



# UNIVERSITY OF NORTH CAROLINA AT PEMBROKE ART DEPARTMENT SAFETY MANUAL

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# **ADMINISTRATIVE RESPONSIBILITIES**

Managing proper safety procedures in the art program depends on cooperation, collaboration, and understanding among all parties involved, especially among faculty. The general safety responsibilities of all key participants are summarized below:

# Faculty:

- 1. Review and enforce safety rules among students and visitors.
- 2. Confirm that appropriate safety gear, such as eye protection, hearing protection, and gloves, are available and known to all people in the studio.
- 3. Control and maintain proper ventilation for hazardous fumes/dusts as much as possible.
- 4. Offer training on chemical hazard information, safety rules, recommended good practices, etc.
- 5. Restrict eating, drinking or smoking in the studios.
- 6. Ensure that secondary containers are properly labeled.

#### **Students:**

- 1. Review and follow safety rules at all times.
- 2. Report unsafe conditions and damaged/inoperable equipment.
- 3. Report accidents to Arts Production Specialist.

# **Studio Technician:**

- 1. Update the Art Department Safety Manual annually.
- 2. Conduct safety inspections of studios.
- 3. Check equipment to ensure proper functionality.
- 4. Inspect waste drums and monitor hazardous material storage and disposal.
- 5. Investigate accidents and hazardous material incidents.
- 6. Post appropriate warning signs within and around studios.
- 7. Assure Safety Data Sheets (SDS) for hazardous chemicals used in the studio are accessible.

## **GENERAL STUDIO SAFETY RULES**

- 1. Always wear the proper safety equipment when necessary.
- 2. Know the location of the emergency eyewash stations, first aid kits, and fire extinguishers.
- 3. Know the location of and understand the function of Safety Data Sheets (SDS).
- 4. Never use the studios if you are impaired/ under the influence of drugs or alcohol.
- 5. Proper and safe attire must be worn at all times, as specified by faculty in respective studio areas.
- 6. Always tie back long hair whenever you are working with power equipment of any type.
- 7. Take care with cutting implements. Do not work under a raised paper cutter. Always be aware of the location of your off hand. Never cut toward yourself or your hands.
- 8. Report any suspicious people or activities immediately.
- 9. No horseplay in the studios.
- 10. Do not prop-open or block exterior doors to the building.
- 11. Never use aerosol cans indoors.
- 12. Never use a tool without proper training. Use tools only for their intended function.
- 13. Always store hazardous materials in their proper locations. Never store hazardous materials in your locker.
- 14. Students working during "open studio hours" may not invite friends/visitors to share the studio space unless preapproved by faculty or the Arts Production Specialist.
- 15. No food or open drink containers are allowed in the studio.
- 16. Step stools are located in each studio for reaching high shelves or hanging art. Never stand on chairs or stools. Do not climb on cabinets or shelves.

## **CERAMICS**

# Clay

Clays are minerals composed of hydrated aluminum silicates, often containing large amounts of crystalline silica. The primary health hazard is associated with repeated breathing of clay dusts. Exposure will occur if dry clay is mixed without ventilation or allowed to accumulate on surfaces.

- 1. Always use dust masks when handling dry ingredients.
- 2. Clay should be mixed outside only.
- 3. Take caution with the mixer and pug mill; never reach into a machine while it is running.
- 3. The studio is wet mopped weekly. Avoid sweeping; use wet sponges for clean-up.

# **Glazes**

Glazes contain a mixture of silica, fluxes and colorants. Fluxes and colorants can be highly toxic by inhalation. Highly toxic glaze constituents include: Antimony, Lead, Barium, Lithium, Cobalt, Manganese, Vanadium, Arsenic, Cadmium, Beryllium, Chromium, and Nickel. All materials are labeled according to OSHA standards and regulations.

- 1. Always wear a dust mask when handling dry ingredients. Anyone in the vicinity should wear a dust mask to avoid exposure.
- 2. Dry ingredients should be mixed outside. If it is necessary to mix inside, switch on the overhead air filtration unit.
- 3. Use a wet sponge to clean up spilled powders.
- 4. Perform all glaze spraying in the designated booth.
- 5. Wash your hands after working with glazes.

#### **Kilns**

1. Kilns may only be operated with permission from the instructor or Arts Production Specialist.

- 2. Only persons who have been instructed in firing procedures may operate the kilns.
- 3. Avoid contact with hot kilns.
- 4. Raku firing should only be conducted under the supervision of the faculty or studio technician.
- 5. Kiln room ventilation must remain on from the time the kiln is started, and may not be switched off until it is ready to be unloaded.

#### **DIGITAL ART**

The Digital Studios contain a suite of sensitive electronic equipment.

- 1. No food or drink is allowed in the Digital Studios.
- 2. Power strips should only be plugged directly into a wall outlet. Never plug one power strip into another.
- 3. Cables should be secured in such a way as to avoid tripping hazards.
- 4. Pay attention to your posture while working. Take periodic breaks to stretch your legs and back.

#### **DRAWING**

The primary hazards in the drawing area are inhalation of fixatives and drawing materials, and injury through misuse of easels and drawing tables.

- 1. Fixatives and other types of aerosol products should not be used indoors.
- 2. Always wear a dust mask when using powdered materials (charcoal, graphite)
- 3. Assure that easels and drawing tables are securely locked in position at all times.
- 4. At the end of each class and work session, return easels and drawing horses to their proper storage location. Drawing tables should be returned to their flat position.
- 5. The work area should be wiped down and free of dust and other materials at the end of each work session.

# **PRINTMAKING**

A primary hazard in printmaking and silkscreen printing is exposure to organic solvents during plate preparation and plate clean up. Prolonged inhalation of solvent vapors in sufficient quantities can cause dizziness, nausea, loss of coordination even unconsciousness. Accidental ingestion either from poor hygiene or unlabeled containers can cause long-term toxic effects or can be fatal if significant quantities are ingested. Solvents are flammable and can be easily ignited.

Acids used in etching are severely corrosive to the body and reactive with many other chemicals. Nitric acid etching releases toxic nitrogen dioxide, which has poor odor warning properties.

- 1. Learn the specific hazards of what you are working with by reading the label and reviewing the Safety Data Sheets if necessary.
- 2. Gloves, goggles, and long sleeves are necessary when using acids and may be necessary when using solvents or bleach.
- 3. Maintain good ventilation, use the exhaust hoods.
- 4. Be aware of the location of eye wash stations or other water source for drenching the skin and eyes.
- 6. Acid should be mixed and poured only by the professor, studio technician, or advanced students with special permission.
- 7. Use the lifting cart for moving large lithography stones.
- 8. Keep fingers away from press rollers.

# **SCULPTURE**

Close-toed shoes must be worn at all times in the sculpture studio. Always be aware of your surroundings in the sculpture area. Be mindful of and avoid creating tripping hazards.

Ensure that others around you are aware before you operate any equipment. When you finish your work session, ensure that your materials and tools are properly and safely stored. Store materials flat; never lean steel, wood, or other materials against a wall or table.

# Welding

- 1. Proper clothing and safety gear must be worn for welding. Long pants, a welding jacket, gloves, and helmet are required. Avoid exposed skin.
- 2. All fire hazards shall be removed from the area of welding.
- 3. When welding is suspended and unattended, switch the machine off, and close the gas cylinder.
- 5. The welding screen must be in place.
- 6. Do not attempt to change gas cylinders.

#### **Machines and Tools**

- 1. Never use a tool without proper training by the faculty or technician.
- 2. Guards and shields, which are provided with the equipment, must not be removed.
- 3. Do not adjust any tools without authorization.
- 4. Eye protection is required for most machine and tool operation.
- 5. Damaged tools, including cords shall not be used and should be reported to the faculty or technician immediately.

# **Metal Casting**

- 1. Proper clothing and safety gear must be worn while tending the furnace or casting.
- 2. The furnace may not be operated without direct supervision by the professor or studio technician.
- 3. Anyone who is observing the process must wear safety glasses and maintain a safe distance at all times.

# **Mold Making**

- 1. Always wear a dust mask when working with dry plaster or silica sand.
- 2. Do not attempt life-casting without proper instruction by the faculty.
- 3. Wear safety glasses and gloves when mixing sand molds.

#### **PAINTING**

Paints are pigments mixed with a binder. Poisoning can occur if toxic pigments are inhaled or ingested. Water based paints include watercolor, acrylic, gouache, tempera and casein. The preservatives used in water-based paint may cause an allergic reaction in some people. Oil paints and brush cleaners include solvents. The solvents are toxic by inhalation, poisonous if ingested and may cause skin contact dermatitis.

- 1. Dispense solvents into approved and labeled containers only.
- 3. Wear neoprene gloves when cleaning brushes in solvents.
- 4. Do not use solvents to remove paint from your hands. Paint can be removed with baby oil and then soap and water.
- 5. Avoid intermixing drinking, eating containers with paintbrush containers.
- 6. Practice good hygiene. Do not put the brush in your mouth. Do not eat while painting. Keep your hands out of your mouth. Wash your hands after painting.

# **GALLERY**

Safety in the gallery is a concern primarily during exhibition changeover. Only approved Gallery Assistants or students who are installing their Senior Exhibitions are allowed in the gallery during these times.

1. Ensure that the exterior doors remain closed and secured.

- 2. When raising or lowering the entrance gate, check to make sure it is free of obstructions.
- 3. Only approved individuals (Studio Technician, Gallery Director) may operate the lift.
- 4. When moving or adjusting the ladder, always do so with a partner.
- 5. When using the ladder, have another gallery worker steady the bottom while you are on it.
- 6. When adjusting the track lights, beware of hot bulbs and housings. Never insert your finger into the track.
- 7. Ask for help when lifting or moving heavy objects.
- 8. Keep the floor clear of packaging material or other debris while working.
- 9. In the storage closets, areas inside the yellow lines must remain clear.

# **WASTE DISPOSAL**

Materials labelled with DANGER are considered hazardous wastes, and should be disposed of accordingly. These include solvents, oils, and other flammable materials.

- 1. Oil and solvent soaked rags should be placed in the red metal cans.
- 2. Unused solvents must be disposed of in the hazardous waste bucket in #123.
- 3. Never pour solvents, oils, or any non-water based material down the sink.
- 4. Heavy waste must be disposed of in the dumpster in the outdoor area. Do not place heavy objects or materials in the trash cans.
- 5. Spills of hazardous materials must be reported to the Office of Environmental Health and Safety immediately. (521-6792)

# **CHEMICAL HYGIENE**

The UNCP chemical hygiene plan may be found at:

http://studentaffairs.uncp.edu/wp-content/uploads/2017/08/UNCP-Chemical-Hygiene-Plan-Final-Draft-November-2016.pdf

# **CAMPUS SAFETY POLICIES**

The employee health and safety manual may be found at:

http://studentaffairs.uncp.edu//flips/EmployeeHealthandSafety/