



**SOUTH DAKOTA
STATE UNIVERSITY**
School of Design

SOUTH DAKOTA STATE UNIVERSITY | SCHOOL OF DESIGN STUDIO ART Safety, Rules, & Information Manual

School of Design Main Office

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EMERGENCY NUMBERS:

POLICE/FIRE/AMBULANCE

From a cell phone: **911**

From a campus phone: **111**

University Police Department: **605.688.5117**

Hazardous Materials: **605.688.4264**

ENVIRONMENTAL HEALTH + SAFETY AT SOUTH DAKOTA STATE UNIVERSITY

Public website:

<https://www.sdstate.edu/emergency-management-preparedness/environmental-health-safety>

RESOURCES AND REFERENCE MATERIALS

- *Artist Beware, Updated and Revised: The Hazards in Working with All Art and Craft Materials and the Precautions Every Artist and Craftsperson Should Take*, Michael McCann, PhD, CIH
- *The Artist's Complete Health and Safety Guide*, Monona Rossol
- *Making Art Safely: Alternative Methods and Materials in Drawing, Graphic Design, and Photography*, Merle Spandorfer
- *Painter's Handbook: Revised and Expanded*, Mark David Gottsegen
- ASTM International provides information on a number of materials, including art supplies.
<https://www.astm.org/COMMIT/SUBCOMMIT/D0157.htm>



PROGRAM GUIDELINES

- Health and Safety information should be posted in the respective studio/shop area, on the program website, and D2L.
- Health and Safety information should be discussed with students at the beginning of each semester.
- Applicable MSDS/SDS sheets should be posted or cataloged in a binder located where materials are stored.
- Emergency contacts should be posted in the studio area.
- Instructor or approved shop technician must be present when students are using power tools.
- Power equipment should have approved lockout mechanism.
- Material disposal policies and procedures should be posted in studio areas.
- First-aid kits should be available in studio areas.
- Students must be instructed in the proper use of tools and machines along with personal safety before being allowed to use equipment.
- No eating or drinking inside the studio.



School of Design Ceramics Studio

Studio Location: Room 108 + 109, The Barn

Open Shop Hours: Card access only with current course enrollment

GENERAL SHOP RULES AND SAFETY PROCEDURES

Accidents can and must be prevented. To do so requires safe work practices safe work practices and guidelines. These policies and guidelines are not all-inclusive and cannot cover every possible problem or danger. As the semester progresses, these safety procedures and studio policies, as well as others, will be reviewed and discussed. **Always use your safety common sense.** The faculty cannot guarantee results and does not take any responsibility if you follow these suggestions and still are injured.

AN UNORGANIZED AND/OR DIRTY STUDIO IS AN UNHEALTHY ENVIRONMENT.

- **Clean up any mess before you leave the studio.**
- **Do not eat or drink in the studio.**
- No shoes, no shirt, no work. Wear proper clothes and protective equipment as required by the job.
- Clean up wheels, sinks, tables, countertops, the floor and any other piece of equipment you have used
- Keep both worktables and storage areas clean by wiping them down with a wet sponge that you rinse frequently. After washing work areas with water, spray with spray cleaner. Make sure that tables aren't left with a clay film when you are finished working.
- Floors will be kept clean. Immediately mop up spilled clay, water, slip, and other materials. Mops are available for use in the studio.
- **Clean up all spills** as soon as they occur. Use the mop in the studio.
- **Avoid sweeping in the studio.** It stirs up dust and contaminants. Use the HEPA vacuum and/or wet mop. It is located by the sink.
- Try to avoid sanding greenware if possible. Instead try to fine-tune craftsmanship on work while it is in the wet or leather hard stage. If you need to smooth greenware, use a wet sponge. If it is absolutely necessary to sand greenware, use the spray booth and wear your dust mask.
- **Wash hands after working** especially after handling chemicals even if you are wearing gloves. Always wash hands prior to eating, drinking, or smoking.
- Put your work on your shelf when you are done working. Do not leave work out on the tables unless you have permission.
- Recycle clay scraps in slurry buckets. Make sure slurry in bucket is covered with water.
- Return chemicals to the proper storage area.
- Always label all containers.
- Put work in-progress away on your shelves when you are finished working unless you have permission. If you leave it out, it can get broken and others may need the workspace.
- Do not leave newspaper or plastic laying around on the tables or floors.
- Keep walkways clear.



- Be willing to clean up a dirty area even if you didn't make the mess. Remember that a clean studio is a safe studio and teamwork requires effort on the part of all.
- Never turn on electrical appliances with wet hands.
- **Know the locations of all fire exits, fire extinguishers and first aid kits (first aid kits are located over the sinks).**
- Do not work in the studio if under the influence of alcohol or drugs.
- Do not leave valuables around the studio.
- Discard trash before leaving the studio.
- REPORT ANY EQUIPMENT PROBLEMS TO THE INSTRUCTOR IMMEDIATELY.

CLOTHING

- It is best to wear old clothing in the studio as some clay materials can stain.
- It is strongly suggested that you wear close-toed shoes in the studio.
- Long hair should be tied back out of the way when working with equipment.
- Remove jewelry while working in the studio. Place it in a SAFE PLACE before working (not on a table or in a pocket).

PROTECTIVE EQUIPMENT

- **The appropriate NIOSH respirator must be worn (N95)** when making clay, glazes or any activity that causes high amounts of dust.
- **Goggles must be worn** when using the grinder and scraping kiln shelves. Ask the instructor where you can find goggles. Eyeglasses are not appropriate protection.
- **Appropriate dark goggles** must be worn when looking into kiln peep holes. They are necessary to protect your eyes from infrared radiation. They are in the kiln room. Silver suits or leathers, facemasks, and the appropriate gloves or mitts must be worn when removing raku ware from the kiln.

POTTERS WHEELS

- Please turn off the toggle switch on the electric wheels after use.
- Clean up wheels and splash pans when done working.
- Scrape off bats when done using them and return to the bat pile.

Do not leave work on the wheels when you are done working. Use bats and remove the work to your shelf.

GENERAL GUIDELINES FOR KILN ROOM SAFETY

- **Always assume that the kilns are hot** until you determine otherwise.
- Wear kiln gloves when necessary.
- Always wear the appropriate dark goggles when looking into a kiln.
- Do not place items on top of kilns (gloves, goggles, etc.)
- Always fire with pyrometric cones.



- Turn the exhaust system on when firing a kiln.
- Never place a kiln shelf directly on the floor of the kiln. Use a 1" post under the shelf so that the heat is distributed evenly.
- When loading ware, be sure it is dry. If it isn't dry, don't put it in the kiln.
- Always allow the kiln to cool for the same amount of time that it took to fire.
- Ware should only be removed from the kiln when it is cool enough to remove with a bare hand (no glove).
- Always use safety goggles when scraping shelves. NEVER brush a kiln shelf with your bare hands. Jagged pieces of glaze can easily tear skin.
- Vacuum the kiln before loading if necessary.
- Restack shelves and posts in appropriate location after unloading.
- Keep carts and other items a safe distance from kilns.
- **Always check to make sure the kilns are off when finished firing.**
- Always use care with kilns of soft brick construction. The bricks are fragile and can be damaged easily.

GENERAL GUIDELINES FOR THE GLAZE AREA

- The appropriate NIOSH (N95) mask **MUST** be worn while making glazes.
- Return chemicals to their proper place after use. Make sure the lids are on tight.
- Always wash hands thoroughly when through and before leaving the work area even if you wore gloves.
- When pouring dry materials, try to keep the dust to a minimum.
- Keep your hands out of the bucket when mixing with the drill.
- Wet wipe the counters and spray booth.
- If a bin is low, fill it.
- Let the instructor know if a chemical is low so it can be ordered.

GENERAL GUIDELINES FOR THE CLAY MIXING ROOM

- The appropriate NIOSH mask **MUST** be work while making clay.
- Turn on the exhaust system.
- Loose clothing and jewelry that could become tangled while operating machinery may not be worn. Long hair must be tied back.
- Do not put your hand or any other object into clay making equipment while it is running. Stop the machine first.
- Never guess at what a material is. Always ask to make sure you are using the right material.
- Clean the clay mixer when done and place plastic in it.
- Clean up any buckets or tools that you used.
- Fill garbage cans if they are low. Try to create as little dust as possible. Make sure you are putting the right clay in the right bucket.
- Throw empty clay bags in the garbage can.
- Lift with your legs rather than your back.
- Report to the instructor if we are running low on a material.



- Use the HEPA vacuum to clean the floor and other areas.
- AVOID SWEEPING if possible. Use the vacuum.
- **REPORT ANY HAZARDOUS SITUATION IMMEDIATELY TO APPROPRIATE UNIVERSITY PERSONNEL.**

CERAMIC KILNS:

APPROACH ALL EQUIPMENT AND TOOLS AS IF THEY ARE HOT.

- In Ceramics I, kilns may NOT be fired without the instructor's signature/permission on a completely filled-in kiln log. Permission must be obtained from the instructor prior to firing kilns.
- Two or more students will fire kilns. Kilns will never be fired by less than two students. Kilns may only be used after proper instructional training.
- Ceramics II, III, and IV may fire alone, but still must have signature and permission on filled in kiln log.
- Kiln sheets will be used and posted for all firings. All information must be provided and firing charts kept accurately.
- Students must remain in the area after the kiln is turned to "HIGH".
- Exhaust fan must be on. If the fan does not turn on, lower the thermostat temperature to approximately 60 degrees F.
- Kiln firing sheets will be used and kept up to date.
- When the kiln is unloaded:
 1. Stilts stack on proper shelves
 2. Shelves scraped and put away
 3. Kilns swept clean
 4. Floor swept if necessary
 5. Shelves washed and stacked
- All ware must be removed from kiln and put on proper shelves.
- If the kiln has a kiln sitter, safety cones must be used as well. Use the proper cones and make sure they are visible in peephole.
- Always use proper kiln wash if firing glazed ware. If no glaze is on ware, kiln- washed shelves are not necessary.
- Be cautious when pulling peep plugs and peering into spy holes. Wear dark goggles and use mitts.



**SOUTH DAKOTA
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School of Design

School of Design Design Studio

Studio Location: Design Studio, Building #21

Open Shop Hours: 24/7 Card Access for students enrolled in classes that meet in the space

GENERAL SHOP RULES AND SAFETY PROCEDURES

The Design Studio can be accessed seven days a week 24 hours a day with student keycard access on the west-side door. Students can access and are encouraged to work outside of their class time in the space whenever classes are not in session. In progress designs and student provided supplies can be stored in assigned flat files in the space or on the stacked tables by the west-side bay door.

Space Use Expectations:

1. It is expected that all students will respect this space, fellow students, and their projects.
2. When you work at night, please work in a buddy system. This building is isolated, so we ask that you come here to work with at least one other person at night or on the weekend at all times.
3. Should you need to call Security Services to be escorted to your dorm or car, do not hesitate to call 688-5117; a UPD safety escort will happily be of service
4. When you work inside and outside of class in the Design Studio, be aware that lack of alertness or complacency can be dangerous;
5. All tools must be used properly and only for their recommended use and with appropriate safety gear when necessary.
6. Keep the space clean and free of debris and clutter. This space is used for multiple classes that use a variety of media, so it needs to be accessible and functional for all.
7. NO SPRAY PAINT is allowed to be used in and around the Design Studio. It is important to respect this space to maintain a positive learning environment.
8. There is NO PARKING available near the Design Studio unless you have the appropriate parking permit. Students are not allowed to park on the gravel around the Design Studio. Students are responsible for any citation or fine they receive from parking in a lot they do not have a permit to park in.

Use of safety glasses/goggles is required anytime anyone in the room is using hammers, chisels, etc. or power tools. All students must supply their own approved safety glasses. No dark or reflective glasses are acceptable.



School of Design Drawing Studio

Studio Location: Room 113, Grove Hall

Open Shop Hours: 24/7 card access with current course enrollment

Ventilation Booth

- Aerosol Spray-fixing any drawing must be done in the ventilation booth in room 106A painting studio or outside of the classroom.
- You may not use Aerosol Sprays of any kind inside the classroom.
- No spray paint will be used in the ventilation booth. Spray paint cannot be used on campus for any reason inside or outside.
- The power switch for the ventilation booth is located next on the east wall in that room.
- Alert instructors about issues with the ventilation filters.

Hand tools

- Follow all safety procedure stated in previous sections that apply to hand tools. This includes battery or electric tools such as drills and reciprocating saws.
- All tools must be used for the purpose they were intended and in accordance to their directions.
- All appropriate personal protective equipment must be used including safety glasses.
- No distractions, focus on the specific task at hand.
- Working area should be free from clutter. Make sure to have ample space around the working area.
- Clean up area and replace tools to proper place when finished.
- Lock tool cabinet. Do not give combination of lock to anyone.
- Any type of cutting must be done on appropriate surfaces. Cutting tables located in south hallway of Grove Hall.

Drawing

- No eating or drinking in the drawing studios. It is important to wash your hands before eating, drinking, or smoking.
- All hazardous/flammable materials must be stored in the Yellow Flammables Cabinet or disposed of properly. Most students will not work with these materials in Drawing 1 and 2.
- The emergency eye wash station is located in room 106A (the room with the ventilation booth).
- First-aid kit is located on the west wall by the sinks in room 106 (Painting Studio).
- Emergency contact information is posted above the sinks
- Students must follow all the safety procedures described in this document.
- All waste oil, oil paint, oil painting medium, and odorless mineral spirits or other hazardous materials must be disposed of according to the procedures described in this document.

Graphite

Graphite is the most stable form of carbon and one of the most widely used material associated with drawing.

- Clean up with soap and water.
- Spray fix drawings after completion.



Charcoal

Charcoal is the oldest drawing medium used by man. It is the by-product of burnt wood (carbon) and is characteristically brittle, crumbly, and dirty. When rubbed against a surface deposits a dark mark and can be used to create lines or turned on its side to produce broad tonal masses.

- Clean up with soap and water.
- Spray fix drawings after completion.
- Clean up work area with simple green and paper towels

Color Pencils

Color pencils are made from color pigments suspended with a wax binder.

- Clean up with soap and water.
- Spray fix drawings after completion.

Ink

India / Sumi ink is made of black carbon particles suspended in water with a little of shellac to stabilize it after it dries.

- Clean up with soap and water.
- Wash brushes after use in sinks in room 106.
- Clean up work area with simple green and paper towels

Markers

Markers are made of five components which include a water or solvent based color solution (dye), a porous plastic nib, a plastic barrel, a cotton filament, and a cap. Some markers emit a strong smell and should be used in ventilated areas. If you feel light headed, stop using your markers and leave the area that you were working in.

- Clean up with soap and water.

Water color / Gouache

Water color paint is made from suspending pigments in a water-soluble vehicle (gum arabic). Watercolor can range from semi-opaque to transparent depending upon how much water is added to it and can come in a full spectrum of color choices. Gouache is very similar to watercolor but it has an additional chalk binder in it's composition which makes it dry more opaque.

- Clean up with soap and water.
- Clean brushes and palette after use.
- Dispose of water after use in sinks.

ACRYLIC

Acrylic paint is a water-soluble paint made of pigment suspended in an acrylic polymer emulsion. It dries much quicker than oil paint, can be diluted with water, and cleans up with water. Acrylic paint dries through the evaporation of water allowing for the acrylic polymers to link together.

- Clean up with soap and water.
- Clean brushes after use (see below Brush Cleaning).
- Dispose of excess unused paint in trash container.



OIL

There is nothing inherent to oil paint that makes it toxic. Oil paint is typically made with drying oils that may include linseed, walnut, safflower, or poppy seed oil. All of these binders are non-toxic and safe to use. However, some pigments are made with substances that can be toxic if not handled properly (See list of pigments below to be cautious of). Typically, oil and acrylic use the same pigments. The odorless mineral spirits that is often used to thin oil paint and to wash oil painting brushes is also toxic if not used or disposed of appropriately. The painting mediums that are used here are much safer, but caution and care should always be taken when working with mediums. There are still paint colors available that contain toxic substances. Lead white and cadmium colors are still produced and provide specific qualities that many artist feel can't be replicated. See Gamblin's Studio Safety page for more information - <https://gamblincolors.com/studio-safety/studio-safety-create-without-compromise/>.

- See below for clean up.

Oil Paint mediums

Any rags or towels that have oil paint, oil painting medium on them need to be disposed of in the red flammable cans. Take only enough oil painting medium that you plan do use in your session. If you have oil painting medium leftover, scoop it out with a paper towel or rag and dispose of it in the red flammable cans. This goes for any of the alkyd mediums, stand oi, linseed oil, etc.

As oil and oil painting mediums dry (technically oxidize), the chemical reaction produces heat. If left bundled up with ample oxygen, these rags can spontaneously combust. Therefore, it is imperative that you follow these safety procedures and dispose of them properly.

ODORLESS MINERAL SPIRITS (OMS)

Students are not allowed to bring their personal OMS or oil paint medium into the painting or drawing studios. These will be provided by the program.

All flammable/combustible materials must be stored in the Yellow Flammables Cabinet when not in use.

Used OMS should be disposed of in the appropriate red cannister next to the yellow cabinet. Students must consult the instructor prior to changing out their OMS. It is a good studio habit to produce the least amount of waste OMS as possible. Often students want to change their brush washer OMS before it really needs to.

To dispose of the used OMS, tightly screw the cover on your brush washer and shake vigorously. This will disperse the pigment sediment into the OMS. Using the funnel provided, pour that into the OMS waste container.

Refill your brush washer with Gamblin's Gamsol located in the yellow cabinet.

Paint disposal

No paint should be put down the sewer, neither acrylic or oil. It is best to scrape or wipe off any leftover paint into a rag or towel and disposed of in the appropriate receptacle. Any rags or



towels that have oil on them should be placed in the red flammable cans. Due to the slow drying nature of oil paint, it can be left on the palette and used later.

HAZARDOUS/FLAMMABLE/TOXIC MATERIALS

Online paint material safety information

<https://gamblincolors.com/studio-safety/studio-safety-create-without-compromise/>

<https://gamblincolors.com/studio-safety/guideforschools/>

Material Safety Data (MSDS/SDS) Sheets are available in the labeled binder stored next to the yellow flammable material cabinet.

If you get OMS or other oil painting hazardous materials in your eye :

- Use the Emergency Eye Wash Station
- Wash with clean water for at least 15 minutes. If irritation persists, get medical attention.

On your skin:

- Wash skin thoroughly with soap and water.

In your mouth:

- Rinse mouth. Seek medical attention.

Brush Cleaning

When finished with a drawing session, it is important to wash your brushes to prolong their life and usability.

OIL PAINTING BRUSHES

- First, use a rag to wipe any excess paint that is on the brush.
- Clean out in your brush washer by lightly rubbing bristles of brush back and forth on the screen in the bottom.
- To see how clean they are, lightly scrape against the top lip of the brush washer to see how much color comes out.
- Once the brushes are as clean as they are going to get from the brush washer, lightly dry them off with a rag.
- At the sink take a drop of dish soap in the palm of your hand and with a circular motion lightly rub the brush into the soap to work the soap up into the bristles.
- Continue circular motions on your palm as you rinse the soap out of the brush. Do this until there are no more suds and the water is clean.

ACRYLIC PAINTING BRUSHES

- First, use a rag to wipe any excess paint that is on the brush.
- At the sink take a drop of dish soap in the palm of your hand and with a circular motion lightly rub the brush into the soap to work the soap up into the bristles.
- Continue circular motions on your palm as you rinse the soap out of the brush. Do this until there are no more suds and the water is clean.



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ADDITIONAL RESOURCES AND REFERENCE MATERIALS

The Artist's Complete Health And Safety Guide, Monona Rossol

Making Art Safely: Alternative Methods And Materials In Drawing, Graphic Design, And Photography, Merle Spandorfer.

Artist Beware, Updated And Revised: The Hazards In Working With All Art And Craft Materials And The Precautions Every Artist And Craftsperson Should Take, Michael Mccann, Phd, Cih

ASTM International provides information on a number of materials, including art supplies.

<https://www.astm.org/COMMIT/SUBCOMMIT/D0157.htm>



School of Design Painting Studio

Studio Location: Room 106 Grove Hall

Open Shop Hours: 24/7 card access only with current course enrollment

GENERAL TOOL AND MACHINE SAFETY RULES

- Operation of power equipment is only permitted after proper instruction, with permission of the instructor or shop technician, and only when the instructor or other appropriate university personnel are present. Each student must check individually with instructor or shop technician before operating each machine for the first time.
- Use of safety glasses/goggles is required anytime anyone in the room is using hammers, chisels, etc. or power tools. All students must supply their own approved safety glasses. No dark or reflective glasses are acceptable.
- Use of shop and equipment can only be used for projects associated with a School of Design course students are currently enrolled in. No personal projects.
- The use of spray paint is not allowed in this building or on the ground outside of this building.
- Each student must clean up area around equipment, tables and floor surfaces where work was performed.
- Given safety concerns, the use of any electronic device will not be allowed by anyone who is operating a stationary or portable power tool. All devices need to be shut off. All cords associated with electronic devices should not be visible on an individual who is operating a power tool. Also, if an individual is using a personal listening/music device, in the room where others are operating power tools, it is recommended that only one ear bud be in place or volume be low enough to allow the individual the ability to be alerted in the event of an emergency.
- The use of dust masks is recommended when dust is present. Students need to supply their own N-95 dust masks. Available at the SDSU Bookstore.
- Safety glasses must be worn at all times when using power equipment.
- Wear no loose clothing.
- Tie back hair.
- Keep machine tables clear of tools and materials.
- Keep floor around machines clear of shavings, scraps, tools and materials.
- Only the operator should be in the safety zone.
- The operator should turn the machine on and off.
- Be sure machine is turned off when you leave it.
- Keep the guard in place and/or in the proper position.
- Keep your mind and attention on the operation. Do not talk or look around.
- Use caution and be aware of where your hands are headed when cutting curves.
- Stop the machine before making adjustments.
- Do not crowd around the machine when set-ups are being made.
- Do not distract persons who are operating machines.
- Approach every machine with the assumption that it is running.
- Please ask supervisor if you are unsure about any procedure or set up on any equipment in the studio.



- Check with supervisor if you have any doubts regarding machine's performance or if blades or belts need replacement.

POWER MITER SAW

All GENERAL MACHINE SAFETY RULES apply with the use of the power miter saw.

- Do not use the power miter saw if your instructor is not present. The saw should remain locked up at all other times.
- Do not use the power miter saw the saw blade guard is not functioning properly.
- Lock wheels on saw when in use.
- Unplug the saw when making repairs or adjusting blades and guards.
- Regularly check and tighten blade and guard.
- When cutting wood, let the saw blade come to a complete stop at the bottom of the cut before raising the saw blade.
- Make sure the blade has come to a complete stop before removing wood or reaching into cutting area.
- Cut with smooth, controlled, and fluid movements. Cutting quickly can increase the possibility of accidents. It also can make messier cuts.
- Keep the fingers away from in front of the saw blade.
- Do not cross hands over saw to hold boards.
- Use clamps to secure wood. Have a fellow student assist supporting the wood if you are cutting a long piece.
- Do not attempt to cut small pieces.
- All appropriate personal safety equipment must be used this includes approved safety glasses
- Remove jewelry like bracelets and rings
- Tie back long hair, scarves, hoodie drawstrings, or apron strings
- Roll-up long sleeves and tuck in any loose or baggy clothing
- Footwear should cover and properly protect entire foot and provided necessary traction
- Be present and aware while you are using the saw. Minimize all distractions. Know where your fingers are.
- Students are responsible for cleaning up all saw dust and wood. Keep the area clean and clear from clutter as you are cutting.

HAND TOOLS

- Follow all safety procedure stated in previous sections that apply to hand tools. This includes battery or electric tools such as drills and reciprocating saws.
- All tools must be used for the purpose they were intended and in accordance to their directions.
- All appropriate personal protective equipment must be used.
- No distractions, focus on the specific task at hand
- Working area should be free from clutter. Make sure to have ample space around the working area
- Clean up area and replace tools to proper place when finished.
- Lock tool cabinet. Do not give combination of lock to anyone.

Updated December 2025



PAINTING

Read Gamblin's information on studio safety and material handling.

<https://gamblincolors.com/studio-safety/guideforschools/>

<https://gamblincolors.com/studio-safety/studio-safety-create-without-compromise/>

- No eating or drinking in the painting studio. It is important to wash your hands before eating, drinking, or smoking.
- Material Safety Data Sheets MSDS are posted in a binder next to the Yellow Flammable Cabinet.
- All hazardous/flammable materials must be stored in the Yellow Flammables Cabinet or disposed of properly.
- The emergency eye wash station is located in room 106A (the room with the vent booth).
- First-aid kit is located on the west wall by the sink.
- Emergency contact information is posted on by the sinks
- Students must follow all the safety procedures described in this document.
- All oil, oil painting medium, and odorless mineral spirits must be stored in the Yellow Flammables cabinet.
- All waste oil, oil paint, oil painting medium, and odorless mineral spirits must be disposed of according to the procedures described in this document.

OIL PAINT

There is nothing inherent to oil paint that makes it toxic. Oil paint is typically made with drying oils that may include linseed, walnut, safflower, or poppy seed oil. All of these binders are non-toxic and safe to use. However, some pigments are made with substances that can be toxic if not handled properly (See list of below of pigments to be cautious of). Typically, oil and acrylic use the same pigments. The odorless mineral spirits that is often used to thin oil paint and to wash oil painting brushes is also toxic if not used or disposed of appropriately. Historic or traditional painting mediums were often quite toxic. None of those are used in this studio. The painting mediums that are used here are much safer, but caution and care should always be taken when working with mediums. Developing safe and healthy working habits starts now.

Binders/Vehicle

Linseed oil

Walnut oil

Safflower oil

Additives in Oil Paint

Aluminum stearate – to limit separation on oil and pigment

Calcite or silica – as fillers

Mediums

Galkyd – Gamblin <https://gamblincolors.com> – an alkyd painting medium

Gamblin Solvent Free Fluid – includes poppy seed oil

Liquin – Winsor Newton www.winsornewton.com – an alkyd painting medium

Linseed oil (refined or cold-pressed) – the same as the binder for most oil paints

Updated December 2025



Stand Oil – Vacuum bodied linseed oil

ACRYLIC PAINT

Acrylic paint is a water-soluble paint made of pigment suspended in an acrylic polymer emulsion. It dries much quicker than oil paint, can be diluted with water, and cleans up with water. Acrylic paint dries through the evaporation of water allowing for the acrylic polymers to link together.

Acrylic paint typically uses the same pigments found in oil and watercolor paint. It is the binder, acrylic resin or acrylic polymer emulsion, that defines its particular working properties.

Binders/Vehicle

Acrylic Polymer Emulsion

Additives in Acrylic Paint

Ammonium Hydroxide

Propylene Glycol

Biocides as preservatives – isothiazolinones

PAINT/PIGMENT

Historically, many of the pigments paint was made with were toxic materials. These included mercury, arsenic, and lead. Many contemporary paint manufacturers have worked for years to create replacement colors for pigments that match their working properties but not their possible toxicity. There are still paint colors available that contain toxic substances. Lead white and cadmium colors are still produced and provide specific qualities that many artist feel can't be replicated. See Gamblin's Studio Safety page for more information - <https://gamblincolors.com/studio-safety/studio-safety-create-without-compromise/>.

With typical use of these paints, the possibility of being effected is extremely low. None the less, it is important to instill safe habits in the studio. The greatest risk to ingestion of these substances is when they are in powder form. If you mix your own paint from powdered pigment you must wear an appropriate respirator and other personal protective equipment including protective clothing. Paint mixing should take place in a specific room with proper ventilation. Dust from sanding a painting, putting pigment particles into the air, and then breathing in the airborne particles is another way these substances can enter the body. The same type of personal safety equipment should be worn when sanding a painting.

This studio generally doesn't use any of those pigments just to be cautious. However, if used properly, they are safe.

ODORLESS MINERAL SPIRITS (OMS)

Students are not allowed to bring their personal OMS or oil paint medium into the painting studio. These will be provided by the program.

All flammable/combustible materials must be stored in the Yellow Flammables Cabinet when not in use.



Used OMS should be disposed of in the appropriate red cannister next to the yellow cabinet. Students must consult the instructor prior to changing out their OMS. It is a good studio habit to produce the least amount of waste OMS as possible. Often students want to change their brush washer OMS before it really needs to.

To dispose of the used OMS, tightly screw the cover on your brush washer and shake vigorously. This will disperse the pigment sediment into the OMS. Using the funnel provided, pour that into the OMS waste container.

Refill your brush washer with Gamblin's Gamsol located in the yellow cabinet.

Disposal of Oil Paint Mediums

Any rags or towels that have oil paint, oil painting medium on them need to be disposed of in the red flammable cans. Take only enough oil painting medium that you plan do use in your painting session. If you have oil painting medium leftover, scoop it out with a paper towel or rag and dispose of it in the red flammable cans. This goes for any of the alkyd mediums, stand oi, linseed oil, etc.

As oil and oil painting mediums dry (technically oxidize), the chemical reaction produces heat. If left bundled up with ample oxygen, these rags can spontaneously combust. Therefore, it is imperative that you follow these safety procedures.

Disposal of Acrylic painting Mediums

There are numerous acrylic painting medium available. They can be used to alter the working properties, change the surface quality to make it more glossy or more matte, or give the paint more body or texture. Most acrylic mediums include acrylic polymer emulsion in some fashion along with other additives from matting agents to silica for texture. Most, if not all of these, should be water soluble.

Paint Disposal

No paint should be put down the sewer, neither acrylic or oil. It is best to scrape or wipe off any leftover paint into a rag or towel and disposed of in the appropriate receptacle. Any rags or towels that have oil on them should be placed in the red flammable cans. Due to the slow drying nature of oil paint, it can be left on the palette and used later.

HAZARDOUS/FLAMMABLE/TOXIC MATERIALS

Online paint material safety information

<https://gamblincolors.com/studio-safety/studio-safety-create-without-compromise/>

<https://gamblincolors.com/studio-safety/guideforschools/>

Material Safety Data Sheets are available in the labeled binder stored next to the yellow flammable material cabinet.



If you get OMS or other oil painting hazardous materials:

In your eye

Use the Emergency Eye Wash Station

- Wash with clean water for at least 15 minutes. If irritation persists, get medical attention.

On your skin:

- Wash skin thoroughly with soap and water.

In your mouth:

- Rinse mouth. Seek medical attention.

Proper Brush Cleaning

When finished with a painting session, it is important to wash your brushes to prolong their life and usability.

<https://gamblincolors.com/studio-safety/guideforschools/>

How to Clean Oil Painting Brushes

First, use a rag to wipe any excess paint that is on the brush.

Clean out in your brush washer by lightly rubbing bristles of brush back and forth on the screen in the bottom.

To see how clean they are, lightly scrape against the top lip of the brush washer to see how much color comes out.

Once the brushes are as clean as they are going to get from the brush washer, lightly dry them off with a rag.

At the sink take a drop of dish soap in the palm of your hand and with a circular motion lightly rub the brush into the soap to work the soap up into the bristles.

Continue circular motions on your palm as you rinse the soap out of the brush. Do this until there are no more suds and the water is clean.

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School of Design Printmaking & Letterpress Studio

Studio Location: Room 118 & 120 Grove Hall

Open Shop Hours: 24/7 card access only with current course enrollment. Use of equipment and materials in Room 120 is restricted to only students with current course enrollment. Working with a buddy system is encouraged for beginning students.

GENERAL SHOP RULES AND SAFETY PROCEDURES

Eyewash Stations

- An eyewash station is in the etching area and is attached to the sink.
- Another eyewash station is in the Clean-Up Room adjacent to the painting studio.

First Aid Kit

Is located on the wall at the doorway adjacent to the painting studio

Health Labeling on Art Materials

via Gamblin Artist Colors

- ASTM (American Society for Testing and Materials) wrote the health labeling standard adopted into Federal Law based on toxicology reports so consumers can easily recognize materials that pose potential health risks.
- Look for this language on the label:
"Health Label conforms to ASTM D-4236."
- If there is a safety concern associated with any of our materials, a health warning will be clearly printed on the label.

GENERAL SHOP RULES AND SAFETY PROCEDURES

- Use of safety glasses/goggles is required anytime you are using solvents, filing metal plates, or working in the etching area. It is advised that students supply their own approved safety glasses, but there are glasses available for community use. No dark or reflective glasses are acceptable.
- Gloves must be worn when working with solvents, ferric chloride, and during screen clean-up.
- Solvents must only be used in the vent hood with the switch turned to ON.
- Spray paint is only allowed for aquatints and grounds. The use of spray paint for any other purpose or on the grounds outside the building is prohibited.
- Each student must clean up areas around presses, tables/counters, and floor surfaces where work was performed.
- Given safety concerns, the use of any electronic device will not be allowed by anyone who is operating a press. All devices need to be shut off.
- The use of dust masks is recommended when dust is present, such as when using the rosin aquatint box or sanding. Students need to supply their own N-95 dust masks. Available at the SDSU Bookstore.
- Always be alert regarding where your hands and fingers are when operating the press.
- No eating or drinking inside the studio.
- Alcohol or drug use is strictly prohibited. Please be present, sober, and alert when working in the studio.

Updated December 2025



- No sleeping in the studio.
- No children in the studio.
- No pets or animals in the studio.
- No open toed shoes or flip-flops worn in the studio to prevent injuries or exposure.
- All containers must be labeled and dated.
- MSDS/SDS sheets are available to each person using the printmaking & letterpress studio to reference material safety and are located in a comprehensive binder.
- Regardless of what you have been working with it is good practice to wash your hands thoroughly with soap and water before taking a break to eat, use your phone or computer, use the restroom, or finish in the studio for the day.

IF YOU GET SOLVENTS OR ANY HAZARDOUS MATERIALS IN YOUR EYE:

- Use the Emergency Eye Wash Station
- Wash with clean water for at least 15 minutes. If irritation persists, seek medical attention.

On your skin:

- Wash skin thoroughly with soap and water.

In your mouth:

- Rinse mouth. Seek medical attention.

CHEMICAL HAZARDS

Ink, Solvent, and Oil Disposal

- No ink should be put down the drain and sewer, this includes watercolor paint and acrylic inks (for Screenprinting) or oil-based inks (for Intaglio, Relief, and Monoprinting). It is best to scrape or wipe off any leftover ink into a rag or towel and disposed of in the appropriate receptacle. Any rags or towels that have oil on them should be placed in the red flammable cans.
- Solvents and grounds should never be put down the drain and sewer.
- Vegetable or baby oil should never be put down the drain and sewer.

Metal Type

via Letterpress Commons

<https://letterpresscommons.com/>

Type metal has lead in it, along with antimony and tin. People tend to stop listening after they hear the word “lead.” There is no question that there are proven, known hazards that can be traced to lead exposure, but, with an understanding of how and why lead enters the body, metal type can be handled safely for decades, just as it has been by 600 years worth of printers. A very small chemistry and biology lesson is needed to understand safe type handling.

There are many chemical forms of “lead.” The important distinction in this case is the difference between metallic lead, which is the form in type metal, and lead salts (oxides or carbonates), which were used in house and artists paints. In general, metallic lead is not biologically active. It doesn’t enter body through the skin, can only be inhaled if it is finely powdered (and even then



acts more like a nuisance dust), and even if ingested in “bulk,” i.e. a piece of type, will pass through the gastrointestinal tract with little absorption.

Lead salts, however, are a different story. Most common ones, such as white lead, used in “flake” white oil paints and house paint, and red lead, used in some metal primers, are biologically active. They can be absorbed, even when bound in dry paint, through the lungs as dust, and via ingestion when eaten as flakes or dust. Their toxicity is particularly acute in children, which is the basis for the restrictions currently in place regarding paint formulations and remodeling activities. Summaries of the effects of lead salts on children and adults are readily available on the EPA website.

That said, how should you keep yourself safe when working with metal type? First and foremost are basic shop hygiene practices: don’t eat, drink, or smoke while you’re working. Wash your hands well before that sandwich. Wear an apron. Don’t put type in your mouth. Be particularly aware of any type that has a white chalky surface. That’s probably lead carbonate, with all its dangers. Seriously consider scrapping it. If you decide that you want to keep oxidized type you’ll need to clean it using a wet method; you don’t want to get that material airborne by blowing it off. And remember that the cleaning materials are now contaminated with lead as well.

EPA webpage on lead

<https://www.epa.gov/lead>

PHYSICAL HAZARDS & EQUIPMENT USE

You may only use equipment and areas you have been shown how to use by your instructor. This varies for each class. Always ask a faculty member for assistance if you are unsure of how to use a piece of equipment or how to do a particular process.

Printmaking Presses

Printing presses that are properly operated are safe to use. Never place your fingers under or near the rollers. Always be aware of where your fingers and hands are at all times when operating the press. Keep your hands away from the press bed or any moving parts when the press is in use. You should only have your hands on the handle or designated areas when operating the presses. Remove jewelry or secure loose clothing or hair that could get caught in the press. Keep track of loose clothing, apron strings, and long hair. Never force anything through the presses.

Potter & Reprex Proofing Presses

via Letterpress Commons

<https://letterpresscommons.com/>

Hand cranked proofing presses are some of the safer machines in the print shop. Be aware of leaving stray things on the press bed, more to avoid damaging the press than damaging the operator. Do keep track of loose clothing, apron strings and long hair—many presses have exposed gearing that could catch wayward bits. Again, it seems obvious, but don’t do anything silly that would put your hand under the cylinder.



TOOL SAFETY

- Keep carving tools sharpened, and carve away from your body.
- Do not place your hands or fingers in front of where you are carving.
- Use a bench hook or non-skid surface to help keep your hands and fingers safe.
- Take care with sharp points of the etching tools.

HANDLING TYPE CASES

- Ask for assistance when removing an entire case
- Slightly open the case below to help support the case from which you're working.
- No open toed shoes or sandals. Type or type cases can fall on your toes or feet and cause injuries.

RAG SAFETY

- Oil and solvent soaked rags can spontaneously combust and must be handled properly with care.
- All oil or solvent soaked rags and newsprint must be placed in a red bin.

BEFORE YOU LEAVE...

You have not finished working until you have cleaned:

- All oil-based ink is cleaned up with vegetable oil followed by Simple Green.
- Brayers and rollers thoroughly cleaned with no remaining ink or oil.
- Rollers cleaned and rags are properly disposed of in Safety Cans.
- Tables have been cleared of paper and other materials.
- Work surfaces have been wiped down with Simple Green.
- No squeegees, tape, ink, or solvents in the sinks..
- The last person to leave must turn off the lights, shut off any running water or electrical equipment.
- Double check the water is shut OFF.
- Double check the hot plate is OFF and temperature gauge is at zero.

RESOURCES

Gamblin Artist Colors

<https://gamblincolors.com/studio-safety/studio-safety-create-without-compromise/>

Letterpress Commons

<https://letterpresscommons.com/>



School of Design (Sculpture Studio)

Studio Location: Room 111 The Barn

Open Shop Hours: 24/7 card access only with current course enrollment.

GENERAL SHOP RULES AND SAFETY PROCEDURES

- **Operation of power equipment is *only* permitted after proper instruction, with permission of the instructor or shop technician, and *only* when the instructor or other appropriate university personnel are present. Each student must check individually with instructor or shop technician before operating each machine for the first time.**
- Use of safety glasses/goggles is required
- Use of shop and equipment can only be used for projects associated with a School of Design course students are currently enrolled in. No personal projects.
- Spray paint, oil-based paints and varnishes are *not allowed* in the Building. The use of spray paint on the grounds outside the building is also *prohibited*.
- Personal power equipment is *only allowed* in the sculpture studio when classes are in session. Check with instructor or shop supervisor before using any personal power equipment.
- Each student must clean up area around equipment, tables and floor surfaces where work was performed.
- Given safety concerns, the use of any electronic device will not be allowed by anyone who is operating a stationary or portable power tool. All devices need to be shut off. All cords associated with electronic devices should not be visible on an individual who is operating a power tool.
- The use of dust masks is recommended when dust is present.
- No eating or drinking inside the studio

GENERAL MACHINE SAFETY RULES

1. Safety glasses must be worn at all times when using power equipment.
2. No loose clothing.
3. Tie back hair.
4. Keep machine tables clear of tools and materials.
5. Keep floor around machines clear of shavings, scraps, tools and materials.
6. Only the operator should be in the safety zone.
7. The operator should turn the machine on and off.
8. Be sure the machine is off and has come to a complete stop before you leave it.
9. Keep guards in place and/or in the proper position.
10. Keep your mind and attention on the operation. Do not talk or look around.
11. Stop the machine before making adjustments.
12. Do not crowd around the machine when set ups are being made.
13. Do not distract persons who are operating machines.
14. Approach every machine with the assumption that it is running.
15. Please ask supervisor if you are unsure about any procedure or set up on any equipment in the studio.
16. Check with supervisor if you have any doubts regarding machine's performance or if blades or belts need replacement.



TABLE SAW

1. Do not saw freehand, and only saw when either rip fence or miter gauge is used.
2. Do not stand directly in front of or in line with the blade. In most cases, the operator will stand to the left of the blade.
3. Do not place hands above or behind the blades unless they are well protected by the guard.
4. Use the push stick when necessary.

BAND SAW

1. Do not stand to the right of the band saw.
2. Adjust the upper guide close to the stock.
3. Do not back the blade out of a cut.
4. Keep the fingers away from in front of the saw blade.
5. Use caution and be aware of where your hands are headed when cutting curves.

JIG SAW

1. Unplug before changing blades.
2. Install the blade with the teeth pointing down.
3. Adjust for tension by raising the tension sleeve the correct amount.
4. Turn the pulley over by hand before turning on the power.
5. Make sure the blade guide and hold-down are adjusted properly.

DRILL PRESS

1. Make sure the stock is clamped properly before drilling or boring.
2. Never attempt to use a hand auger bit in the drill press, use only drills and bits designed for machine use.
3. Always position the hole in the center of the table beneath the drill and place a piece of wood beneath the work to keep from drilling holes in the table.
4. Use brush to keep table free of sawdust.
5. Never attempt to stop the machine by taking hold of the chuck after the power is off.
6. On deep cuts, back bit out often to clean out the hole.

SANDER

1. Work must rest securely on table. Table can be angled, see instructor or shop technician.
2. Check rotation of belt for proper placement of work on table.
3. Use only light pressure – just enough to hold the work against the abrasive.
4. Sand parallel with the grain whenever possible to obtain a smooth finish.
5. Sand only dry wood.
6. Use a fixture to hold small pieces of wood when machine sanding (see instructor).



School of Design Welding Shop

Studio Location: Room 107 The Barn

Open Shop Hours: Permitted only under the supervision of a School of Design Shop Manager or qualified faculty member.

Welding Shop (107) Rules

1. **Supervision:**
Work in the Metal Shop is permitted only under the supervision of a School of Design Shop Manager or qualified faculty member.
2. **Training:**
Use only tools and equipment for which you have received proper training.
3. **Personal Protective Equipment (PPE):**
 - a. OSHA Z87.1 or Z87-2 safety glasses, long pants, and closed-toe, closed-heel footwear are required at all times.
 - b. Outer garments must be made of natural fibers; synthetics can melt, whereas cotton and leather will burn away.
 - c. PPE must be appropriate to the task: welding requires a welding helmet, jacket, and gloves; powered grinding or cutting requires a face shield; gloves are **not** permitted when using wire wheels or cup brushes.
4. **Clothing and Accessories:**
Remove or secure any items that pose a safety hazard. Tie back long hair and remove loose or dangling jewelry and garments.
5. **Noise Protection:**
Before using loud tools (e.g., angle grinders), ensure that all individuals in the space are wearing hearing protection.
6. **Welding and Torch Use:**
Before activating any welder or torch, confirm that ventilation and filtration systems are running, welding curtains are properly positioned, and all individuals on the welding side of the curtain are wearing welding helmets.
7. **Shutdown and Cleanup:**
Before leaving, verify that all equipment you used is turned off and returned to its proper location.
8. **Equipment Issues:**
Report malfunctioning or damaged tools immediately to the supervising Shop Manager or faculty member.
9. **Emergencies:**
In the event of an injury or other emergency, contact Campus Police at **605-688-5117**.



EMERGENCY NOTIFICATION SYSTEM

The Emergency Notification System is an established set of procedures. These systems are designed to provide critical information and instructions to the community during an emergency.

The university's emergency plans are dynamic and are continuously reviewed and updated to incorporate best practices as they emerge. Please take the opportunity to familiarize yourself with the plans and information provided here.

And remember – stay connected, stay alert, ask questions and take care of each other. If You See Something, Say Something!

Your safety and security are our top priority. That is why the university has implemented a campus alert system to notify students, faculty and staff of any safety threats or severe weather emergencies. You can be notified by any combination of the following:

- Mobile phone
- Text message
- Campus assigned email
- Business phone
- Home phone
- Secondary email
- Second mobile phone

The Emergency Notification System is a free service provided to students, faculty and staff of SDSU. It is important that all students and employees register to ensure they receive information regarding campus-related emergencies.

New students and employees will receive an email from CampusAlert@sdbor.edu at the beginning of the semester or when you start employment with registration information. The email will be personalized to you. The directions in the email walk users through the registration process. The first step is to click on the link to begin the registration process.

During a campus-related emergency, you'll be reached immediately with information that will keep you safe.



UNIVERSITY BUILDING & CAMPUS EVACUATION PROCEDURES

Evacuation Policy: SDSU policy requires immediate evacuation when any fire alarm sounds within a building. All faculty, staff, students and any other individuals within the building must promptly evacuate the building using the nearest designated exit routes.

Building Evacuation

- Building wardens and area wardens are responsible to ensure all people in their building are aware of exit routes and location of their building emergency assembly area.
- Personnel may briefly delay evacuating if they need time to shut down electrical and other equipment, especially any that involve flame, explosive vapor, or hazardous materials.
- All building occupants will follow instructions relevant to public safety issued by the building warden or fire and police personnel.
- After exiting the building, occupants are to go directly to their designated Emergency Assembly Area (EAA) and follow guidance provided by the building warden (or designated safety representative) and emergency responders.
- Do not re-enter the building until authorized fire or police department personnel give the "All Clear" instruction.

General Evacuation Procedures: If you hear the fire alarm or are instructed to leave the building:

- Immediately obey evacuation alarms and orders. Tell others to evacuate.
- No one may remain inside a building when an evacuation is in progress.
- Classes in session must evacuate.
- If involved with hazardous research or doing a dangerous procedure, immediately shut down operations that could create additional hazards if left unattended. Notify the building warden and evacuate as soon as possible.
- If immediately shutting down hazardous research would cause additional risks or hazards, notify the building warden and emergency personnel of location and hazards.
- When you evacuate, take keys, coat, medication, purse and any other critical personal items with you to the EAA.
- REMEMBER, IN CASE OF A FIRE, IT IS IMPORTANT TO NOT DELAY EVACUATION.
- Close doors as rooms are vacated.
- Assist those who need help, but do not put yourself at risk attempting to rescue trapped or injured victims.
- Note location of trapped and injured victims and notify your building warden or emergency responders.
- Walk calmly but quickly to the nearest emergency exit.
- Use stairways only. Do not use elevators.
- Keep to the right side of corridors and stairwells as you exit.
- Proceed directly to your designated EAA. Stay away from the immediate area near the building you evacuated.



- Remain in EAA until accountability is taken and instructions are given.
- Do not re-enter the building until authorized fire or police department personnel give the “All Clear” instruction.

Campus Evacuation

An emergency requiring the evacuation of the SDSU Campus is likely to be part of a larger evacuation. It is important to follow evacuation instructions.

Evacuating in a vehicle the primary egress routes for those leaving the campus in a vehicle are:

- Medary Ave, North to the Hwy 14 bypass or South to the City of Brookings
- 11th Street East to 22nd Ave and then North to the Hwy 14 bypass or South to the City of Brookings
- 8th Street West to Medary or East to 20th Ave. then South to 6th Street