



Safe Instruction: Laboratory Courses

Laboratory courses provide important experiential learning opportunities. The varied teaching spaces and activities in these courses require careful planning to ensure proper social distancing and to minimize the risks of virus transmission. For this reason, all laboratory courses must develop a plan for safe instruction. This memo describes the requirements for the safe-instruction plan and provides guidelines to aid in planning teaching laboratories.

Teaching in-person laboratory courses will be carried out in full compliance with the Brown University [Health Protocols](#) and any other University policies that govern the return to campus. Safety within instructional spaces must be carefully maintained, with adequate access to personal protective equipment (PPE) and safety-related supplies such as disinfectants, hand sanitizer, and access to soap and water for hand washing. These and other supplies may be requested through the [COVID-19 Essential Health & Safety Supply Request Form](#). Instructors are encouraged to consult with Facilities Management (FM) (crystal_bradwin@brown.edu) and Environmental Health and Safety (EHS) (linda_olmsted@brown.edu) early in their planning process.

While the focus of these guidelines is the safety of in-person instruction, instructors must also plan to allow remote participation for students who can't attend in person. Digital Learning & Design and Media Services provide guidance, equipment, and support for various class scenarios, including pre-recorded demonstrations, live-streamed instructor classes, and hybrids. If you have questions, need media support or would like to schedule a media consultation, contact dld@brown.edu. For a list of instructor resources, please see <https://healthy.brown.edu/academics/teaching-and-learning>.

A university-approved plan is required for all lab classes before in-person instruction can begin. Chairs, instructors and/or lab/studio managers must submit a 1-2 page narrative describing plans for safe instruction, including:

- Plans for maintaining social distancing
- Procedures for disinfecting workspaces and shared equipment
- Personal hygiene and use of PPE

For spaces shared by multiple instructors, a single plan can be submitted. Individual course leaders will be required to confirm that they will follow the approved plans.

Plans should adhere to the following guidelines, and should be submitted through the [Return to Campus Portal](#). Plans will be reviewed as soon as they are received. For questions about the

approval process, contact Tom Roberts, Associate Provost for Academic Space (thomas_roberts@brown.edu), or Janet Blume, Deputy Dean of the Faculty (janet_blume@brown.edu).

GUIDELINES

Social distancing and space planning

- Chairs, instructors and/or lab/studio managers should review space layouts and work with Facilities Management (FM) (crystal_bradwin@brown.edu) and Environmental Health and Safety (EHS) (linda_olmsted@brown.edu) to determine the maximum capacity of each instructional space.
- Plan lab activities to limit student movement through the space during the class period.
- Assess the flow of traffic. Where possible, designate one-way paths for students to walk through the laboratory space. Re-evaluate and modify pathways if needed.
- If students must regularly move through the space during class, you will need to allocate at least 150 square feet per person.
- Plan for students to stay at one workstation whenever possible. Arrange to have all materials and supplies (including cleaning supplies) available at the workstations before students arrive (preferable) or arrange for TAs and instructors to bring materials to the students.
- When possible, designate the same workstation for each student to use throughout the entire semester.
- Shared equipment and fixtures should be used only if essential and must be used in a controlled manner to avoid congestion. Areas with shared equipment or fixtures should be set up for single-person use, and must be disinfected before and after each use.
- Barriers may be used to separate work areas, but 6-foot social distancing must be maintained.
- Instructors may establish location markings on the floor or table to identify social distancing expectations. Floor markings are preferred if chemical or biological agents are used on work surfaces. Please use painter's tape, as other adhesives can cause damage.
- Students should never be alone or unsupervised in a lab. Trained instructors, laboratory staff personnel, and/or graduate student TAs must be present at all times.
- Standardized COVID signage must be in place. FM will post the signs.
- Post signs to indicate areas and seating that will be off-limits during the labs.
- Students and instructors shall wash their hands with soap and water or use hand sanitizer upon entering and before exiting the laboratory and as needed.

Protective Equipment

- Before each class, be sure that there is an adequate supply of the necessary protective equipment. Extra supplies should be kept in department stockrooms.
- If instructors, TAs, and/or students must come within 6 feet of one another, barriers or face shields (in addition to face coverings) may be used. Even with additional barriers or face shields, people may only come within 6 feet of one another for very brief encounters. Physical contact is not permitted.
- If additional protective gear, such as goggles/safety glasses, are needed, students should be given their own equipment for use throughout the semester. Any other reusable protective equipment must be thoroughly disinfected before and after each use.
- Face coverings should be disposed of as regulated waste if contaminated with chemical or biological agents. A supply of face coverings should be available for use if a covering becomes contaminated.
- Physical barriers can be requested if deemed essential. Please consult with FM/EHS.
 - To request a fixed plexiglass installation, submit a Facilities Management work order via a [service request](#).
 - To request a portable/movable physical barrier, submit a request through the [COVID-19 Essential Health & Safety Supply Request Form](#).
- Physical barriers and face shields do not fully protect one from COVID-19. The primary form of protection should always be face coverings and social distancing.

Disinfection

- Disinfection protocols must be written by the instructors and available for the instructors, TAs, and students to follow as a standard procedure.
 - Students shall have disinfecting supplies at their designated workstation to use at the start and end of the class.
 - Disinfectants must be accessible at all shared equipment stations. All shared equipment must be disinfected before and after use by the individual user.
 - All common high-touch surfaces must be disinfected as often as possible during the class and must be disinfected after each class by an instructor or TA.
- Instructors may make their own disinfectants with diluted bleach or an alcohol solution. COVID-19 related enhanced disinfection procedures should not be confused with the decontamination procedures already in place for working with biological research samples.
 - For disinfection of surfaces for COVID-19, instructors may prepare spray bottles containing at least 70% alcohol for disinfecting touch points on electronics and sensitive equipment. Spray bottles must be clearly labeled.
 - A freshly made 2% solution (about ⅓ cup of bleach per gallon of water, or 4 teaspoons of bleach per quart) is an effective disinfectant if left in contact with

the surface for at least 1 minute before being wiped off. Bleach solutions begin to lose their effectiveness after 24 hours. A new solution must be made each day.

The container or bottle must be clearly labeled.

- All containers for disinfectants--whether made in the lab or purchased--must be clearly labeled with the material, hazard and manufacturer. For example:
 - 70% Ethyl alcohol (or ethanol) in water
 - Flammable - Irritant
 - Manufacturer name
- Custodial services has increased disinfection frequency on campus. Refer to the [Custodial Disinfection Matrix - Campus Wide w/ Task and Frequency](#) regarding classrooms.

Training

- Employees are required to complete the employee Workplace Safety Training module in Workday before their return to campus. Teaching Assistants will receive the student version of the employee Workplace Safety Training module.
- The Laboratory Hazard Awareness for Teachers and TA training is required by EHS and is administered through TrainCaster. This must be completed by instructors and TAs working in teaching laboratories. Those who have already completed Laboratory Safety Training, Hazardous Waste Training, and Biological Safety Training (if applicable) will not be required to complete the Laboratory Hazard Awareness for Teachers and TA training.
- Instructors are encouraged to post lab safety procedures on Canvas or other course websites. Students will be required to review the procedures before the first lab.