Art & Design Guide to Safety
2019
Safety Policy

It is our policy to take all practical steps to provide a college community that is free from recognizable hazards to life and health. The University will maintain an Environmental, Health and Safety Program that will comply with Federal, State, and Local regulations and standards.

Each member of the University community has a responsibility for acting in a safe manner and for reporting acts and conditions that may cause injury or harm immediately.

In carrying out this responsibility, the Office of Environmental, Health and Safety (OEHS) should be called upon for assistance, but the availability of such assistance in no way reduces an individual's responsibility for his or her own safety and the safety of others.

Students, faculty, and staff are vital resources in our community and their well-being is of primary importance.
Table of Contents
Introduction 1
PPE and Precautions 4
Hazardous Materials 6
Studios 10
Introduction

This manual is designed to give an Art & Design student at Suffolk University an overview of the potential hazards associated with the materials they may use, and suggestions on how to use them safely. In addition to identifying these materials, guidelines on the use of studio equipment have also been included.

The University’s Studio Safety Program has been developed to allow the artist, to practice art in a safe environment. There are some practices and procedures performed that have the potential to cause injury or harm. Standard Operating Procedures (SOP’s) have been developed to help instruct and protect the person(s) who are involved. There are also art supplies that have the potential to be highly toxic, if used improperly, or if used without taking necessary precautions by equipping yourself with the proper Personal Protective Equipment (PPE).

Use of any art-making materials not supplied to you by the University is prohibited unless prior approval has been obtained from your instructor(s) or the woodshop manager. This fundamental studio rule must be adhered to when contemplating use of any private materials. Safety Data Sheets (SDS’s) must be obtained by the prospective user from the substance manufacturer or distributor and given to the course instructor.

This manual reflects the commitment of the University to you, the artist, to provide a safe environment in which to practice and learn. We urge you to read each section as it applies to your curriculum and to follow these most important guidelines, procedures, and work practices.

Emergency Procedures

The Suffolk University Police Department (SUPD) is on duty 24 hours a day, 7 days a week, and is equipped and trained to handle emergency situations that may occur on campus.

Emergency numbers on campus to remember are:

- POLICE: x8111 (On campus phone)
- POLICE: (617) 573 – 8111 (Outside line)
- FIRE: 9 then 911 (On campus phone)
- AMBULANCE: 9 then 911 (On campus phone)

All emergencies must be reported immediately to your instructor or to the receptionist at the front desk.

Safety Equipment

Ensure that all doorways, stairways, and access to mechanical rooms and safety equipment remain unobstructed.

First Aid kits are readily available in most classrooms and at the front desk for emergency use. It is important to become familiar with the location of these first aid kits in the event of an emergency. Report any kits that are missing supplies to an instructor or technician.

Fire exits: take the time to identify the nearest exit route. Keep all exits and exit routes clear. Also make a note of the Assembly Area which is located in Roemer Plaza on the south side of the main entrance to 20 Somerset.

Fire extinguishers are located throughout Art & Design spaces and should only be used by trained personnel. The number one priority is a safe evacuation out of the building in the event of a fire.
General Rules for Studios

The following are general rules to be followed in all Suffolk University studios:

• There is NO eating, drinking, or smoking permitted in the studios. The only exception is if a drink lid is tightly in place. Paint residue and pigment dust particles can be easily ingested through food.

• Studios must be kept in good order. Exits must not be blocked and must be accessible at all times.

• All materials must be stored appropriately. Solvents, flammables and corrosive materials must be kept covered at all times and stored in the yellow flame cabinets when not in use.

• Spray paints or fixatives are only permitted in the spray booth located in the Woodshop (B31).

• Open flames are not permitted in Art & Design studios

• Storage of flammable materials outside of flammable storage cabinets is not permitted.

• Melting of waxes is not permitted without faculty supervision. Portable, electric cook stoves must have heat level controls and must be UL rated.

• Pastels may only be used in studios while wearing a dust mask, and only with the express permission of the instructor and with the consent of the students working nearby. The use of non toxic pastels is recommended.

Avoid the use of pigments containing heavy metals (check material Safety Data Sheet before use):

• Arsenic (emerald green, cobalt violet) Antimony (true naples yellow)
• Cadmium (all cadmium pigments)
• Chromium (chromium oxide green, zinc yellow, strontium yellow, viridian, chrome yellow)
• Lead (flake white, mixed white, true naples yellow, chrome yellow)
• Manganese (manganese blue, manganese violet, burnt umber, raw umber, mars brown)
• Mercury (vermilion, cadmium, vermilion red)

• Do NOT use sinks to dispose of wastes. Solvent or media waste is to be disposed of in marked waste containers only. It is illegal to dispose of solvents or other hazardous chemicals down the drain.

• Painting rags and trash is not allowed to accumulate in studios. Oily rags and paper towels must be disposed of in the red, metal containers.

• Odorless paint thinner or odorless mineral spirits are the only solvents that may be used to thin paint or to clean painting materials.

• Small spills should be cleaned up immediately, notify you professor or supervisor. Spill kits are located in the main accumulation area (1st floor near elevators). If a serious spill occurs involving a gallon or more, OEHS must be notified.

• Always use the exhaust fan when any painting is being done, including when there is a significant amount of work drying after the actual painting.

• The largest container of odorless mineral spirits allowed in studios is one pint per student.

• All unused solvent or medium containers must be made of plastic or metal, clearly labeled as to exact contents and stored in a container with a tightly closing top.

• Final cleaning of brushes and palettes should be done with liquid soap from the dispensers in the studio.

• Disposable latex or plastic gloves are available for use and are available upon request.

*Any student who willingly does not adhere to safety guidelines and policies may have their studio use rights revoked.
After Hours Policy

The following applies to students wishing to work in the studios outside of normal operating hours. Normal hours correspond to the building hours of Sawyer (8am-11pm excluding any day when the university is closed).

- Students must call security (x8111) or stop by the SUPD security desk by 11pm to let security know they are planning on staying late.
- Students must provide the following:
  - Name
  - 1D#
  - Room they will be working in
- The latest anyone can stay in the studios is 1am.
- Students should let security know when they are leaving the building.
- Swipe cards will not work past 11pm so students cannot gain re-entry into the building itself if they leave.
- Any student who has not checked in with security but has been found working past normal hours may be asked to leave.
PPE & Precautions

Specific personal protective equipment (PPE) used in the studio or shop should be used to protect yourself and to prevent the spread of chemical residues (secondary contamination).

Gloves should be worn during all chemical processing. They should be clean and uncontaminated. Be sure your hands are clean before putting on gloves. After each session, wash the inside and outside of reusable rubber or plastic gloves. Check for leaks. Discard defective gloves. Use disposable gloves only once. Be sure glove material is compatible with the chemical being used (Contact OEHS if you need assistance). Solvents may cause gloves to deteriorate.

Safety (impact) glasses are required where the danger of flying debris exists. They must have side shields to prevent material entering from the sides.

* Ordinary glasses are not an adequate substitute for approved safety glasses. Safety glass are required in the Wood shop.

Unvented, or indirectly vented, approved splash goggles must be worn when handling dangerous chemicals. Splash goggles of this type completely enclose the eyes so as to prevent the entry of liquids. Prescription glasses and contact lenses may be worn under approved goggles.

Noise can reach 100 decibels or more in the Woodshop area and only 15 minutes of exposure can cause hearing loss. Noise reducing ear muffs or ear plugs are required when working in loud areas or with loud equipment/tools. Ear muffs or ear plugs are required in these areas that present a noise hazard. Always read the standard operating procedure (SOP) when working with new equipment/tools. Please request an SOP from your instructor.

Be sure to check with the instructor if you are unsure of any procedure prior to beginning. Immediately report any problem or unsafe act/condition to the instructor.

Ladders

Only trained personnel may use ladders in Art & Design spaces. Trained students may use a ladder under direct supervision only if trained by an instructor who has been trained. Please refer to the ‘Safe Ladder Use Guide’ for specific safety procedures while using a ladder.

Policy on Bringing/Storing Hazardous or Questionable Materials

Students must not bring hazardous materials on to University property.

Art & Design reserves the right to prohibit storage or use on the premises of any material that is too hazardous to be present regardless of its intended use.

The owner or possessor of unsuitable materials will be asked to promptly remove them from the premises. If the owner cannot, will not, or should not (because of high risk) remove the material themselves from the campus, it will be sequestered by either OEHS or the University Police for removal and disposal at the expense of the material's owner. If the material is an illegal narcotic or an explosive or pyrotechnic device of any type, it will be confiscated by University Police and its owner or possessor may be subject to appropriate discipline.

Storing Hazardous Materials in Lockers and Cabinets

No student may store a hazardous material (solid, liquid or gas) in any locker, cabinet, desk, credenza, or similar piece of furniture.
On-site storage of any student owned material (hazardous or otherwise) is at the sole discretion of the Art & Design dept. Materials whose ownership is not obvious; that are not related to academic work at the University; whose containers are unlabeled, damaged, leaking or otherwise faulty; which represent any other unacceptable risk to life or property; or that may be reasonably considered unwanted or abandoned are subject to being removed from the premises without either prior notice or compensation to the owner.

**Hazardous Waste Disposal Procedures**

All unmarked or recycled containers containing hazardous materials (new, used or waste) must be labeled with the name of the responsible individual, location, a description of their contents and the hazard (“toxic,” “flammable,” “reactive,” and/or “corrosive”). A Suffolk University Hazardous Waste Label must be used.

**Disposal of Hazardous Waste**

- All waste solvents should be placed into properly labeled and DOT (Dept. of Transportation) approved waste containers.
- Oily rags and paper towels are to be thrown away only in the special red flammable rag disposal containers provided.
- Do not pour chemicals, oil-based paints, or plaster down the drain, it is against the law.
- Do not mix waste materials. Containers must be properly labeled.
- Use a brand name (Thin-X, Kodak Dektol Developer, etc.), a well known common name (turpentine, linseed oil, etc.) or a chemical name (copper sulfate solution, ferric chloride, etc.). Do not use jargon or nick names (i.e. “used solvent” or “gunk”).
- Detailed hazardous waste procedures will be reviewed with you by the instructor when appropriate.
- All containers must have closed, drip proof caps or lids. Rubber stoppers, corks, tinfoil, or other temporary closures are not acceptable for transport.
- Waste containers must be closed with the lid cap screwed on tight when they are not in use.
- All waste containers must be kept in secondary containment.
- Keep the exterior of all containers clean. Contact OEHS if there are any questions about hazardous waste procedures.
Hazardous Materials in General Use

Safety Data Sheets and Standard Operating Procedures

Each studio has binders with Safety Data Sheets (SDS) and Standard Operating Procedures (SOP) that correspond with the materials, supplies, and tools generally used in Art & Design studios. They can be referenced for chemical make up/active ingredients, how to properly use, and first aid relevant to that material/tool.

Students who chose to use materials/tools outside of what is covered in the SDS and SOP binders must consult their instructor or the woodshop manager for approval.

Adhesives

Spray adhesives are not permitted in the studios except in Woodshop spray booth. Rubber cement and hot glue sticks give off fumes. These should be used in well ventilated areas. Use non-toxic glue sticks or sheets of adhesive instead of spray glue. These alternatives are less toxic and more permanent.

Aerosol Sprays

Aerosol sprays are not permitted in Art & Design studios except in Woodshop spray booth.

Clay

Avoid procedures that produce dust. Keep materials wet. Work with pre-mixed clay. Protect your face and eyes. Use a dust mask and goggles during mixing, chipping and grinding. Always ensure that the space is well ventilated. Learn about the chemistry of the materials by reading labels, charts and the SDS's before using the material.

Cutting with Utility and X-Acto Knives

Injuries can occur when cutting illustration board or other cardboard if proper precautions are not taken. In order to reduce the risk of injury please adhere to the following: the heavy gauge utility knife should be used for cutting illustration board, foam core board and corrugated cardboard.

• To prevent the blade from slipping over the straight edge guide, raise the straight edge up slightly by taping pennies or nickels underneath. Use a tape that provides some friction. A cork or neoprene backed ruler are suitable for this type of cutting and provide excellent grip.
• When cutting, the hand that steadies the straight edge guide should be well away from the knife blade. Draw the blade firmly and steadily towards you.
• For thicker material, the first blade stroke scores the surface, providing a track for subsequent strokes.
• Never twist the blade, the point can snap off.
• X-Acto knives should be reserved for thinner material and finer, intricate work.
• Always retract the blade or replace the safety cap over the blade when not in use.
• Dispose of blades in a safe manner: in provided yellow "sharp containers."
• Never cut in a hurry.
• All cutting should be done on cutting mats.
Dust masks should be worn where drawing materials may cause the atmosphere to fill with dust. Do not blow excess material off of drawings. Shake off loose powder in an area away from other students.

Use less toxic materials such as non-toxic pastels, colored pencils, crayon or oil stick when possible.

**Electrical Equipment and Connections**

- Extension cords may be used only when necessary and temporarily.
- Never remove the ground pin from extension cords or equipment.
- If something starts to smoke or cause sparks, unplug it from the power source.
- Label it with a warning of the defect and report the incident to the instructor.
- Electricity and water do not mix. Stay clear of water puddles when working with electricity.
- Extension cords should be adequate for the attached load (the extension cord must be rated high enough for the device it is powering). Household extension cords are not adequate for studio use and must not be used.
- Any extension cords that show signs of wear and tear must be removed from service and disposed of.

**High Density Rigid Foam Board**

Foam board contains toxic chemicals, which are released when heated with a hot cutting wire, or any other hot tool. The safest way is to cut it with a saw or band saw. Never use spray paint, oil-based paint or solvents on foam board. These may melt the material, causing a chemical reaction and releasing harmful fumes.

**Installations**

There have been several instances in art schools in which an art installation had the potential to cause personal injury or serious property damage. These hazards included blocking fire exits and/or sprinklers, improper use of flammable materials, incorrect wiring of electrical devices and large, heavy items that were inadequately restrained from tipping over. Prior review by the Facilities Department, OEHS, and/or Jamezie & Steve Novick is required if an artist intends a performance or exhibition that requires the use of, or attachment to, any component of the University’s buildings or is intended to
occur in any public “access” or “transport” areas, regardless of any attachment to University property. This policy will be enforced.

**Lights**

- Open faced lights should not be aimed at or positioned in close proximity to people, furniture, drapery, sets or flammable materials.
- Do not interfere with ventilation by covering the lights in anyway, except with properly installed gels, diffusers or scrim.
- Do not replace or remove lamps. This should be done by the technician. Never touch lamp glass, as the oil in your hand may cause the lamp to malfunction.
- Use only the power cable supplied with the lamp.
- Make sure all the sections of the light stand are tightened.
- Make sure that lighting devices are hung properly and are well ventilated.
- Be careful when adjusting lighting devices after they have been operating. The 500 watt lamps generate a lot of heat. They can cause severe burns. Rough handling may cause bulbs to explode.
- Make sure the connecting cables are large enough for the power requirements.
- The use of halogen lamps is prohibited in the studios.
- Lights should not be left on and unattended.

**Marking Pens**

The fumes from non-water based marking pens is potentially hazardous and should be used in well ventilated areas. Use non-toxic water soluble markers instead.

**Metalworking**

Any abrasive process, such as grinding or using a wire brush, can produce airborne debris that can cause damage to the eyes and the lungs. Students are required to wear safety glasses and a dust mask. Due to heat transfer leather gloves should be worn. Wash hands/arms afterwards. No other metal working is permitted on campus.

**Plaster**

Wear a dust mask and gloves. Certain types of plaster and quicklime become dangerously hot when curing. Consult the instructor regarding the type of plaster you are using and its potential to reach high temperatures. Goggles must be worn when carving or chiseling plaster. Bags of unmixed plaster and cement must be closed and labeled.

**Solvents**

Solvents are used for many purposes: to dissolve and mix oils, resins, varnishes; to clean brushes and silk screens. Prior to using any solvent, review the SDS and read the precautions and warning labels on the container. Familiarize yourself with the side effects that could result from long-term or short term over-exposure to the properties of that solvent. Dizziness, intoxication, and skin irritations are common ailments that result from the abuse of solvents.

**Waxes**

Hot plates are not to be used for the melting of wax for sculptural work. Heat lamps should be used for this purpose. Fumes from the molten wax and caustic dried pigments used in the Batik process can be hazardous. Never leave wax which is being heated unattended. Never add solvent or paint thinner when melting wax. Paint thinner is highly flammable. Hot wax should never be brought to a temperature where it begins to smoke.
Studios

Electronic Studios

- No food or drink is permitted near the work stations.
- Work in a natural and relaxed position. Take frequent breaks. Vary your activity.
- No spray paints, fixatives, adhesives or permanent markers are permitted
- Use non-toxic glue sticks or sheets of adhesive instead of spray glue.
- All cutting must be done on cutting mats.
- Use safe cutting methods when using X-Acto knives.
- Immediately report any unauthorized users, vandalism, theft, or improper use of equipment to SUPD, front desk person or a faculty member.
- Conserve resources: print in black and white as you work on a document, proofread it carefully, then print only one final in color. Save paper and recycle.

Avoiding Eye Strain

Avoid eye strain by regularly focusing into the distance. Blink often. Have soft light in the room. Do not work in darkness.

Monitor Adjustments

Brightness and Contrast Controls:
- Adjust to enhance readability.

Minimize Glare and Reflections:
- Adjust the monitor tilt so that ceiling lights do not reflect on your screen. Anti-glare screens, placed in front of your monitor, are available for your use.

Distance from the Monitor:
- You should be at least 18 inches away from the monitor (Hold arm straight out, you should touch the screen with your finger tips).

Monitor Height:
- The top of the screen should be at or slightly below eye level.

Use ergonomic posture to prevent fatigue and back pain. Rest back against back of chair with feet flat on the floor (avoid crossing legs/ankles). Avoid tiling head downward. Take breaks when sitting for extended periods (take a short walk, stand up, etc.).

Painting Studios

Use the smallest amount possible of any solvent. Do not use solvents to clean your hands. Wear gloves when working and follow this with soap and water. Use solvent resistant gloves wherever possible. (Be sure to reference the materials SDS)

Use gloves when handling varnishes, lacquers, thinners and epoxy resins. Make sure that there is adequate ventilation. Most solvents are flammable: be sure that you are familiar with the location of your studio fire extinguisher. All fire extinguishers should be mounted and identified with signs.

When disposing of rags or used liquids please use the containers designated for this purpose. Storing oily rags in your studio not only creates a health risk to you, but it could contribute significantly to causing spontaneous combustion and result in a fire.

Easels

Faculty will demonstrate proper set up of easels for their class. Ensure that legs are completely open and use bottom nobs to lock them in place. Check other positions nobs before using easel so that it does not tip while using.

Printmaking Studio

Etching Presses: Keep hands from press tops. Always check pressure before printing.

Clean-up: All solvent rags and paper should be put in safety cans and emptied
every day. These should be emptied into the large drum in the Main Accumulation Area by the department safety officer.

Printmaking methods use a variety of solvents and solvent mixtures, primarily for cleaning. Inks used in printmaking (black and white) usually contain carbon black. Studies have shown that repeated contact with carbon black could cause skin cancer years later (Carcinogen). Protect your skin from absorbing these chemicals. Common toxic pigments used in printmaking include chrome yellow (lead chromate), zinc yellow (zinc chromate), milori green (lead chromate), and cadmium colors.

Since most solvents used in printmaking are skin irritants, skin contact with them should be avoided as much as possible through the use of gloves, especially during clean-ups.

Only odorless paint thinner or odorless mineral spirits are to be used in the studio. Used OMS and OPT can be poured into labeled receptacles for settling and reuse. Do not use these to wash hands. Use hand cleaner.

Rags with ink or solvents may represent both a health and fire hazard. Be sure they are discarded into the special fire proof containers provided for this purpose.

Caution must also be used in the operation of print equipment. Intaglio printing requires a great deal of pressure and it is necessary to operate the presses properly. Students must be alert and knowledgeable when operating print equipment and seek assistance when in doubt. The printmaking studio is only available to beginning students when there is a monitor present who is trained in the proper use of equipment. Always seek assistance when necessary.

Hazards in silk-screening are minimized because only water based inks are used. However, there are toxic materials contained in photo-emulsion and emulsion removers. Also, advanced silk-screen classes utilize photo chemicals such as, developers, stop bath and fixers.

The printmaking studio in Art & Design is equipped with ventilation equipment, however, proper training and safety precautions are necessary to reduce the hazards associated with the use of printmaking materials.

**Woodshop**

* Any Suffolk student may use the shop with Monitor training and supervision.

- Do not work alone.
- Do not wear loose clothing, gloves, necklaces, rings, bracelets or other jewelry that may get caught in moving parts. Bare feet are not allowed in any studio or shop. Sandals, open-toe shoes, or high heels should not be worn. Non-slip safety shoes are recommended. Tie hair back.
- Always use safety glasses. Use a dust mask if a cutting or sanding operation creates dust.
• Noise reducing earplugs or ear muffs are required where the danger of hearing injury exists.
• Keep your work area clean.

**Woodshop policy**

The Woodshop Manager is responsible for training shop Monitors and others who wish to use the equipment. Any faculty who wishes to use the shop for a class project should be trained on the equipment by the shop manager in order to bring their class into the Woodshop. To request a shop demo and introduction for a class contact Jamezie at jahelenski@suffolk.edu ext 1701, office B31. Faculty must remain in the Woodshop with their students. Provided safety glasses must be worn when in the shop at all times.

**Woodshop Monitors**

Woodshop Monitors are student employees. Before assuming the position of Woodshop monitor, the student is required to be trained in the safe and efficient use of all shop tools, power and manual. They must have attended all training sessions required and must be thoroughly familiar with the instructional manuals that accompany each piece of equipment. In addition, each Monitor will have demonstrated proficiency with the shop equipment during safety training. Woodshop Monitors can provide technical assistance to students as to the operation and choice of machines.

Woodshop Manager Jamezie has extensive fabrication knowledge and can provide technical advice to students with the completion of their projects and may also train them in the safe operation of tools and equipment.

Students who wish to use the Woodshop’s power tools must first receive instruction from the Woodshop Manager or a Woodshop Monitor and may only use such tools when supervision is available, either during class or during regularly scheduled shop hours.

The Saw Stop table saw may only be used by the Woodshop Manager and Monitors whom have been trained, and have demonstrated proficiency and read the Saw Stop Manual. No students may operate this machine.
The Stationary equipment may be used by properly trained faculty and supervised students, and Woodshop Monitors. Hand-held power tools may be used under supervision, either in class or during regularly scheduled Woodshop hours.

**Care of Equipment**

- Do not operate tools or equipment without prior instruction from instructors or technicians.
- For your own safety, read the instruction manual before operating a tool. Learn the tool's applications and limitations, as well as the specific hazards.
- Keep guards of power tools in place and in working order.
- Electrically ground all tools where required. If a tool is equipped with a three-prong plug, it should be plugged into a three-slot electrical receptacle.
- Remove adjusting keys and wrenches before operating equipment.
- Disconnect tools before servicing or when changing accessories such as blades, bits, cutters, etc.
- Report all damaged or inoperable equipment to the studio technician. Do not use damaged equipment.

**Operation of Equipment**

- Secure your work. Use clamps or a vice to hold your work.
- Don't overreach. Keep proper footing and balance at all times.
- Avoid accidental starting. Make sure the switch is in the "OFF" position before plugging in the power cord. Do not use equipment that is tagged or labeled as inoperative or under repair.
- Never stand on a tool.
- Feed work into a blade or cutter only against the direction of rotation of the blade or cutter.
- Never leave a tool running unattended. Turn off the power.

**Recycling**

Do your part in helping Suffolk University increase recycling and reduce production of waste. There are glass/plastic/metal recycle bins as well as paper/cardboard recycle bins located in most classrooms and common areas. Please see the Suffolk University Sustainability web page.

**Energy Management**

Do your part in helping Suffolk University conserve energy. Please turn off all lights, computers, fans and other equipment while not in use.