Guidelines for Undergraduate Classroom/Lab Use During the COVID-19 Pandemic

Purpose

The guidelines outlined in this document will assist in the development of Standard Operating Procedures (SOPs) related to Undergraduate Classroom/Lab Use and will help to ensure the appropriate COVID-19 health and safety considerations for the protection of all members of the McMaster community.

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Hierarchical of Hazard Control

Hazard mitigation should always focus on implementing control measures to eliminate or reduce risk. For this purpose, the hierarchy of controls must be considered. This hierarchy can be applied to any hazard in the workplace including COVID-19. A brief overview of this concept is highlighted below.

Adjust the Workplace (Engineering Controls)

Includes designs or modifications to classrooms, workstations, systems or processes that reduce the source of exposure.

Resuming undergraduate occupancy at McMaster should take the following into consideration:

- Room occupancy levels should be monitored. Each department should reduce their lab and classroom occupancy to the suggested occupancy numbers provided by the University.
- Classrooms should have seating spaced such that there maintains a 2 m (6 ft) minimum diameter around all individuals. The goal should be to maximize spacing between people when possible and not try to maximize occupancy.
- Signage throughout buildings reminding students to physically distance from others, to avoid crowding, and directions to larger spaces where they can wait for the start of classes or relax between classes while physical distancing. Students should be instructed to avoid eating and drinking in groups while waiting for the start of labs or classes.

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**Adjust Work Processes (Administrative Controls)**

Controls that alter the way the work is done, including timing of work, policies and procedures, and work practices such as standards operating procedures (including training, housekeeping, and equipment maintenance, and personal hygiene practices).

Consider communication via campus video monitors, Avenue to Learn, emails and Twitter feeds to students reminding them to physical distance and not to congregate in confined areas outside of classrooms or laboratories should be circulated regularly.

**Personal Protective Equipment (PPE)/Face Coverings**

Equipment worn by individuals to reduce exposure to the hazard (gloves, masks, etc.).

It is important to remember that Engineering and Administrative Controls must always be considered prior to implementing personal protective equipment (PPE) to eliminate/reduce the risk. PPE only provides a barrier between the individual and the hazard and is dependent on the user to utilize it properly.

Individuals learning healthcare skills who are unable to practice physical distancing will wearing a medical mask and a face shield.

In response to the most recent public health information, the University will require face coverings be worn in all indoor public spaces at all McMaster locations, effective Tuesday, July 14, 2020. Face coverings do not replace the need for physical distancing. Face coverings are not considered personal protective equipment.

**Procedural Guidelines**

- The overarching goal should be to minimize the requirement of students to be on campus at all. If work can be done at home, this should remain the priority.
- Occupancy numbers and layouts for labs and classrooms provided by the University should be posted by the department to the entrance of each room.
- Scheduling should be such that only a limited number of students will be able to work in one lab or sit in a classroom at a time.
- Considering the length of the room, partitioning may be necessary in large areas to prevent students from encountering other groups – consider caution tape or other barriers such that it is not a hazard and does not impinge on the Fire Code or create a tripping hazard. In other words, not a fixed or full partition.
- All employees involved in labs and classes on campus must complete the Ontario COVID-19 screening tool no more than 1 hour before coming to the University, retain a copy of

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their outcome from the tool and contact (email, MS Teams, text message, phone call, etc.) their direct supervisor to advise them of their result (whether they are clear to attend campus or have been advised to get tested for COVID-19 or to isolate). It is recommended that individuals retain a copy of their result. Supervisors must retain a copy of the result for a period of 14 days.

- All students involved in labs and classes on campus must complete the Ontario COVID-19 self-assessment tool no more than 1 hour before coming to the University. After completing the screening, contact (email, MS Teams, text message, phone call, etc.) their class instructor informing them if they have passed or not passed the screening for the day. If they have passed, they are then able to enter campus. Instructors may also set up a folder on the course’s Avenue to Learn site for this purpose and will communicate this to students in the class.

- All employees involved in labs and classes on campus must complete the COVID-19 Awareness training. Registration for the training can be completed through Mosaic and the training presentation will be available on Avenue to Learn. Proof of completion will need to be provided to the instructor. The instructor may decide to document and include this requirement into their course syllabus document.

**Outside the Labs and Classrooms**

- Students should not be permitted to congregate in the hallways – physical distancing must be adhered to – they should remain in designated waiting areas prior to the start of the lab/lecture where physical distancing is possible. Consider marking lineup queues for students to wait outside of the lab/classroom.

- Consideration should be given to using hall monitors to manage the flow of individuals into and out of labs and classrooms.

- Students leaving the lab/classroom will have priority and be able to exit first through hallways, all students should vacate the area prior to the others arriving.

- Students should be notified to arrive on campus for labs or classes within specifically designated time frames.

**Inside the Labs/Classrooms with Physical Distancing**

- Signage should be posted by the department regarding maximum room capacities based on provided room layouts.

- Desks/chairs will be cordoned off or removed if not to be used, and signage will be utilized to identify seats to be occupied.

- Attendance within the lab or classroom must be managed by the lab supervisor or the instructor.

- The lab supervisor or classroom instructor must confirm that all participants have completed the Ontario COVID-19 self-assessment tool every day they attend campus.

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• Students in classrooms shall continue to wear face coverings during the lecture.
• Students in wet labs are not required to wear face coverings – proper PPE will be provided by the lab for the experiments performed.
• Students in non-wet labs shall continue to wear face coverings during the lab.
• Should students in wet labs wish to wear a face covering, they will be provided a disposable mask from the lab and not be permitted to wear personal face coverings while in the lab due to possible chemical contamination should the student touch the mask with gloved hands.
• If physical distancing can be maintained at the instruction podium within a classroom, the instructor may remove their face covering.
• The instructor should announce that students must remain in their seats at all times during the class. The instructor may don a face covering at the end of the class to address individual questions from students.
• Visual guidance for physical distancing should be placed on stationary objects. Place tape or markers on the desks/benches/floor to indicate the space for students to occupy when they enter the areas.
• Hand sanitizers should be available upon entrance to the classrooms. As the students enter the area, they should be reminded to sanitize their hands prior to taking their seats. Sinks are available for handwashing in all labs. Students should be reminded to wash their hands before commencing the lab.
• Facility Services will clean all identified classrooms daily.
• TA demonstrations may have to be performed multiple times with fewer students to prevent crowding. If possible, in wet labs, demonstrate through the glass partition of the fume hoods for one-on-one issues. Use multi-media wherever possible to avoid crowding when demonstrating.
• Where one-on-one training or help is required and physical distancing cannot be maintained, both individuals should be wearing proper PPE including medical masks and goggles or face shields.
• Wet Labs: students will work one person per hood to the maximum allowed in one area (TA included in the count).
• All experiments should be redesigned to be independent labs – no students are to work in pairs.
• Equipment/chemicals and other materials should be spaced out within the lab to allow students the maximum efficiency with minimum interaction – there should be no line ups permitted at balances etc. If possible, assign students to sets of chemicals and balances/equipment to avoid interaction.
• Temporary shields or barriers may be necessary in areas where interaction may be unavoidable or highly likely (lecturer’s desk, balance area in lab, instrument stations,

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etc.). Please contact Facilities Services immediately if additional measures are needed in the space.

- Machinery/Instrumental labs that require one-on-one instruction should be postponed until physical distancing is no longer required.

- Ten minutes prior to the lab period ending, TA’s will stop experiments and ensure students clean up and sanitize all equipment and surfaces. Proper lab cleaning protocols should be followed including the use of disinfectant sprays or soap and water with J-cloths, paper towels or disinfectant wipes to wipe down surfaces and ensure everything is cleaned and sanitized. TA’s need to enforce this as staff may not have time between labs to clean every surface. Due to the hard stop for experiments in order to ensure appropriate time for cleanup, data sets could be available to students if necessary.

- At the end of classes, the lecturer shall dismiss rows of students such that physical distancing is maintained while exiting the lecture theatre.

- Students should be reminded to hand sanitize or wash their hands prior to leaving the lab/classroom. Measure must be in place to ensure that they do not gather at the sink.

### Senior Thesis and Capstone Projects

Senior Thesis Projects in research labs and projects involving teams such as Capstone projects, should be assessed on a case by case basis and the necessary approvals must be met prior to commencing. All Supervisors must submit a plan for their proposed research to the Chairs and Capstone teams to their mentors. The plan must be reviewed/approved by the departmental Chairs before projects commence.

Theses that do not require close contact with others – literature research, theoretical modeling, etc., can continue as usual.

### References

- Space Analysis & Re-Occupancy Planning Tool
- Facility Services teaching space layouts
- Government of Canada
- Public Health of Ontario
- Government of Ontario
- McMaster University COVID-19 Guidelines and Posters

For more information, contact [Environmental and Occupational Health Support Services (EOHSS)](mailto:EOHSS@mcmaster.ca)

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