

Carnegie Mellon University

School of Art

Doherty Hall SIS Facilities Shop Safety and General Lab Guidelines

Any training done prior to Spring 2023 must be renewed either in class or with the technician

Regardless of any customary use or knowledge, before using a shop, lab, or any piece of equipment overseen by the Wood, Metals, and Moldmaking/casting Technician, all undergraduate students and graduate students must be trained on any equipment that they wish to use. Training sessions will be scheduled throughout the semester to accommodate this policy, and sign up forms for these training sessions will be available via email. Upon training, a record of which students have been trained on what equipment will be available for monitors and technicians. General policies for Fall 2023 include:

- Swipe card access is available for all graduate students who have been newly trained and have signed a work alone waiver.
- Undergraduate access to students who have been trained in classes or by the Technician is available during monitor hours
- All students who enter the shop during monitor hours when the lab is open, must sign in to the woodshop using the QR code located near the front door. Please scan code with your phone and enter any requested information.
- Upon being trained by a shop technician and signing this document and the shop use agreement, a record of the date you were trained will be kept and be available to monitors and technicians. After 1 year of non-use of shops or equipment, you will be required to be re-trained.
- **Tool checkout:** Tools can either be checked out during class hours with faculty permission or during open lab hours with Monitor approval. Please use the QR code located at the Monitor desk and fill out all pertinent information. All tools must be returned the following day during class or open lab hours.
- All materials and projects stored in Doherty Hall must be labeled with your name and date or semester (such as "F23") that you will be using this material. If your material or project is not labeled correctly it may be removed.
- 2nd and 3rd year graduate students who have keys to the Woodshop + Material storage area next to the woodshop must return their keys to the Woodshop Technician or Kellie Hames and have access to the woodshop via ID card swipe card from here forward.

- Access to the metal shop is limited only to undergraduate students enrolled in Intermediate Mixed Media and graduate students who have undergone appropriate training (unless directly being supervised by SIS faculty during a class or by SIS Technician).

Shop Access Policy:

School of Art Doherty Hall facilities and equipment are primarily for the use of School of Art students (including students from other schools who are currently registered for School of Art classes). Others wishing to use the equipment must contact the appropriate staff.

Environmental Health and Safety **requires** that all student shop users and key holders must complete the following BioRAFT courses online:

[Student Shop Safety
Hand and Power Tool Safety Training](#)

[Compressed Gas and Toxic Gas
Procedures](#)

Compressed Gas and Toxic Gas training is required for all grads, monitors, GAs, and Faculty who will be using the metal shop and welding equipment.

Area specific safety training will be conducted by School of Art faculty and staff. Training must be completed before students can access the following facilities. Please click the facility's name to view access policies, safety guidelines, and other resources associated with each lab. **Please note: Some of these policies are currently under construction and new updates will be available at a later date.**

[Wood Shop \(C202\)](#)

[SIS Foundations classroom \(C200\)](#)

[Metal Shop \(D200 and D200A\)](#)

[CNC Router \(D200B\)](#)

[Laser Lab \(C316\)](#)

[Physical Computing Lab \(B305\)](#)

[Soft Sculpture Lab \(B307\)](#)

[PC + 3D Printing Lab \(B308\)](#)

[Moldmaking + Casting Studio \(B303, B306\)](#)

[Ceramics Studio \(B301, B300\)-](#)

[Imaging + Documentation Lab \(B303B\)](#) - Closed until further notice

[Vacuum Former \(D200\)-](#) Closed until further notice

[Spray Booth \(D200 hallway or D272\)](#)

Digital Print Studio (C308) - DP3 area, contact khames@andrew.cmu.edu

Printmaking Lab (C300-301) - DP3 area, contact khames@andrew.cmu.edu

Students are not allowed to use shops, labs, equipment, or any of these facilities under any circumstances without first completing training.

This document functions as a general facilities use agreement, to be signed by students after they are trained and kept as a record of their training

Hours of Operation:

Doherty Hall shops are open to student use during staffed or monitored hours. Monitor schedules are posted at the entry of each shop and online at <http://www.art.cmu.edu/facilities/shop-calendars/>

Should lab or equipment usage become crowded, some equipment, such as the CNC and laser cutters, may require making reservations for usage during monitor hours in advance (booked by appointment [here](#)). This is not required at this time. If you have questions about specific machines or equipment, please reach out to the staff member this equipment is listed under (see below).

Staff Contacts:

Jenna Boyles, Digital + Physical Computing Technician
CNC Router, Laser Lab, Physical Computing Lab, PC + 3D Printing Lab, Soft Sculpture Lab, Imaging + Documentation Lab
jboyles@andrew.cmu.edu

Kellie Hames, Print Technician
Digital Print Studio, Printmaking Lab
khames@andrew.cmu.edu

Michael Muelhaupt, Sculpture Technician
Woodshop, Metal shop, Foundations Classroom, Moldmaking + Casting studio, Ceramics studio, Spray Booth, Imaging + Documentation lab
mmuelhau@andrew.cmu.edu

Emergency Contacts:

For **ALL** on-campus emergencies, call **412-268-2323** or **x82323** on campus phones

CMU Environmental Health and Safety, **412-268-8182** or **x88182** on campus phones

A note on dust masks and voluntary respirators:

Our shops and labs use ventilation systems and filtration to reduce exposure to harmful dust particles and fumes. For this reason, it is not mandatory to require masks or respirators in any of our shops, except those masks that may be required as part of CMU's response protocol to COVID-19. We do provide general dust masks in our woodshop that we would recommend wearing if you are sensitive to dust particles.

However, if you are interested in seeking additional respiratory protection from the dust particles and fumes you will be exposed to, please contact CMU Environmental Health and Safety [safety@andrew.cmu.edu] about their respiratory protection program.

The respiratory protection program sets guidelines for respirator selection and use, medical surveillance and physician's approval. All respirator use by employees and students must be coordinated through EH&S. Persons wishing to enroll in the respiratory protection program should contact EH&S. For additional information on respiratory protection, please review the reference links here:

<https://www.cmu.edu/ehs/Workplace-Construction/respiratory-protection.html>

This program will require a medical evaluation and registration for a respirator fitting.

General Shop and Lab Safety Rules:

1. **Injuries** - For immediate help notify the SoArt Technician or monitor on duty and call **412-268-2323 or x82323** on campus phones. Do not attempt to remove foreign objects from the eye or body; report to the student health service for medical treatment.
2. **Never work alone** - a supervising SoArt Technician or student monitor must be present at all times in shops or labs with machines. Trained graduate students may work outside of monitor hours in specific labs by signing the work-alone waivers. These waivers are available through the Sculpture Technicians.
3. **Sign in to any shop or lab you are working in**, using the physical sign-in sheets located near the door, or by signing in with a monitor who may provide you a digital sign in option. Sign in with date and time and sign out when you leave. This is not required for general classrooms that may not have machines / equipment present.
4. **Training and approval is required** to enter shops and operate any equipment. Upon being trained by a shop technician and signing the Shop Use Agreement, a record of the date you were trained will be kept and be available to monitors and technicians. After 1 year of non-use of shops or equipment, you will be required to be re-trained.
5. **Appropriate personal protective equipment must be worn at all times**. This includes safety glasses or goggles, gloves, respirators and hearing protection.

- a. Gloves **should not** be worn when operating rotary equipment.
 - b. Appropriate clothing, coverings, face shields and eye protection must be worn during hot work.
6. **Appropriate clothing is required to enter a shop facility.** See various shop and lab policies for different requirements. For wood and metal shops, rubber sole shoes with full foot coverage must be worn in the shop. No sandals, open toe shoes, heels or shoes exposing the top of your feet are allowed. Shorts and skirts are prohibited.
7. **All guards and safety shields must be secured** and in place prior to operating equipment, where this is relevant and available. Exceptions must receive prior training or assistance from shop staff.
8. **Inspect equipment prior to use.** If equipment does not appear to be operating normally, report the issue immediately to shop staff.
9. **Before beginning work with powered equipment and machines:**
 - a. **Secure loose clothing** including ties, scarves, and loose sleeves.
 - b. **Remove jewelry.** This includes rings, necklaces, bracelets, lanyards and watches.
 - c. **Secure long hair.** Hair must be contained and pulled back so it cannot come in contact with machinery. This includes beards.
10. Ensure any appropriate **dust collection** or fume extraction systems have been **turned on** prior to working.
11. **Aisles, exits, and access to emergency equipment** must be kept clear.
12. **No smoking and no food or drink.**
13. **Compressed air** must NOT be used to clean skin or clothing.
14. **Stop** any person you see working unsafely if it is safe to do so. **Report continued unsafe practices to the shop staff.**
15. **Shop Monitors and Staff, as well as faculty** have full authority to prohibit shop or tool access and/or use any time.
16. **Do not distract others.** Concentrate on your task. Distracting others and horseplay is forbidden.
17. **Personal electronic devices** such as cell phones, earphones, etc.,. Must not be used when working at any machine. Loud music is prohibited while operating machines. Laptops are only permitted in specific areas, see lab policies.
18. **Attend all running machines.** Never ever leave equipment running unattended.

19. **Stay alert, never work impaired.** Do not enter a shop or use equipment while under the influence of drugs, alcohol, and/or while deprived of sleep, or under stress.
20. **Health, safety or other concerns?** Notify shop staff if you have an issue that could impair or limit your ability to work safely (seizures, physical limitations, medication, lack of sleep, illness, etc.)
21. **Report all** injuries and accidents to the shop supervisor or monitor.
22. **Project Storage is not permitted** in any shop facility without permission from staff or faculty. Leave all projects only in designated areas.
23. **Small project storage** is provided for Undergraduates along the C-level hallway in Doherty Hall. Graduate project storage is provided along the D-level hallway leading to the Doherty Hall Loading dock.
24. Graduate students wishing to work in a lab during a class time or store a project in classroom space **must have permission from the faculty members teaching in this space** before doing so.
25. **Lab-specific materials storage is provided in various shops and labs** and other locations throughout Doherty Hall. All materials permitted in the Wood Shop may be kept in C203 for short term storage. Materials specifically intended for the CNC router and cut down to 4'x4' may be stored in D200 outside the CNC room. Excess metal stock may be stored in the Welding Room on provided storage racks. If you have questions, please see specific lab policies or a shop technician.
26. **All materials and projects stored in Doherty Hall in designated storage areas must be labeled** with your name and date or semester (such as "S23") that you will be using this material. If your material or project is not labeled correctly it may be removed.
27. CNC router and Laser cutters are to be used on an appointment-basis and operated by a trained technician, monitor, or faculty. To make an appointment, go here:
CNC: https://www.supersaas.com/schedule/SchoolofArt/CNC_Router
Laser: https://www.supersaas.com/schedule/SchoolofArt/Laser_Cutters
28. **A reservation system is now available for 3D printers.** Reservations are not required for prints under 2 hours. You must reserve a printer for prints 2+ hours or to use multiple printers. Please check printer availability before visiting the lab and make reservations here: https://www.supersaas.com/schedule/SchoolofArt/3D_Printers
29. **Flammable or combustible** materials must be stored in approved flammable storage cabinets.

30. Please refrain from using materials you are unfamiliar with that have not been addressed in a class setting. **The use of any potentially harmful or hazardous materials needs to be approved by sculpture technicians.** The use of flammable or combustible materials are **limited to designated areas, such as the spray booth or loading dock.** If you have questions about specific materials, please reach out to a technician. Please see the moldmaking and casting policies for more guidelines on material usage acceptable in the moldmaking area.
31. **Solvents and chemicals** must be disposed of in designated chemical disposal containers.
32. **All painting, staining, and finishing** with oil-based materials or solvents should be conducted in the **Spray Booth or on the Loading Dock.** Only water-based paints can be used inside in designated areas, protecting all surfaces (floors / tables) with tarps or paper.
33. **Clean up. You are responsible for cleaning and disposing of materials you have used and any garbage or scraps in the appropriate trash can or recycling bin. You are responsible for putting tools away and leaving the shop or lab in as good if not better condition than when you entered.**

Failure to observe and adhere to University and School of Art safety guidelines may result in loss of equipment or facility access, fines, and/or removal from the program.

For questions regarding materials, storage of projects, and special facilities requests please contact a School of Art Sculpture Technicians.