**Goal:** To ensure safe and proper use of teaching labs by undergraduate students outside of scheduled class time. Instructors should think about which labs can be done safely during off hours and which cannot. For those that cannot, the instructor should consider how to tailor the lab for the amount of supervised time available (regularly scheduled lab time, class time plus added time with TA supervision, etc.).

1. **Safety Training**
   a. Students are required to complete and pass the following EH&S online safety training courses through Learn@ISU. Other equipment specific training may also be required. Instructors must verify students’ successful completion of the courses though Canvas.
      i. Laboratory Safety: Core Concepts (every three years)
      ii. Fire Safety and Extinguisher Training (every year)
      iii. Emergency Response Guide Video (every three years)
   b. Students are not permitted to use any equipment not necessary for their current lab experiment.
   c. Students may not work alone under any circumstance.

2. **Room Access**
   a. Instructors should choose one student in a team to be the “responsible” person who will have access coded on his/her keycard and provide the list of student names, rooms, and time periods of access to Michelle Grawe in advance of use.
   b. Doors must be closed and locked when the team leaves – no propped open doors without someone in the room. The key code system can track who was the last one to access the room and students will be held responsible for any damage, loss, or accidents when they access the rooms.
   c. Read-only access to the online iLab room schedule is available to everyone in the department so they know if certain hours are available. You must have an iLab account to access this schedule: [https://iastate.ilab.agilent.com/service_center/4532?tab=equipment](https://iastate.ilab.agilent.com/service_center/4532?tab=equipment)

3. **Chemical and Equipment Access**
   a. All chemicals will be stored in locked cabinets. No chemicals will be accessible to students outside of scheduled class time. This includes not leaving them under a hood. Every chemical cabinet is to be locked after each lab.
   b. If a student needs access to chemicals outside of class time, a TA or instructor must be present.
   c. Students must read the Safety Data Sheets (SDS) for the chemicals they are using before using the chemicals.
   d. All equipment use must be approved by Michelle Grawe. All usage of equipment that is tracked using iLab must be logged on iLab.

4. **Mat E 414 and Mat E 444**
   a. For all new procedures, students must complete an MSE Hazard Checklist [https://docs.google.com/forms/u/1/d/17Zi4Lu8m_Bbmlr9eyukSvSjzMtkrXqfHw3mke5S9cE/edit?usp=d rive_open](https://docs.google.com/forms/u/1/d/17Zi4Lu8m_Bbmlr9eyukSvSjzMtkrXqfHw3mke5S9cE/edit?usp=drive_open)
   b. If the procedure involves chemicals, students must check compatibility of materials using the Chemical Reactivity Worksheet App [https://www.aiche.org/ccps/resources/downloadinstall](https://www.aiche.org/ccps/resources/downloadinstall)
   c. Groups must present an SOP to their advisors/instructors and to Michelle Grawe before being granted lab access.