

GUIDANCE ABOUT HEALTH SAFETY PLANNING FOR INSTRUCTIONAL LABORATORIES



INTRODUCTION AND PURPOSE

Laboratory-based activities are integral to student learning, as they are hands-on, engaging, team-based and supported by facilitating instructors. Unfortunately, these valuable characteristics of laboratory-based activities can conflict with guidance from the Centers for Disease Control and Prevention, campus officials, and other sources for mitigating COVID-19 spread, such as social distancing and not sharing items. Therefore, laboratory instructors need to develop plans that incorporate effective health safety practices while achieving the desired student learning outcomes. The purpose of this document is to offer guidance to instructors as they develop their plans.

This guidance builds on prior training for the **Return to Campus** and the **Return to Classrooms** that established protocols such as:

- Social distancing, wearing face masks, regular washing of hands
- Classrooms rearranged to enable social distancing
- Students using university-provided cleaning materials to sanitize their work areas in a classroom (For laboratories, cleaning will be done twice—as students arrive and also as they prepare to leave.)
- Protocols for cleaning classroom technology by instructors
- Minimizing instructional interactions where persons are within six feet with a total not to exceed 10 minutes per class session

Health safety plan for students included in course syllabus

Instructors are encouraged to review and use these prior trainings to assist developing a plan for their laboratory courses/sections. Consultation with departmental leadership is recommended regarding instructional goals, instructional mode, and number of students the laboratory can accommodate while maintaining social distancing. This new guidance is designed for laboratory instruction that is entirely face-to-face or hybrid where a portion of the students in the course are present in each laboratory session. The approach of this guidance document is to assist instructors by providing questions to consider along with information about supporting campus resources.

QUESTIONS ABOUT PERSONAL INTERACTIONS

- Can the entire laboratory period be conducted with all persons at least six feet from each other at all times? This instructional goal is strongly encouraged.
- If persons are going to be closer than six feet for a laboratory activity, is it necessary or can it be replaced, possibly virtually, to achieve the learning goal? If it is necessary, what can be done to ensure less than 10 total minutes of such interaction per student or instructor? Also, can an alternative activity be created for students or instructors who do not wish to participate in an activity where social distancing cannot be maintained?
- If partnering of students for laboratory activities is intended, is it possible to pair students who share other aspects of their lives such as living accommodations?

- How and when will the seating chart for the laboratory class be done?
- Can common equipment/samples/etc. be situated in room to maintain six-foot separation?
- How can laboratory activities be developed to minimize the sharing of equipment and materials? Or will gloves be needed (please see next section)?
- Do health safety procedures necessitate changes to laboratory safety procedures? If so, can laboratory safety be maintained or does the experimental activity require change to be compliant with both types of safety requirements?

QUESTIONS ABOUT HEALTH-SAFETY-RELATED PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Does a laboratory procedure preclude students wearing their masks? If so, is it necessary or can it be replaced, possibly virtually, to achieve the learning goal?
- Note that any student who states that they have a medical reason for not wearing a mask will need documentation provided by **Student Disability Services** or the **Student Health Center** to show to the instructor. Such a student should always utilize social distancing during the laboratory class.
- Will the use of face shields enhance the safety of students and/or instructor?
*Face shields will be available to each student for free from the university bookstore (VoIShop), and face shields are available for instructors by the **PPE request process** through departmental offices. Face shields are not a replacement for face coverings.*

- Will using disposable gloves for the entirety or a portion of the lab period enhance safety of students and/or instructor?
*If gloves are being ordered for an instructional laboratory only to deal with COVID-19 safety, the university will provide them free of charge by the **PPE request process** through departmental offices.*

- Will lab coats be required for each student?
Lab coats should not be shared during or between laboratory classes, so each student should have purchased their own lab coat if required. Students should not be allowed to take the lab coats home during the semester and lab coats should be stored safely, perhaps with other class-related PPE for each student.
- Will students need to remove health-safety PPE during experimental activity because of a requirement for laboratory safety? If so, is the activity necessary or can it be replaced, possibly virtually, to achieve the learning goal? If still necessary, can social distancing be maintained and hand-cleaning occur immediately afterward?
- Does the health-safety planning incorporate time between classes for instructor(s) to clean non-student work areas, equipment, cabinetry, etc. in preparation for the next group of students?

- Is the instructional laboratory class being conducted in a research laboratory?
*If so, the **Health Safety Plan** will need to be updated for the instructional activity.*

QUESTIONS ABOUT CLASSROOM MODIFICATIONS

- Will furniture need to be removed from the laboratory room to support social distancing for the semester?
*Contact Facilities Services at **865-946-7777** if furniture removal is needed.*

- Are all sinks in the lab equipped with handwashing supplies such as paper towels?

*If needed, visit hr.utk.edu/important-resources/ select link “**Workspace Controls Checklist (signage checklist)**,” and contact Facilities Services.*

- Will physical barriers be needed, and if so, why?
*If so, visit hr.utk.edu/important-resources and select link “**Workspace Controls Checklist (signage checklist)**”*

- Will any navigational signage or floor markings be needed to assist with social distancing?
If so, visit fs.utk.edu/utfs-response-to-covid-19/signage-plan-for-campus-spaces

- Will digital AV equipment need to be added to the laboratory room to support a hybrid form of instruction? If so, does the laboratory need a webcam, microphone(s), speakers? Will instructors use computer, tablet and/or phone to connect to Zoom and the laboratory digital AV? Will recording of the laboratory sessions be desired or needed?

*Requests for **digital AV equipment** can be made to the Office of Information Technology.*

QUESTIONS ABOUT COMPUTER LABORATORIES

- Is the use of computer workstations to be changed by either removing or disabling computers to achieve social distancing? Will furniture need to be removed?
Remember to consider this in a 360° view and not simply side to side.
- Does the lab use ensure that students use the same computer for the entire class period?
- Are computers and monitors powered up at all times with a power-saving plan that reactivates them when a student uses a keyboard or mouse, so that power buttons are not touched?
- Do the keyboards have plastic covers that allow typing and facilitate cleaning?

- Does the laboratory have sanitizer and wipes for keyboard and mouse cleaning by students?

QUESTIONS ABOUT LABORATORIES CONDUCTED OUTDOORS OR OFF-CAMPUS

- Is the instruction entirely face-to-face or is a hybrid mode with AV/IT requirements being utilized?
- How are health safety requirements for personal interactions affected?
- How is the use of PPE affected?
- Will health safety planning need to consider transportation to the laboratory site? Will this transportation be **university-provided** or student-provided?
- Does the outdoor/off-campus location have a pre-existing health safety plan? If so, is this plan incorporated into the health safety planning for the course as it should be?
- Will the students be taught about or trained in the plan? If so, when?

Resource for preparation and planning these outdoor and offsite activities: **experiencelearning.utk.edu/offcampus_risk_checklist**

QUESTIONS ABOUT UTILIZING THE HEALTH SAFETY PLAN FOR THE LABORATORY

- Is the health safety plan for the laboratory included in the course syllabus? **The campus syllabus is available as a resource.**
- Will the health safety be posted in the laboratory?
- Will the students be taught about or trained in the plan? If so, when?
- Do departments have plans to train instructors, particularly graduate teaching assistants/ associates about dealing with noncompliant students, such as contacting a colleague or supervisor to be present for resolving the situation? Are instructors familiar with the guidance in the **Return to Classroom** training for resolving this situation?

QUESTIONS ABOUT COVID-19 IMPACTS TO LABORATORY INSTRUCTIONAL PLANS

- Does the laboratory course/section have sufficient instructors to be able to offer face-to-face and/or hybrid instruction? If not, what is the instructional plan for an online version of the laboratory course/section?
- Does the instructional plan allow for students who opt out of face-to-face or hybrid laboratories and would participate virtually for the semester?
- Does the instructional plan for the laboratory section provide a means for students who are absent due to COVID-19 or university-required isolation to complete replacement or make-up work?
- Does the instructional plan provide for a replacement instructor if the instructor is unable to teach the lab (e.g., the instructor is ill)?
- Does the instructional plan encompass the possibility that the course may need to shift to online delivery due to societal conditions with respect to the pandemic?

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