsite teaching by the Department of Physical Therapy (PHTH). Precautions will be taken by Engineering services staff to avoid contact with staff and students from other units.

Section #1 – Regulatory Context

3. Provincial and Sector-Specific Guidance

- BC’s Restart Plan: “Next Steps to move BC through the pandemic”
- BC COVID-19 Self Assessment Tool

4. WorkSafeBC Guidance

- COVID-19 and returning to safe operation - Phases 2 & 3
- WorkSafeBC COVID-19 Safety Plan
- WorkSafeBC: Designing Effective Barriers
- WorkSafeBC: Entry Check for Workers
- WorkSafeBC: Entry Check for Visitors
- WorkSafeBC Protocol: Offices
- WorkSafeBC Protocols: Post-Secondary Education

5. UBC Guidance

- COVID-19 Campus Rules
- Guidelines for Preparing for Reoccupancy
- Guidelines for Safe Washroom Reoccupancy
- Space Analysis and Reoccupancy Planning Tool
- UBC Employee COVID-19 PPE Guidance
- Ordering Critical Personal Protective Equipment
- UBC Employee COVID-19 Use of Shared UBC Vehicles Guidance
- UBC Facilities COVID-19 website - Service Level Information
- UBC Employees COVID-19 Essential In-person Meetings/Trainings Guidance
- Workplace Physical distancing Planning Tool and Signage Kit
- Preventing COVID-19 Infection in the Workplace training course
- UBC Cleaning Standards & Recommendations for Supplementary Cleaning
- UBC Classroom Safety Planning
Section 2 - Risk Assessment

The below information is intended to serve as a guide for risk assessment and the planning of mitigation strategies. Activities are considered **high risk for COVID-19** if they meet any three risk considerations below. Your plan will be reviewed by your LST; they will consider both high and low risk activities as this will determine additional approval requirements (APSC Dean’s Office, Central UBC, etc.). Please note, the risk assessment is done before the risk mitigations are in place.

<table>
<thead>
<tr>
<th>Risk Consideration</th>
<th>Context</th>
<th>Important Risk Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk #1</strong> – public facing units (interactions with 10+ people who are not your regular colleagues)</td>
<td>The risk of COVID-19 introduction and spread is presumed to be greater as the number of contacts increases</td>
<td>– Enable two metre physical distancing; pinch-points must be addressed and carefully managed. – Use of plexiglass barriers wherever possible – Reduction of high touch points or increased cleaning – Use of cohort groups, where appropriate – Enable and encourage increased hand hygiene – Strict non-admittance to anyone with symptoms</td>
</tr>
<tr>
<td><strong>Risk #2</strong> – Prolonged close interaction with others (not in the usual cohort of colleagues); if contact lasts for more than 15 minutes</td>
<td>Person-to-person spread is more likely with prolonged contact</td>
<td>– Enable two metre physical distancing – Reduction of high touch points or increased cleaning – Enable and encourage increased hand hygiene – Strict non-admittance to anyone with symptoms</td>
</tr>
<tr>
<td><strong>Risk #3</strong> – The workplace or activity is indoors and windows cannot be opened (e.g., some classroom and meeting spaces)</td>
<td>A confined indoor space is presumed to have greater risk</td>
<td>– Enable two metre physical distancing – Reduction of high touch points or increased cleaning – Enable and encourage increased hand hygiene</td>
</tr>
</tbody>
</table>
### Risk #4 – Employees/students/visitors have frequent contact with high-touch surfaces

A higher frequency of contact with high-touch surfaces (e.g., service counters, card payment machines) is presumed to have greater risk

- Enable two metre physical distancing
- Use of plexiglass barriers wherever possible
- Reduction of high touch points or increased cleaning
- Enable and encourage increased hand hygiene
- Strict non-admittance to anyone with symptoms

### Risk #5 – The activity involves people who are at higher risk of severe illness (i.e., older adults or those with chronic health conditions)

COVID-19 can cause more severe illness among people who are 65 and over, and those who have compromised immune systems or other underlying medical conditions

- Work with HR for individual accommodations
- Encourage work from home arrangements
- Enable two metre physical distancing
- Reduction of high touch points or increased cleaning
- Enable and encourage increased hand hygiene
- Strict non-admittance to anyone with symptoms

### Risk #6 – The activity involves people who are not able to follow hygiene practices such as washing hands frequently, and identifying when they are feeling ill and staying home (e.g., Childcare Facilities, summer day camps)

COVID-19 spread can occur when personal preventive practices are not consistently followed. For example, young children are less likely to be able to carry out these practices

- Reduction of high touch points or increased cleaning
- Strict non-admittance to anyone with symptoms
- Limiting of non-essential contacts in space
- Strict non-admittance to anyone with symptoms

Risks will be considered in accordance with [https://srs.ubc.ca/covid-19/safety-planning/determining-safety-plan-risk/](https://srs.ubc.ca/covid-19/safety-planning/determining-safety-plan-risk/). Applicable risk factors may be subject to change based on COVID-19 developments and Campus operations, and will be addressed as part of required monitoring.

### 2.1. Risk # Associated to your Activity
List below the Risk # associated to your activity and give a brief description as to why. Activities are considered high risk if they meet 3 or more risks of the categories for risk consideration BEFORE mitigations are in place.

The second floor of the LIFE building is an extensive space of 5,100 sqm of which approximately 1,800 sqm (35%) are used by the PHTH Department for on site lectures 3 times per week. In general the risk of close contact interaction between 1 to 3 staff in such a large space is low and the regular safety monitoring responsibilities of ECE Engineering services ensures secure levels of safety management and compliance in these spaces. In practice nonetheless, the variety of planned support tasks and support clients will result in various levels of potential risks that are described here:

**Sharing of common spaces with the Department of PHTH:**
Potential interactions with 10+ non regular colleagues – This risk is present due to scheduled on site PHTH classes in rooms 2302 and 2202. Fortunately, as illustrated in Appendixes 2 and 3: a) the classrooms are located away from the main ECE spaces; b) designated entrance and exit doors assigned to PHTH students are in opposite locations than those employed by ECE staff, c) comprehensive safety signage has been deployed to direct students. As additional mitigation during class hours the Main Atrium area will be avoided by ECE staff and the use of washrooms will be done in accordance to the posted safety signage. Students from PHTH will not be allowed to make use of the south side of the 2nd floor, as access is controlled via card reader.

**Laboratory filming for remote teaching:**
Potential interaction with less than 10 non regular colleagues – Video recordings of lab demonstrations will likely require up to 3 people to work in close proximity with occasional in person support from staff. This is significantly reduced from the lab occupancy that is normally expected during regular course operations. Under regular circumstances labs have student capacities of between 48-118 with up to 4 additional support faculty/staff/teaching assistants. Some lab equipment may need to be touched often in order to ensure the appropriate configuration and setup. Mitigation measures are explained in sections 4.3 and 6.1.

**Receiving and handing out parts to clients:**
Potential contact with items handled by non regular colleagues – The exchange of physical items from fabrication services as well as the occasional pickups linked to classroom teaching support or the MCLD renovation project will potentially expose Engineering Services staff and recipients to close contact with non-coworkers and contaminated items. Mitigation actions are explained in detail in section 2.2.

**Facilities support:**
Potential interaction with less than 10 non regular colleagues – There may be a occasions when multiple Engineering Services staff members will be needed in one room in response to a facility task, or may meet with external contractors or other UBC staff. In such cases physical distancing and hygiene protocols will be respected and interactions will be limited to less than 5 people and 15min.

Close contact while moving / carrying larger items – staff may be unable to maintain a 2m social distance when working together on such tasks. – In such cases all possible mitigation strategies such as use of barriers wherever possible, reduction of high touch points, increased surface cleaning, increased hand hygiene, and wearing of face masks will be applied.
Activities in indoor spaces with windows that cannot be opened:
While the majority of the spaces in LIFE second floor have no windows the air rotation by the air flow system is good. Wherever possible arrangements have been made with UBC custodial staff to gain control of balcony doors and a single shared staff office was distributed into 3 spaces to increase social distancing and take advantage of balconies. Given the good ventilation and extremely low occupancy (a handful of staff in a space conceived for one thousand students) the lack of open windows in many spaces is not considered a risk.

2.2. Hazard Identification
Describe the type of contact (close/distant) and duration of the contact (brief/prolonged) under COVID operations - where do people congregate; what job tasks require close proximity; what surfaces are touched often; what tools, machinery, and equipment do people come into contact with during work

Types of contact

Within Engineering Services staff:
Contact within the group is limited in degree and duration, given the proposed schedule and location of on campus work. Typically 1-3 Engineering Services staff members will be working in LIFE at any given time and under coordinated schedules. Room occupancies have been reduced to enforce social distancing, additional offices and work spaces have been conditioned to redistribute staff, and common tasks requiring close proximity or frequent interaction have been split or reorganized into one person processes with remote assistance from staff working at home.

With other ECE members:
During short scheduled sessions other ECE members will work at LIFE teaching laboratories to prepare or film course experiments, also occasional pickups or drop ins by ECE members will be scheduled to deliver parts and equipment. Physical contact, close or distant, with Engineering services staff will therefore be brief and controlled.

Access control
Access to LIFE spaces will be restricted in the following manner:
- Access to the building and second floor stairwell entrances will be restricted via card readers.
- For Engineering Service staff access to rooms will be restricted via card reader by use of a ProxSafe key box located in LIFE second floor.
- For ECE filming crews or laboratory instructors preparing for remote teaching access to specific teaching laboratories will be permitted only via card reader through the ProxSafe key box.
- Deliveries of parts and instruments will only be scheduled on a need basis and no card or key access will be granted to non Engineering Services staff.
- All student spaces, clubs, lunchroom, and lounge will remain closed.
- All teaching spaces for which there are no tasks related to remote teaching will remain closed.

Common tools and equipment
Rooms with common tools, equipment, and work surfaces are primarily teaching laboratories and prototyping facilities (electronic assembly, 3D printing, Maker spaces).
To mitigate the risk of exposure through contact with communal equipment, furniture, and other surfaces Engineering Services staff, Lab instructors, and Filming crews will be required to follow strict entrance and exit protocols, as described below to further minimize risk:

1) Upon entrance to a room the staff member will immediately sanitize their hands at the sink or sanitizer dispenser found next to the main door.

2) Staff member will then carefully use sanitization wipes or spray and towels provided next to the main door to wipe down work surfaces and potentially shared equipment.

3) Staff members will be asked to work at their designated individual workstation and carefully wipe down the area prior to commencing work.

4) Should a staff member require use of communal equipment they are to wipe down the surface areas prior to utilization.
   a. When a single user is present and working, equipment will be wiped down before use and at the end of shift.
   b. When two users are present and working, equipment will be wiped down before and after use.

5) All materials used in the sanitization process should be discarded carefully in the waste bins (next to the main door), for collection by custodial staff.

6) At the end of their shift, the staff member will sanitize all surfaces they touched with the provided sanitization wipes.

7) Upon exit, the staff member will be asked to use a sanitization wipe to clean the door handle after locking and closing the door securely.

Deliveries and pickups:
The following steps will be followed to eliminate the risk of close contact during deliveries and pickups:

1. Contactless deliveries will be employed by asking the deliverer to drop the items and step back a distance greater than 2 mts from the recipient.

2. The visitor will be required to sanitize hands upon entrance and exchanges will be limited to common areas or building entrances. Signage will be posted accordingly.

3. Face masks will be worn by the recipient and the deliverer.

4. No pens, notes or tools will be exchanged.

5. Increased hygiene will be practice before receiving and after handling a package or item, with particular care of not touching the face or face masks.

6. Items will be cleaned immediately with disinfectants or wipes before been brought into work spaces. If any carts are used in the process their handles and surfaces will be sanitized before and after the exchange.

Protocol for planning and documenting Engineering Services support tasks not explicitly described in the COVID child safety plans:
Due to the broadband nature of physical services that Engineering Service is responsible for, there may be occasional need to perform short tasks are not explicitly described in the COVID child safety plans. Examples of such tasks are deployment, repair, or removal of safety items; equipment moves or repairs, preparation of teaching parts kits, etc.

To address these tasks in the context of COVID prevention the following protocol will be used:

1. An RT ticket will be created to document COVID safety risk assessment and mitigation steps. This ticket will be linked to the RT request.
2. The Hierarchy Control (HC) Diagram form shown in Appendix 4 will be filled by the ECE Safety Manager and the Engineering Services Team Lead. Once the form is filled it will be attached to the RT ticket and discussed with all staff involved.

3. Staff performing the task will follow the mitigation steps described in the HC form.

2.3. Pre-COVID vs. Post-COVID Occupancy and Contact list

Provide actual numbers and percentage of its normal capacity. Please fill out the excel spreadsheet “contact list template” to list the names and the contact details of the approved persons to come back on campus. This contact list should be sent to the LST chair or co-chair. They will update a master contact list stored on SharePoint. This is important to have that list up-to-date in case of Contact Tracing.

The table below lists rooms of common use (in green) and less frequent use (yellow) and their designated reduced capacities. The intent of these assignments is to reduce, when ample area is available, offices to 2 person occupancies to account for one room resident and one drop-in visitor, and cap large laboratories to a maximum of 20 people to provide for some built-in capacity for future stages of this safety plan. Notice, however that under the activities described in this plan no more than 5 people will be working in any lab.

<table>
<thead>
<tr>
<th>Room #</th>
<th>Area (m²)</th>
<th>Normal Occupancy</th>
<th>%Reduction</th>
<th>Reduced occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2101</td>
<td>24</td>
<td>6</td>
<td>33.33</td>
<td>2</td>
</tr>
<tr>
<td>2104</td>
<td>56</td>
<td>10</td>
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<tr>
<td>2602</td>
<td>271</td>
<td>118</td>
<td>16.95</td>
<td>20</td>
</tr>
</tbody>
</table>

2.4. Confirm that you have discussed each employee’s comfort level with returning to work and have addressed any concerns, or will require further assistance in doing so. Any worker (staff, students, faculty, post docs, research associates, technicians and other research personnel) who has concerns about returning to work on campus can request an exemption to his/her supervisor.

Each group member has reviewed this child plan and provided an opportunity to express concerns about returning to work on campus.

2.5. Employee Input/Involvement

Detail how you have met the MANDATORY requirement to involve frontline workers, Joint Occupational Health and Safety Committees (JOHSC), and/or Local Safety Teams (LST) in identifying risks and protocols as part of this plan
The plan was presented to ECE Engineering Services staff via TeamShare and Zoom meeting on Wednesday October 7, 2020, as well as the ECE LST, via email on Friday, October 9th, 2020 for questions and feedback. The applicable JOHSC(s) will review the plan either prior to submission or within 30 days of submission, and the plan will be revised as necessary.

2.6. Worker Health
Detail how all Supervisors have been notified on appropriate Workplace Health measures and support available and how they will communicate these to employees. [https://wellbeing.ubc.ca/wellbeing-campaigns-and-initiatives/thrive](https://wellbeing.ubc.ca/wellbeing-campaigns-and-initiatives/thrive)

All supervisors have been informed on appropriate Workplace Health measures and supports for staff mental and physical health, to be made available as they return to campus. Check in’s and supports will also be made available via the following channels:

- Weekly team meetings (virtual)
- Team email broadcasts
- One-on-one meetings with direct supervisors
- JOHSC meetings & communications

Supervisors are encouraged to disseminate information from [UBC Wellbeing](https://wellbeing.ubc.ca/).

2.7. Plan Publication
Describe how you will publish your plan ONLINE and post in HARD COPY at your workplace for employees and for others that may need to attend site

Final plans will be emailed to all staff and posted to workspace Health and Safety boards in hardcopy.

Section #3 – Hazard Elimination or Physical Distancing
Coronavirus is transmitted through contaminated droplets that are spread by coughing or sneezing, or by contact with contaminated hands, surfaces or objects. UBC’s goal is to minimize COVID-19 transmission by following the safety hierarchy of controls in eliminating this risk, as below.

The following general practices shall be applied for all UBC buildings and workspaces:

- Where possible, workers are instructed to work from home.
Anybody who has travelled internationally, been in contact with a clinically confirmed case of COVID-19 or is experiencing “flu like” symptoms must stay at home.

All staff are aware that they must maintain a physical distance of at least 2 meters from each other at all times.

Do not touch your eyes/nose/mouth with unwashed hands.

When you sneeze or cough, cover your mouth and nose with a disposable tissue or the crease of your elbow, and then wash your hands.

All staff are aware of proper handwashing and sanitizing procedures for their workspace.

Supervisors and managers must ensure large events/gatherings (> 50 people in a single space) are avoided.

All staff wearing non-medical masks are aware of the risks and limitations of the face covering they have chosen to wear or have been provided to protect against the transmission of COVID-19. See SRS website for further information.

3.1. Work from Home/Remote Work

Detail how/which workers can/will continue to work from home (WFH); this is required where it is feasible.

ECE Engineering Services staff will remain working remotely for the majority of their work. However, to provide minimal daily on campus presence as dictated by the ECE intermediate plan, group staff will be scheduled to work in rotations at the LIFE, Wesbrook, and Kaiser buildings.

No administrative services (includes purchasing staff) or student services staff are expected to be present in the Life Building Facility. Potentially, for a limited time no more than 2 UBC IT Service Support staff may be onsite to support course related activities.

In preparation for remote teaching of courses a limited number of Faculty and their supporting personnel will be preparing video recorded lab sessions at the LIFE laboratories.

While at LIFE, Engineering Services staff will be supporting: a) teaching activities such as filming of labs, preparation of student kits, setup of remote labs; b) fabrication requests from various departmental research groups; c) any pending facilities issues related to the move from MacLeod; d) safety across all ECE buildings.

At LIFE staff attendance will normally be planned for 1 staff only but may increase to 3 staff depending on technical support requests. When more than one staff is on site social distancing and hygiene protocols will strictly be followed.

3.2. Work and room schedule

If you need to use a SHARED space, give the name of the person responsible of room booking in each building you plan on entering.

Presence in LIFE will be coordinated by the Engineering Services team through the shared group Slack channel. Furthermore, the overall attendance of Engineering Services staff at the Kaiser, Wesbrook and LIFE buildings is coordinated to minimize staff interactions and maximize remote work while maintaining a minimal daily presence as stipulated by the ECE intermediate COVID safety plan.

Recording or any course preparation session will be booked in advance by contacting the Engineering Services Team Leader.
Onsite Work will only occur during regular scheduled hours (between 7am to 6pm) on weekdays only.

### 3.3. Working alone procedure

Discuss your working alone procedures and how they will be adapted for this Child plan.

Use of LIFE spaces may require working alone. As such, staff members that access the building will be asked to follow the same Work Alone procedures and processes as laid out in the Kaiser Building plan. Any staff member who is in the office will also be expected to check in upon arrival with their team lead via ECE Engineering Services Slack channel with a calendar integration, and upon completion of their day and exit from the office.

### 3.4. Spatial Analysis: Occupancy limits, floor space, and traffic flows

APSC recognizes that some workspaces are dynamic environments and it may be challenging to adhere to physical distancing guidelines. Nonetheless, controls must be in place to keep personnel spaced at least 2m apart at all times. Clear communication of this to employees, monitoring of implementation, in addition to physical controls (signage) are needed.

**As such: Using floor plans and/or photographs of your lab/workspace:**

1. Identify and list the rooms and maximum occupancy for each workspace/area explaining your methodology for determining occupancy;
2. Illustrate a 2 metres radius circle around stationary workspaces/benches/instruments and common areas or equivalent approach to social distancing; and
3. Illustrate one-way directional traffic flows

1) Occupancies:

The 2nd floor Life Building is expected to have very low occupancy until at least Summer 2021. Reduced room occupancies are listed in section 2.3 and were determined based on the size of the space and normal occupancy levels during pre-COVID work.

Staff has been temporarily assigned office space in student study rooms to reduce the occupancy of shared offices. At this time except for two staff that share a 5 person room of 32 sqm every other team member has an individual work space.

The teaching labs are currently setup for high volume of student traffic but under this plan it is expected that no more than one instructional faculty member and up to 2 other supporting staff (GTA, UAA, GAA, Co-op), and occasionally up to 2 staff may be present at the same time for video recording purposes. Such large rooms with one set up per use should not pose any spatial challenges. Notice though that reduced lab occupancies have been set to up to 20 people to create room for future stages of this plan. For all intended activities covered by this plan Engineering Services staff will review and coordinate room usage for the Life Building.

2) Approaches to social distancing and signage:

Signage has been deployed across the LIFE 2nd floor in accordance to the UBC COVID Communication Packages guidelines. The picture below shows signage examples from 2 teaching labs and one staff office.
Maintaining effective social distancing at the ECE Spaces of LIFE 2nd floor is not considered a high risk since the ECE space is extensively large, the occupancy is low, and attendance and safety compliance are under the coordination and supervision of the Engineering services staff. For recording of labs, where a crew is to work around a small bench setup, use of PPE and barriers will be used as explained in detail in section 6.1.

Building operations is providing signing for washroom facilities. As is required washroom stalls are marked with signage to ensure appropriate distancing is maintained.

3) One way directional flow graphics:
Given the large space and low occupancy of ECE spaces directional restrictions are not necessary. In their narrowest sections the hallways are 2.2 mts wide, and the use of face masks will be required in all common areas.

Directional flow will apply to the common areas in use by PHTH as shown in Appendix 2. The pictures in Appendix 3 illustrate the corresponding circulation signage that is in place. ECE personnel will stay away from spaces assigned to PHTH, avoid as much as possible common areas used by PHTH students, and when necessary follow all directional flows put in place by PHTH.

### 3.5. Worker Screening
Describe how you will screen workers: 1) exhibiting symptoms of the common cold, influenza or gastrointestinal; 2) to ensure self-isolation if returning to Canada from international travel; and 3) to ensure self-isolation if clinical or confirmed COVID-19 case in household or as medically advised

- Every Department/School will ensure that the check-in & check-out QR code (provided by the Dean’s Office) is posted on the entrance doors of each APSC building (where possible). The survey will have the questions from [Thrive BC Self-Assessment Tool](https://www.thrivebc.org/).
• Every person (employee, visitor, contractor, etc.) returning on campus (also the employees working remotely) will do the SRS training.
  o To complete the SRS training, if the person does not have a CWL, a temporary one can be hosted by the Department/School/Unit through UBC IT.
  o Before coming to work, all personnel must check their health status.
    ▪ Personnel experiencing any symptoms of COVID-19 (cough, sneezing, shortness of breath, loss of sense of smell/taste, sore throat, tiredness, fever) must not come to work.
  o Individuals displaying symptoms of COVID-19 must remain at home and isolated until they have been confirmed COVID-free by testing or have been symptom free for the length of time recommended by the BCCDC.
    ▪ Personnel who have been in contact with a person confirmed or presumed to have COVID-19 must also self-isolate as per provincial health guidelines. Personnel will be referred to the BC Health Self-Assessment Tool to determine if they require testing and/or medical care.
  o Anyone returning from outside of Canada must follow the directions of the quarantine act, which specifies 14 days of self-isolation, regardless of whether or not they are experiencing COVID-19 symptoms.
    ▪ Anyone exposed to a traveler must also self-isolate for 14 days. Supervisors cannot give personnel in quarantine work that would require them to break the quarantine.
• Every front and back entry door will include signage for both workers and visitors/guests that prohibits entry if any of the above criteria apply. The signage will either copy, or will directly use the signage below:
  a. UBC Entry Check Sign
  b. WorkSafe: Entry Check for Workers
  c. WorkSafe: Entry Check for Visitors

### 3.6. Prohibited Worker Tracking

Describe how you will track and communicate with workers who meet categories above for worker screenings

The QR code Qualtrics survey database will have the information if someone who tried to access a building has COVID-19 symptoms. These workers will inform their supervisors by email and will decide if they want to take a sick day or work remotely if possible. If they decide to take a sick day, they will enter that request onto the Workday system.

### Section #4 – Engineering Controls

#### 4.1. Cleaning and Hygiene

Detail the cleaning and hygiene regimen required to be completed by the user for common areas/surfaces (Custodial has limitations on cleaning frequency, etc.).
Outline specific cleaning processes and schedule for high-touch equipment, specialized/sensitive equipment or other unique circumstances to your lab/workspace. Detail how and what types of cleaning products and disposal options you will provide. If possible, include cleaning stations/infrastructure on your lab photos/plan.

- Personnel must wash their hands regularly and avoid contact with one another.
  - Hand washing/sanitizing stations should be considered inside of building entrances, at locations near shared spaces, and at locations where propping the doors interferes with a building’s airflow/temp stability, subject to availability.
- The standard UBC custodial standards will apply. Custodial crews will clean the common areas of buildings outside of operation hours (after 7 PM).
  - If there is any additional required cleaning (e.g. high-touch surfaces) the protocols and cleaning solutions must be provided. Any laboratory cleaning will follow the [WHO guidelines for decontamination](https://www.who.int).  

- Staff and filming crews using any of the teaching labs will either wash their hands in the nearest lab sinks. All labs but 2408 and 2534 have sinks, for these two rooms hand sanitation supplies are provided and the nearest empty labs are left open during filming.
- Hand and surface sanitizing supplies will be deployed inside any room without sinks.

### 4.2. Equipment Removal/Sanitation

Detail your appropriate removal of unnecessary tools/equipment/access to areas and/or adequate sanitation for items that must be shared that may elevate risk of transmission, both activity-related (i.e. instruments, tools) and general (i.e. coffee makers in break rooms).

As stated in Section 2.2, staff members will be asked to follow strict entrance and exit protocols to minimize the risk of contact through common surfaces. Staff will be asked to work at their specific workstation, and to minimize use of other workstations or common areas wherever possible. Where communal equipment must be used, they will follow the steps laid out in Section 2.2.

### 4.3. Partitions or Plexiglass installation

Describe any needs for safety infrastructure i.e. physical barriers, plexiglass installation required for your lab/workspace and if possible include them on your photos/room plan.

Barriers will only be used in teaching spaces where filming is taking place to guarantee 2mts distancing between filming crew members as shown on the picture below.
## Section #5 – Administrative Controls

### 5.1. Training Strategy for Employees
Detail how you will mandate, track and confirm that all employees (including the ones who continue to work remotely) successfully complete the Preventing COVID-19 Infection in the Workplace online training; further detail how you will confirm employee orientation to your specific safety plan

- The SRS Preventing COVID-19 Infection in the Workplace online training course is mandatory for all employees (including those who remain working remotely).
- The SRS course link, the ‘Return to Campus Activity Commitment Form’ (please see Appendix1) as well as a list of all documents required for reading ahead of returning to campus (i.e. building safety plans, and their specific Workspace safety plans) must be sent by email to all workers.
- A copy of the completed course certificate and a signed ‘Return to Campus Activity Commitment Form’ must be returned to the Department/School designate → Technical Services, Facilities and Safety Manager via safety@ece.ubc.ca.

### 5.2. Communication Strategy for Employees
Describe how employees may raise concerns and how you will address these, and how you will document all of this information exchange

**Communication of the Plan to Employees**
- To communicate the risk of exposure to COVID-19 in the workplace to the employees, ECE Engineering Services will disseminate this Child plan via e-mail and will post it as hard copy on the door to the workspace.

**Communication of Worker’s Concerns**
- When an employee is concerned about any of these policies, they should follow the standard WorkSafeBC reporting guidelines (see Right to Refuse Unsafe Work).
- They may also contact their worker representative of the APSC JOHSC to express their concerns.

### 5.3. Signage
Detail the type of signage you will utilize and how it will be placed (e.g. floor decals denoting one-way walkways and doors) ‘cleanliness state’ of equipment/instruments, hand-washing guidance. Please see signage templates on Safety & Risk Services COVID-19 website and Worksafe’s COVID-19 – Resources


**Required Signage:**

- Signs that state the maximum occupancy of common rooms
- Use of tape to block-off rooms and classrooms that are off-limits
- Use of tape and floor signage to direct traffic through high flow areas
- Signs to remind people to adhere to physical distancing guidelines
- Floor signs to mark of 2 m spaces where people might line up (if needed)
- Signed Access Agreement on lab doors indicating maximum occupancy

Checklist of items that require disinfection at the end of each shift. This should include switches, freezer / fridge handles, keyboards and mice of communal computers, cart handles, etc.

### 5.4. Emergency Procedures

The applicant must ensure that all employees entering the lab should be aware of the Building Emergency Response Plan (BERP) and have access to it. If applicable, detail your strategy to amend your lab’s emergency response plan procedures during COVID-19.


All of the Building Emergency Response Plans (BERPs) within the Department of Electrical and Computer Engineering have been updated to accommodate the reduced staffing levels; our updated BERP can be found here, and staff members will be notified of the link and a hardcopy will be provided in the office space. When the designated Fire Wardens are not scheduled to work, all ‘Responsible Persons’ will be certified Fire Wardens and will be responsible for BERP protocols. They will also have access to lists of the research personnel and laboratory rooms that are occupied each day. A comprehensive document that provides safety and emergency contacts as well as an emergency response plan must be publicly available both online and as a hard copy. Amended BERPS will be provided, where necessary, as part of any site-specific safety planning.

In the event of any suspected COVID-19 incidents, staff presenting COVID-19-like symptoms are directed to call UBC First Aid at 2-4444, and any suspected positive incidents are to be reported to the Department Head and documented by the supervisor in CAIRS as well as by emailing ready.ubc@ubc.ca

### 5.5. Monitoring/Updating COVID-19 Safety Plan

Describe how you will monitor your workplace (supervisor, departmental safety representative, other) and update your plans as needed; plan must remain valid and updated for next 12-18 months

- The workspace plan will be reviewed every 3 months.
- The following items would trigger an off cycle review:
  - Request by Safety and Risk Services
  - Moving to higher building occupancy
5.6. Addressing Risks from Previous Closure
Describe how you will address the following since the closure: staff changes/turnover; worker roles change; any new necessary training (e.g. new protocols); and training on new equipment

Since the initial closure in March 2020, we have not had staff changes or turnover. Should such changes be required for continued operation, training in the new protocols of the job will be provided, and this training will be documented. The set of students or staff working in individual research labs may change from time to time, and in that case, the responsible faculty member for that lab will ensure that new students and staff are trained appropriately. All new workers will complete the Covid-19 training as described above, and will be required to be familiar with the relevant safety plans. Changes to approved workers will be communicated to the ECE Engineering Services staff, which will reflect these changes in the access control system.

Section #6 – Personal Protective Equipment (PPE)
6.1. Personal Protective Equipment
Describe what appropriate PPE you will utilize and how you will/continue to procure the PPE

Work gloves and steel toe shoes will continue to be worn for those tasks that commonly require it.

Section #7 – Non-Medical Masks
7.1. Non-Medical Masks (New)
Describe your plan to inform faculty and staff on the wearing of non-medical masks

- See Using Non-Medical Masks website for the most up to date information
- Effective September 16, 2020 UBC implemented a policy whereby students, faculty, staff and visitors are required to wear non-medical masks in common indoor spaces on campus.
  - Office spaces:
    - Non-medical masks are not required when working in a sole occupant office or enclosed room.
    - In individually assigned cubicles in open concept workspaces that have been designated to ensure they are 2m apart or have appropriate physical barriers: while occupying an assigned workspace, users have the option to remove their non-medical mask when seated or while engaged in activities where the physical distancing requirement is met.
    - Non-medical masks are not required in internal office hallways that have been designated as one way, yield to others, or able to meet physical distancing requirements.
- Labs / workshops:
• Non-medical masks are not required when working in a sole occupant lab / workshop or enclosed room.
• In lab spaces / workshops that have been designated to ensure occupants are working 2m apart or have appropriate physical barriers: users have the option to remove their non-medical mask while engaged in activities where the physical distancing requirement is met.

- Classrooms:
  • Faculty and instructors are not required to wear a non-medical mask in classrooms while physically distanced (2m) from students and other classroom users.
  • In classrooms where capacities have been reduced so that designated seats are 2m apart: students and other classroom users have the option to remove their non-medical mask when seated in designated seats, or while engaged in activities in a classroom where the physical distancing requirement it met.

- As per UBC’s policy, non-medical masks must be worn:
  • When travelling through building corridors and shared spaces;
  • While entering or exiting research spaces or while moving from an assigned research location;
  • While entering or exiting classrooms;
  • Within classrooms while moving to a seat;
  • Any other time that 2m physical distancing cannot be maintained

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**Section #8 - Acknowledgement**

**8.1. Acknowledgement**

Plan must demonstrate approval by Administrative Head of Unit, confirming: 1) the Safety Plan will be shared with staff and how; 2) staff will acknowledged receipt and will comply with the Safety Plan.

The final version of this Child Plan will be signed by the Administrative Head of Unit, Dr. Steve Wilton and further approved by the Dean of the Faculty of Applied Science, James Olson. It will be distributed to all Departmental/School faculty and staff, the unit’s LST and the Faculty of Applied Science’s JOHSC. It will also be posted on the Departmental/Unit website. If the plan is amended or updates, impacted staff and/or faculty will be informed by email.

**Principal Investigator / Manager Submitting:**
Matthew Kutarna, Technical Services, Facilities, & Safety Manager

Name, Title

Signature

X

October 22, 2020

Department Head/School Director Approval

Name, Title

Signature

X
Appendix 1 – Return to Campus Activity Commitment Form

Building requirements for conduct related specifically to COVID-19 safety have been developed for the LIFE building in general and workspace in particular. The building guidelines have been developed by the LIFE Building LST. All students, staff and faculty who are permitted to resume activities in the LIFE building are required to complete the following requirements. Send completed form to your supervisor or his/her designate → Technical Services, Facilities and Safety Manager via safety@ece.ubc.ca.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Check when complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review the building safety plan</td>
<td></td>
</tr>
<tr>
<td>Review the workspace safety plan</td>
<td></td>
</tr>
<tr>
<td>Complete the SRS online COVID-19 safety course and send the certificate to</td>
<td></td>
</tr>
<tr>
<td>Technical Services, Facilities and Safety Manager via <a href="mailto:safety@ece.ubc.ca">safety@ece.ubc.ca</a></td>
<td></td>
</tr>
</tbody>
</table>

Your name: _______________________  Date: ________

Faculty/Dept. ____________    Your main room no. _______

Your role (faculty, staff, grad student, etc.): ___________________

Supervisor: ________________   Signature: ________________

By your signature you agree that you intend to meet the requirements/principles for:

- Doing the daily building check-in and check-out (QR code access)
- Practices for protecting against getting COVID-19 (stay home if ill; avoid touching your face; wash hands frequently; physical distancing > 2 m)
- No building access unless authorized by the schedule set up by the supervisor
- Knowing the guidelines for entry/exit to/from the building and getting around it
- Accessing washrooms
- Eating guidelines
- Cleaning and disinfecting commonly touched surfaces and shared equipment/tools
- Knowing who to contact for safety and interpersonal concerns/problems
- Abide by your unit working alone policy
- Building evacuation procedures in case of emergency
- What to do if someone shows signs of respiratory illness
- Consequences of not following requirements and rules
Appendix 2 – Layout of LIFE building 2nd Floor
Appendix 3 – Circulation and safety signage for PHTH

North hallway – traffic markers and social distancing reminder

Classroom signage showing reduced post-COVID occupancy

South hallway – traffic markers and social distancing reminder

Separate ways up and down at the South entrance stair well. Only the side going up leads to an access door on the second floor with a card reader.
Appendix 4 – The Hierarchy Control (HC) Diagram form

Hierarchy of Controls diagram for COVID-19 prevention

Elimination
Physically remove the hazard

Substitution
Replace the hazard

Engineering Controls
Isolate the hazard from workers

Administrative Controls
Change the way work is performed

PPE
Protective workwear

Task description:
Hazard(s) involved:
on site work? multiple staff? potential sources of exposure? other considerations?

For guidance on how to apply the diagram see:
https://rsf.ubc.ca/HS/strategic/corporate/effective-managing-risk/conceptual/HCs
For examples of HBC applications of this diagram see: