

## Program/Course Health & Safety Form

<b>Date:</b> 6/4/2020	<b>Campus:</b> Richmond
<b>Faculty:</b> Science and Horticulture	<b>Program:</b> Physics for Modern Technology – PHYS 4299
<b>Date of first group of students on campus:</b> 9/8/2020	<b>Date of first group of students to leave campus:</b> 12/7/2020
<b>Date of second group of students on campus (if needed):</b> Click or tap to enter.	<b>Date of second group of students to leave campus (if needed):</b> Click or tap to enter.
<b>Number of students anticipated on campus and on which days:</b> Max 4 students, max 2 days per week. 9:00 am – 12:00 pm, Mondays and Wednesdays. Will vary from week to week depending on progress of individual projects.	<b>Number of employees on campus to support this program and on which days:</b> 1 faculty member and 1 lab technician each day.  <b>Instructor Name:</b> James Hoyland
<b>Rationale for why students need to be on campus:</b> The physics project class is an individual capstone project for student s graduating the PMT program. These students have already completed the first half of their project (4199) and now need to complete it. Most of the projects include equipment and/or chemicals which for safety and access reasons cannot be used unsupervised at home.	
<b>Have you informed the Registrar of the scheduling requirements for this course? Yes/no and when informed?</b> Yes, the scheduling office was notified on May 29 <sup>th</sup> .	
<b>PPE requirements for students, faculty, and staff (quantity needed).</b> <ul style="list-style-type: none"> <li>• Students and faculty advised to bring their own face masks.</li> <li>• 50 gloves – size M</li> <li>• 50 gloves – size L</li> <li>• Safety glasses to be worn as necessary (some of the projects are laser projects requiring specialist laser goggles).</li> <li>• Hand sanitizers in each lab</li> <li>• Hard surface cleaner spray</li> </ul>	
<b>Has there been consultation with the Faculty OH&amp;S Committee or the instructor? (provide details).</b> The instructor has been consulted.	

**Students must conduct COVID-19 self-assessment prior to arriving on campus and attending class. If you are experiencing any signs and symptoms that may be related to COVID-19, you need to remain home, contact 811, then contact the instructor to determine next steps. Instructors/lab staff will check in with you when you arrive on campus to ensure that this is being strictly followed.**

**Safety Plan for Employees and students:**

There are four students working in the 4299 course in fall 2020. The project students have a number of requirements that differ from a normal course.

1. They work mostly on their own, interacting only with either their supervisor or a technician as necessary. They do not need to come together as a class at any point.
2. The projects are all experimental in nature and require specific equipment and materials varying from student to student. Many of the projects are difficult or time consuming to disassemble or move. They require an exclusive workspace where their project can remain undisturbed throughout the semester.
3. Some of the projects have special space or safety requirements which limit the spaces in which they can be used.
4. The projects all require student access to the fabrication facilities available in the workshop / makerspace located in rooms 3005 & 3015

**General provisions:**

1. Students will be provided with their own set of common tools as well as specialist equipment for their individual project to be kept at their designated workspace. The tools will be for the exclusive use of that student throughout the semester.
2. Students will have an individual work plan for each day determined in advance through consultation with instructor in a weekly video-conference call with the whole class. Students will only come onto campus if their work plan for the day requires use of the labs.
3. During project time students will have exclusive access to their assigned project space. Only the supervisor and assigned technician will be permitted enter the space and will maintain social distancing of 2m when doing so.
4. Students will access the fabrication facilities in the makerspace only as scheduled by their weekly workplan. Students schedules for the makerspace will be arranged to ensure no more than one student per room.
5. Technician or supervisor may also be present in the workspace for student training, assistance or for equipment safety reasons and will maintain social distancing while doing so.
6. When moving between the project space and the makerspace they will follow the approved route shown on the plan.
7. Students will use the bathrooms shown on the plan and will follow the approved route.
8. The instructor will visit each student in their workspace regularly throughout the session, following the route shown and observing social distancing rules. If students need to contact the instructor or technician during the session they may do so via SMS.
9. Instructors, technicians and students will wear masks in situations where it is not possible to maintain physical distancing of 2 meters.

A student or employee may also personally choose to wear a face mask if they have one.

Students and employees will be required to wear a face mask when:

- Using equipment or chemicals that require it for safety reasons

- If they are required to be within 2 meters of another person

In addition to the general provisions above each project has specific requirements as follows:

1. Student A - Constructing a CO2 laser.

Requirements:

- a. A well ventilated work bench close to a sink.
- b. All present during laser operation should have laser eyewear suitable for class 4 far infrared lasers.
- c. Compressed inert gas cylinder (should not be located in confined space)

Provisions:

- a. Recommended space "A" in room 3310 (see plan)
- b. Student provided with laser eyewear with an extra pair for technician / supervisor.

2. Student B - Development of an optical tweezer system.

Requirements:

- a. A work bench in an area capable of being made dark
- b. All present during laser operation should have laser eyewear suitable for class 4 near infrared lasers.

Provisions:

- a. Recommended space "B" in room 3265
- b. Student provided with laser eyewear with an extra pair for technician / supervisor.

3. Student C - Development of an agricultural robot.

Requirements:

- a. An assembly space for large robot.
- b. Outdoor testing area

Provisions:

- a. Recommended space "C" in room 3290
- b. Space provided in parking lot for outdoor tests.

4. Student D - Underwater bubble imaging system.

Requirements:

- a. A space with a sink


Provisions:

- a. Recommended space "D" in room 3290 (see plan)

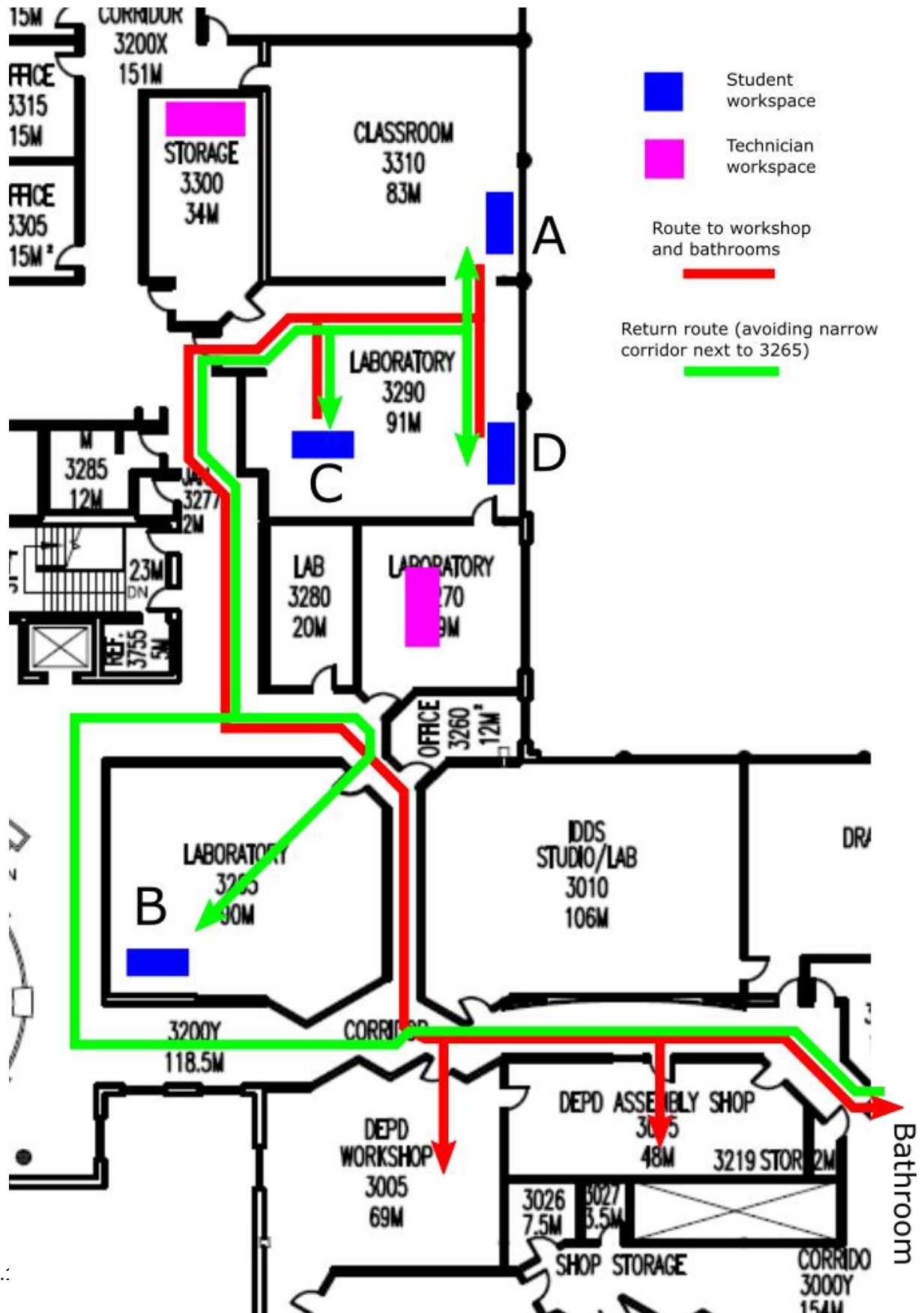
### Student Self Assessment Script

Student Self Assessment for COVID-19 symptoms will be part of the initial education for students regarding the COVID-19 Safety Plan for PHYS 4299, will be posted on the course website (Moodle), and will be part of the onsite check-in with students when they arrive on campus.

The course website and student education for COVID-19 Safety Plan will include the following script. "If you are experiencing any signs and symptoms that may be related to COVID-19, you need to remain home, contact 811, then contact the instructor to determine next steps."

<p>When students come onto campus, Employees (instructor/staff) will check in with the students using the following script or similar. "How are you feeling today?" "If you are experiencing signs and symptoms related to COVID-19, then we ask that you leave the facilities, go home, and contact 811." Please ask student to connect with you to determine next steps.</p>	
<p><b>Submitted by:</b> Dr. Elizabeth Worobec, Dean, Faculty of Science and Horticulture</p>	
<p><b>Approved by Provost and VPA:</b> Dr. Sandy Vanderburgh</p>	<p><b>Signature:</b> <b>Date:</b></p>
<p><b>Approved by Special Advisor to the President on Covid-19:</b> Dr. David Florkowski</p>	<p><b>Signature:</b>  <b>Date:</b> July 13, 2020</p>
<p><b>Approved by the Office of Health &amp; Safety Name:</b> Pablo Dobud</p>	<p><b>Signature:</b> <b>Date:</b></p>

Insert sketch(es) of classroom arrangement and "flow of students" here.



# COVID 19-Classroom/Shop/Laboratory Safety Plan Checklist

Department:

Campus:

Completed by:

Date:

## Overview

- The following checklist must be completed for spaces being used for face to face activities/instruction.
- The intent is to ensure that minimum requirements are being considered to maintain safe spaces for employees and students in our classrooms, shops and laboratories.
- This checklist is by no means exhaustive and there may be other measures unique to your spaces that may need to be considered in developing your classroom/shop/laboratory safety plan.
- The requirements identified are consistent with the current guidelines provided by the Provincial Health Officer, BC Center for Disease Control and WorkSafe BC.

**When completing this checklist describe the implementation details for each item indicated as “yes”.**

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1. Orientation, information and training on the Department’s Covid-19 Safety plan has been provided to employees and students?

Yes

Not Applicable

2. Handwashing posters posted in all washrooms?

Yes

Not Applicable

3. Students/employees are reminded to practice good hygiene during class and to wash hands immediately before and after class?

Yes

Not Applicable

4. Nearest handwashing sink located, is stocked and has been identified to students?

Yes

Not Applicable

5. Students have been advised that no eating/drinking is permitted during classes in classroom/shop/lab?

Yes

Not Applicable

6. Physical distancing posters posted in classrooms/shops/labs and throughout the common areas?

Yes

Not Applicable

7. The maximum number of persons allowed in a space has been determined in order to maintain 2-meter physical distancing?

Yes

Not Applicable

8. Occupancy limit signage posted on door?

Yes

Not Applicable

9. Directional arrows to support flow of people throughout the teaching space are in place?  
Provide a floor plan with your plan indicating direction of flow of people, location of workstations, entry and exit points.

Yes

Not Applicable

10. If applicable, Facilities has been notified of additional cleaning needs for building/classrooms/shop/lab?

Yes

Not Applicable

11. If applicable, Facilities has been notified of additional signage required for the classroom/shop/lab?

Yes

Not Applicable

12. Students have been provided instruction on where to spend their break time? (No social gatherings, leave the building, in their cars)

Yes

Not Applicable

13. Classroom/shop/lab set up to allow for 2 meters physical distancing between all occupants?

Yes

Not Applicable

14. Demonstration and work areas set-up to allow for 2 meters physical distancing?

Yes

Not Applicable



15. If physical distancing or other measures are not practical installation of barriers or sneeze guards has been considered?

Yes

Not Applicable

16. Handouts, papers, pens, etc. are not physically provided to students? (Use e-versions, students provide their own, etc.)

Yes

Not Applicable

17. When possible, students should have their own dedicated tools/equipment? (Items are not shared between students during class).

Yes

Not Applicable

18. Common touch points and tools/equipment that must be shared are identified?

Yes

Not Applicable

19. Cleaning and disinfecting program in place for cleaning/sanitizing shared tools/equipment and touch points?

Yes

Not Applicable

20. Students and employees are given instruction for the safe and correct use of any cleaning/sanitizing materials?

Yes

Not Applicable

21. Safety Data Sheets available for cleaning/disinfecting supplies?

Yes

Not Applicable

22. Students/employees are given instruction for the safe and correct use of any provided personal protective equipment (PPE)? Instruct students/employees on how to safely use, remove, and dispose/clean (as applicable) any required PPE for the class. **Please note in regards to Covid-19, PPE should only be considered when physical distancing and other measures are not practical to implement.**

Yes

Not Applicable

23. First Aid protocol has been reviewed with students and employees? Students in need of first aid to notify instructor and instructor to call First Aid Attendant. Follow directions of First Aid Attendant.

Yes

Not Applicable

24. A process has been developed to deal with employees not following the control measures?

Yes

Not Applicable

25. A process has been developed to deal with students not following the established control measures?

Yes

Not Applicable

26. A process is in place to advise employees to stay home if sick, and how to report COVID-19 like symptoms? (Supporting measures should also be in place to accommodate absences and provide coverage, if applicable)

Yes

Not Applicable

27. A process is in place to advise students to stay home if sick and how to report COVID-19 like symptoms? (Supporting measures should also be in place to accommodate absences?)

Yes

Not Applicable

28. Students are advised to self-monitor and notify instructor if not feeling well?

Yes

Not Applicable

29. Employees are encouraged to self-monitor and to notify supervisor if not feeling well?

Yes

Not Applicable