WINTHROP UNIVERSITY

COLLEGE OF VISUAL AND PERFORMING ARTS

DEPARTMENT OF FINE ARTS

HEALTH, SAFETY, AND SECURITY POLICY

Creativity + Community + Collaboration = Mindset

<u>Please Note</u>: All faculty, staff, and students are required to read and familiarize themselves with this local safety policy.

2016-2017

In addition to the Department of Fine Arts Safety Policies delineated in this document, the following information must be noted and explored.

WINTHROP UNIVERSITY EMERGENCY INFORMATION

can be accessed through the following link:

http://www.winthrop.edu/emergency/default.aspx

Contact information for Campus Police along with critical information for your safety is available through the above link. Also, in case of an emergency of any kind please contact Campus Police at any time.

Campus Police 803-323-3333.

Other contacts

Department Chair
803-323-2653

Assistant to the Chair 803-323-3412

CVPA Dean's Office 803-323-2323

Fine Arts Safety Director/Studio Technical Manager 803-323-2332

Campus Environmental Health and Safety Manager 803-323-2328

Campus-Wide Warning and Response System

ALERTUS response system has stations located on each floor of Rutledge and McLaurin. This system will be activated in case of emergency situations. Please take note that a message will flash across the screen of the **ALERTUS** box. You will also receive both text and phone messages notifying you with important information regarding your safety. **Your phone must be registered** to receive critical notification in the event of emergencies, critical weather, or unplanned university closings. If you are not registered, you may do so through the above link's webpage.

TABLE OF CONTENTS

Introdu	iction]	page 4	ļ
1.	Pream	ıble	page 4	1
2.	Responsibility			1
3.	Access to Rutledge, McLaurin, Roddeypage			
4.	Accident Preventionpag			7
5.	Hazardous Materialspa			7
6.	Accidents			7
7.	Safety Inspection		page 7	7
8.	Evacuation Procedurepage			3
9.	Depar	tmental Area Studio Policiesp	age 9	
	A.	The Wood Studio	page 9)
	B.	Sculpturep	age 1	0
	C.	Jewelry/Metals	page 1	1
	D.	Ceramics Studio.	page	13
	E.	Painting Studio.	page 1	14
	F.	Photography Studio	page 1	5
	G.	Printmaking Studio	page 1	16
	H.	Art Education Studio	page 1	17
10.	Acci	dent Prevention Detail	.page	18
	A.	Housekeeping.	page	18
	B.	Manual Handling	.page	19
	C.	Machinery	page	20
	D.	Electricity.	page	24
	E.	Compressed Air and Gases	.page	25
	F.	Safe Handling of Chemicals	page	26
	G.	First Aid	page	27
Appe	ndix A	. Accident Report form	page	28
Appen	ndix B.	Hazard Report form	page	29
Appen	dix C.	Rutledge Building - Vacation Access	page	30

INTRODUCTION

The Williams-Steiger Occupational Safety and Health Act of 1970 became effective on April 28, 1972. The purpose and policy of this act is "to assure, so far as possible, every working man and woman in the nation safe and healthful working conditions and to preserve our human resources."

1. PREAMBLE

- A. Under the Occupational Safety and Health Act of 1970, the Department of Fine Arts is required to provide a policy and arrangements for the health, safety, and security of its students and employees. Faculty are also required to provide a `local' safety policy for their studio operations and activities. These separate local policies are attached to this document as appendices.
- B. The departmental health, safety and security policy depends upon the active involvement of all groups and individuals and a safety council/committee structure is established to provide for appropriate consultation at all levels, and to consider and advise on various aspects of the policy, including the provision of safety information training and methods of control.
- C. The policy has been formulated to endeavor to ensure the health and safety of all members of the Department of Fine Arts as far as is reasonably practicable; it also aims to achieve efficient utilization of resources, and at the personal level, provision of beneficial working conditions.

2. RESPONSIBILITY

Introduction

- It is the responsibility of the College of Visual and Performing Arts administration to provide, as far as is reasonably practical, safe working conditions for its students and employees.
- At the department level, each chair is responsible for ensuring that the `local' (departmental) health, safety, and security policy is adhered to by the students and faculty.
- Therefore, there are four main divisions of responsibility:
 - **►** Chair
 - ► Safety Director
 - **►** Faculty
 - **►** Students

A. Chair's Responsibility, with authority given to the Department's Safety Director to:

- 1. Establish a local health, safety and security policy.
- 2. Establish a departmental health, safety and security committee.
- 3. Ensure that both faculty and students are fully aware of their individual responsibilities regarding health, safety and security.
- 4. Ensure that regular meetings of the health, safety and security committee are held.
- 5. Ensure that regular inspections of the facility by the committee are planned and carried out.
- 6. Ensure that the committee's reports are submitted to the appropriate university officers for action when warranted and appropriate.
- 7. Ensure that the individual hazard reports are submitted to the appropriate university officer for action when warranted and appropriate.
- 8. Ensure that accident reports are forwarded to the appropriate university officer.
- 9. In conjunction with ARTT 112 Introduction to Fine Arts first semester freshman class, to ensure that students are introduced to art department safety, students view the video Yale

- Environmental Health and Safety at http://www.yale.edu/ehs/onlinetraining/video/artsafety.htm).
- 10. During this time students are also introduced to University Emergency Information found at http://www.winthrop.edu/emergency/default.aspx.

B. Faculty Responsibility

Within the Department of Fine Arts the faculty are responsible individually to the chair for specific aspects of health, safety and security. They are responsible for endeavoring to ensure safe conditions for work within those areas of the department under their control. The faculty must attempt to ensure the safety of all students under their supervision by:

- 1. Informing all students concerned of the individual responsibility regarding health and safety within the department's individual studios and buildings.(See "Local Studio Policies", page 8.)
- 2. Carrying on-going safety inspections in their studios.
- 3. Ensuring that all materials, equipment, and machinery purchases conform to recognized standards regarding the Health and Safety policy within the department.
- 4. Endeavoring, within all reasonable practicability and available resources, to keep the students trained in the safe use and maintenance of all machinery, tools, and equipment.
- 5. Instructing every student in the safe use and storage of chemicals, acids and materials
- 6. Ensuring that the appropriate protective clothing is worn by students involved in the use of machinery, equipment and chemicals, i.e. goggles, face visors, breathing masks, overalls, etc
- 7. Maintaining the "no smoking" policy.
- 8. Ensuring that he or she is fully aware of the Health and Safety regulations and the procedure for reporting and recording accidents. Also, the directions regarding the safe evacuation of students in an emergency, i.e. location of fire extinguishers and exits;
- 9. Informing the chair of hazardous conditions or situations; (See Appendix B.)
- 10. Informing their students of the evacuation point to be used (from the studio concerned) and procedures to be followed in an emergency;
- 11. Informing students of the nearest first-aid or medical equipment;
- 12. Indicating the location of all fire extinguishers in the studio and/or the adjacent hallway.

Faculty who observe a student in violation of the policies established in this document must instruct that student to cease such action.

This information and instruction must be presented to each of the faculty's student groups at the beginning of each semester or at the induction of any new student group. Every new student joining a class must be given the safety information and instruction by the faculty concerned.

C. Student's Responsibility

All students are required to ensure the safety of themselves or others by:

- 1. Only using power machinery and equipment for which they have received authorized training from the faculty or professional instructor. (If you have not received training in the safe use of machinery, contact the faculty member responsible.)
- 2. Only using power machinery and equipment in other rooms when authorized by the faculty member responsible for the other room;
- 3. Not using power machinery when alone in the studios;
- 4. Not using power machinery in the woodshop when the faculty member or shop monitor is absent;
- 5. Using the appropriate protective clothing when using machinery, i.e. goggles, head bands, overalls, etc. Also, to ensure that loose ties, belts, cuffs, jewelry and long hair are properly secured or tucked in;

- 6. Keeping their own hand tools in good repair;
- 7. Adhering to the "no smoking" rule in studios and buildings;
- 8. Not consuming, or bringing into the studios, workshops, or any building, any alcoholic beverage or controlled substance.
- 9. Evacuating the buildings immediately when the "Fire Alarm" is sounded.

3. ACCESS TO THE RUTLEDGE BUILDING, MCLAURIN HALL, and RODDEY STUDIOS

During the official semester dates (first day of class to the last day of class), fine arts majors have 24-hour access, seven days each week, to the Rutledge building facilities/studios. Certain facilities/studios including (but not limited to) the Wood Studio, Sculpture/Welding and Jewelry/Metals have monitored Open Studio Hours. Access is therefore limited.

McLaurin access is limited after normal business hours. Students having studios, studio space or some designated function in the building after hours will have access to the building.

Roddey Studio Space Usage Guidelines

- Students should know that there are NO public area restrooms in the building. It is an apartment building so we don't have any central lobby location or community bathrooms in the hall for visitor use. The closest bathrooms for them (if they are not Roddey residents) will be either Johnson or Rutledge.
- Having card access to the building if students do not live in Roddey is only for their use to go to and from their studio. All guests of any residence hall must be escorted by a resident of that building at all times. We make an exception in this case for your students but they need to understand that they are not allowed in the residential area without a Roddey escort. They should enter the building at our inner left courtyard door and straight down the stairs. They are not permitted to walk through the rest of the building for any reason.
- If a student's card does not work for some reason and they think they should have access to the studio, a faculty member with access will need to let them in. The Residence Life staff does not keep a class roster and for security reasons will not open the doors for people unless they are certain that person is a Roddey resident.
- Residence halls observe Quiet Hours from 10:00pm to 10:00am, and Roddey also may have children as residents so please remind your students that people live where they are working especially if they are working on projects in the evenings or may have the radio on.
- If the fire alarm goes off, everyone needs to evacuate the building even non-residents.
- Students will not have card access past 10:00pm each night because they should not be in the building at that time. They will have access on weekends up to 10:00pm as well to work on projects. Please do not call the Roddey staff to be let into the building, as they will only permit entrance to Roddey residents.

Student access to the facilities/studios outside of the regular official semester dates is a special privilege and requires the permission of the Chair of the Department of Fine Arts. Any student wishing to secure the Chair's approval to access the facilities/studios during non-semester terms must fill out and agree to the conditions described in the Vacation Access Agreement. (See Appendix C.)

The names of those students approved by the Chair to access the facilities/studios will be forwarded to Campus Police. Any student that has not received permission from the Chair will be told by Campus Police officers to leave the building.

4. ACCIDENT PREVENTION

- A. It is the policy of the Department of Fine Arts to act on prevention rather than cure. To this end, every member of the faculty, staff and the student body is required to report any potentially dangerous situation as soon as it becomes apparent. A "Hazard Report" form is available from the department office. Any hazard noted must be reported to the safety director or to the chair immediately. (See *Hazard Report* form, Appendix B.) Prevention also involves safety education. In addition to training programs, each faculty member, whether full-time or parttime, is required to provide information and instruction to his or her students regarding accident prevention.
- B. Safety information and instruction must be presented by the faculty to their student groups at the beginning of each semester or at the induction of any new individual group of students.
- C. Faculty must ensure the general tidiness, cleanliness and housekeeping of the working environment, use of guards or protective clothing where necessary, and the maintenance of equipment. Faculty must ensure that only authorized and/or adequately trained individuals be allowed to use or operate dangerous machines and equipment.

5. HAZARDOUS MATERIALS

- A. Safety Policy in relation to hazardous materials involves the utilization of set procedures so that risk to health and safety is minimized at all stages of storage, distribution use and disposal. See Section 10, (F).
- B. Security arrangements for the storage of hazardous materials and limitations on the quantities stored, issued or purchased must be strictly observed.

6. ACCIDENTS

- A. In this Policy Statement accidents are defined as incidents that have caused or might reasonably be expected to have caused injury to persons and/or damage to property.
- B. The departmental procedure for reporting accidents must be adhered to, thereby ensuring that the relevant information about accidents, especially those involving personal injury, is recorded for insurance and record purposes.
- C. Following the occurrence of a serious accident, apart from immediate attention to an injured person or persons and switching off electricity, gas supplies, etc., care should be taken to seal off the area without clearing up, alteration, or removal of equipment or materials until inspection has been carried out by public safety officers.
- D. The area should only be reinstated to its normal working condition after obtaining specific approval from the chair or safety director.
- E. Any accident to a member of the faculty, staff or student must be reported immediately to the safety director or to the chair. In the event that the safety director and chair are not available, the accident must be reported to the department's secretary for relay to the dean. Accidents during evening classes must be reported to public safety.
- F. An accident form must be completed by the faculty in charge of the area in which the accident occurred. These are available from the department office. The completed form must be submitted to the chair. Faculty are also required to report "near miss" accident situations to the chair. See Appendices A and B.

7. SAFETY INSPECTION

A. Regular inspections of the Department of Fine Arts, its departmental plant, equipment and amenities will be carried out by a designated safety committee of academic and non-teaching staff.

- B. Composition of the Fine Arts Department Safety Committee:
- Studio Technical Director/Safety Director
- University Environmental Health and Safety Manager
- Studio Faculty
- One Student
- Chairman of the Department (ex officio)

C. <u>Terms of Reference</u>

In touring the department facilities the Safety Groups must observe, record and report on the following:

Electrical fixtures

Machinery - Access and Guards

Ventilation efficiency

Access to fire doors and exits

Hallways obstructions

Acid and chemical storage areas - studio containers

Gas Bottle Storage

First Aid Boxes

Eye Wash units

General organization and tidiness of studio

Gas lines and compressed air hoses and fixtures

Oxygen and acetylene gauges and pipes

Hand tools and equipment safety

Flooring

General noticeable hazards

Protective clothing facilities

Hazard warning notices

8. EVACUATION PROCEDURE

In the event of a fire occurring, the following procedure is advised:

- A. Those members of the faculty or staff who are involved with the incident should:
 - 1) **SOUND THE FIRE ALARM**. This may be done by activating the alarm buttons. Should the alarm not sound, try another call point or instruct the departmental office to inform all extensions in the building of the existence of fire and the need for evacuation.
 - 2) CALL CAMPUS POLICE WITHOUT DELAY. Dial 803-323-3333 and give the location, size and type of fire.
 - 3) ENSURE THAT THE FIRE DEPARTMENT IS MET ON ARRIVAL AND GIVEN FULL INFORMATION.
- B. WHEN THE ALARM SOUNDS THE BUILDING MUST BE EVACUATED.
 - Faculty in charge of classes must instruct their students to leave the building as soon as the alarm is heard.
 - Faculty should assume responsibility for supervising the evacuation. Should the alarm not sound, they should initiate the evacuation, notify other faculty to do the same, and notify the secretaries to inform all extensions in the building of the existence of fire and the need for

evacuation.

- Apparatus, etc. should be made safe if time permits.
- Doors and windows should be closed.
- The evacuation should proceed quietly but quickly, making use of all available exits.

C. AFTER EVACUATION, STUDENTS, FACULTY AND STAFF MUST REPORT.

Students should report to the faculty in charge of their class and staff should report to the person to whom they are normally responsible. The Fire Department should be informed if anyone is known to be missing.

D. DO NOT RE-ENTER THE BUILDING UNLESS GIVEN PERMISSION BY CAMPUS POLICE.

All staff are requested to familiarize themselves with the locations of the fire alarm call points and the emergency exits as well as the mode of operation and positions of the extinguishers.

9. <u>DEPARTMENTAL AREA STUDIO POLICIES</u>

THE WOOD STUDIO

Responsible Staff, Andrew Davis (323-2332)

- Do not work alone in the wood studio. Observe studio hours.
- Never remove blade guards.
- Never attempt to use tools that you have not been trained to use by an instructor.
- If you are taking any drug or medication that may in any way impair your not mental function, you may not use the studio.
- Only students who are currently enrolled in a class that requires the use of the studio may use the studio. No one else may enter or use the studio.
- Jewelry of any kind must be removed while working in the studio.
- Long hair must be tied back and loose clothing must be secured.
- Enclosed shoes must be worn in the studio.
- Hearing protection is necessary. Wear appropriate sound suppressors in the studio.
- Safety glasses or a face shield must be worn when operation power tools.
- Lung protection is necessary. You must use it when sanding any material.
- Never leave a machine when it is running.
- Do not engage in conversation while running a power tool.
- Never force a cutting tool. Let the tool do the work. Dull tools are dangerous.
- When using hand tools, be sure the wood is clamped down in two places.
- Keep your body parts out of the way of all blades and/or tools that have the potential to harm you.
- Do not cut towards yourself when using gouges and chisels.
- Use push sticks when necessary. Be sure you know when and how to use them.
- Combustible materials must be carefully stored in the fire containment cabinet. Do not store them in your lockers. Do not leave oily rags lying about. They must be thoroughly washed and removed from the studio. Do not throw them in the trash.
- Glue-up tables must be kept clean. Do not let glue, paint, hot glue, etc. dry on the tables.
- Students are responsible for all clean-up.
- Fifteen minutes before the end of the scheduled shop hours, the monitor will announce that it is time to clean-up the shop. All students are required to stop work, return all hand tools, and begin clean-up. Shop vacuums must be used to clean all work surfaces to include: all stationary tools such as band saws, drill presses, table saw, radial-arm saw, sander, and so on; also, all work tables and the floor.

- During the time a student is in the wood shop or using shop tools, he or she will adhere to all shop procedures and safety requirements.
- Failure to abide by the policies, procedures, and safety requirements regarding the wood studio will result in the loss of shop privileges.

Wood Studio Monitor Duties:

- All monitors must maintain the woodshop hours they are assigned and/or responsible for working. If a monitor cannot work or otherwise maintain the shop hours he or she has been assigned, the monitor must notify the shop supervisor, or other responsible authority designated by the shop supervisor, or the chair of the Department of Fine Arts. Requests for time-off from assigned monitor duties must be made to the shop supervisor in a timely manner. In the event of an illness, accident, or other emergency situation that prevents the monitor from working the assigned hours, the monitor will make a responsible effort to notify the woodshop supervisor or the Fine Arts office of the monitor's inability to perform his or her work obligations.
- In the event of a serious accident in the wood studio, the monitor will immediately telephone Campus Police. The phone number is 803-323-3333 (3333) The monitor must tell security who they are, where they are, and the nature of the accident.
- Monitors must remain within the wood studio area during work hours.
- Monitors will become familiar with all wood studio procedures, policies, and safety requirements.
- Monitors are responsible for final clean-up at the end of day's shop hours. Fifteen minutes before closing, the monitor will announce that it is time to clean up the shop. All students working in the shop are required to stop work, return all hand tools, and clean up. Shop vacuums must be used to clean all work surfaces to include: all stationary tools such as band saws, drill presses, table saw, radial-arm saw, sander, and so on; also, all work tables and the floor.
- The monitor will inspect the shop before closing to insure that all tools are secured. Monitors will lock all cabinets and shop doors before leaving. Any problems should be noted and the information left for the shop supervisor.

SCULPTURE

Responsible Faculty, Shaun Cassidy (323-2360)

You will find available at all times in the studios a number of excellent resource texts of sculpture, design, materials, methods and safety. Every student must study appropriate chapters before starting projects. Review when necessary. Ask when uncertain.

- Wear safe clothing appropriate to your tasks. (example, no loose clothing, jewelry or gloves around most machines).
- Do wear non-flammable clothing (example, cotton) and enclosed shoes in soldering, casting and foundry area.
- Wear safety gear when using or near power tools, torches, such as:
- Safety glasses and face shields,
- Leather gloves when needed (example, with chainsaws, grinders) and when dealing with hot objects (example, welding-casting)
- Ear plugs when around high noise levels.
- Dust masks around light sanding.

- Dual cartridge respirators around solvents, plastics, other toxics. Helpful during stone carving and other particle producing tasks.
- Appropriate dark lenses when casting-welding, etc. or when near by.

Other cautions

- Do not work alone.
- Do not use power tools when overtired.
- Do not talk or otherwise divert your attention or that of other people while operating power equipment.
- Do not operate equipment unless you have been trained by an authorized person, you are capable of operating it safely, have permission to do so and are enrolled in a class assigned to this area.
- Follow directions. Do not invent ways of operating equipment.
- Never force a cutting tool. Let each tool do its job.
- Do not try to slow or stop coasting machines.
- Do not leave machines running.
- Do not remove machine guards.
- Do not adjust tools. When changing disks, wheels or other replaceables use tools designed for this task.
- ▶ Keep work areas clean and free of trash, oil, etc.
- Do not use flammable materials in foundry or casting area.
- ▶ Know fire exits and location of firefighting equipment.
- Stay alert. Be responsible for your safety and that of others.
- ▶ In case of emergency--call Campus Police 803-323-3333.

JEWELRY/METALS

Responsible Faculty, Anne Fiala (323-2673)

General Policies

- When in doubt ask questions.
- No Food or open beverages in the studio. This is a University policy and if you bring food in, you will be asked by a monitor or faculty member to take it back outside.
- Take breaks and stretch muscles often.
- Wash hands before leaving the studio to smoke or have a snack.
- If you use it, return it. If you found it out, put it away. If you don't know where it goes, just ask.
- The use of tools and equipment in this facility is restricted to those students who are currently enrolled in a Jewelry & Metals course or those who have made arrangements and paid the lab fee; only a faculty member may make exceptions to this policy.
- Equipment usage and operation under the effects of drugs, alcohol, medications or lack of sleep is strictly prohibited. This policy is non-negotiable and disciplinary action will be taken and may include loss of studio use.
- No equipment may be used without instruction, orientation and proper safety gear.
- If using power tools and equipment, one must do the following: tie back long hair, remove loose jewelry, secure loose clothing, and wear proper safety equipment, i.e. safety glasses, face shield, and dust mask (when appropriate).
- No one may work in the facility alone. Only assigned monitors are to keep the studio open during hours that classes are not in session.
- The use of equipment in this studio is voluntary. If you do not feel comfortable working with a
 particular tool or technique, please let the instructor know and alternative methods will be
 explored.

- To keep the studio free of clutter, please keep personal items in your lockers or on hooks. Any item left out after a class period is subject to disposal.
- All students must respect the direction of the studio monitor on duty. The monitor is responsible
 for the studio and equipment during their shift, if anyone chooses to ignore the instructions of the
 monitor, that student will be told to leave the studio and the incident will be reported to a faculty
 member for further action.
- Keep hands and arms behind cutting tools, always cut away from your body.
- Faculty members reserve the right to limit studio access to any student at any time.

Studio Attire

- Safety glasses should be work at all appropriate times. Those in charge will remind you of this constantly.
- This is a workshop, therefore it is prone to dust and dirt. The clothing you wear to work in the shop may not look the same when you leave class, keep this in mind when selecting dress. A sturdy apron is recommended. Also, synthetic materials are sometimes more flammable than natural materials such as cotton.
- Wear long pants when working in the studio.
- When casting, long pants and sleeves are required. You will not be permitted to cast in shorts or skirts. Welding jackets can be worn over clothing.
- Closed-toe shoes must be worn at all times, flip-flops and/or sandals are not permitted.
- Students not dressed in appropriate attire will not be permitted to work and will be asked to leave by either a faculty member or studio monitor.
- Long hair should be tied back when working with power tools and torches; it is most frequently burned and caught in machinery.

Machinery

- Safety glasses must be worn when working with power tools. **ALWAYS!**
- When using the Polishing and Buffing equipment, ventilation must be on and a **dust mask** must be worn in addition to eye protection.
- When casting and enameling dark UV glasses must be worn.
- Make sure all work is clamped down whenever possible. It is important to understand the potential dangers of working with these tools. When you are unsure of something, it is always a good idea to ask a monitor or faculty member for help.
- Improper usage of machine tools will result in a loss of studio access. It is the responsibility of the student to make sure that all directions are understood prior to using tools on own.

Chemistry

- Goggles (not safety glasses) and gloves are required when working with any chemical in the studio.
- All chemistry must be stored in the yellow flammable cabinet; this includes corrosives.
- All chemistry must be labeled properly, include the date and name, if placed in jars or bottles different from the original packaging.
- Chemicals may not be left unattended or stored anywhere but the big yellow cabinet. This includes liver of sulfur and pickle.
- MSDS sheets are available for all chemicals used in the Department. Material Safety Data Sheets
 contain all information about a specific substance. Read the provided information prior to
 working with any material or chemical, even if it looks harmless at first. If you cannot find the
 MSDS sheet, contact Courtney Starrett or Mike Lavine for more information.
- Chemistry must be used in specified locations (as posted), with adequate ventilation. This includes epoxies and glues.

- Paper must be put down in the workspace when using any adhesives or messy materials. Then the paper should be disposed of when finished.
- Always add acid to water. Not the reverse. Acid may splash in your face. Always were goggles when doing this.
- Plastics, resins and rubbers: if you leave a work piece to set-up, it must be labeled and in a posted "cure zone" under ventilation.
- A dust mask is required when working with investment through all stages...powder to wet and post cast quenching. Investment contains silica.

Fire

- In the JMTL studio there are multiple fuels. Report any gas leak to the person in charge. Acetylene: garlic like smell and Natural Gas and Propane: distinctive.
- Keep all combustible materials away from heat and flame. Example: Never place paper towels on the soldering benches.
- Never place flammable materials (such as acetone and denatured alcohol) near the soldering benches.
- All gas tanks must be chained. Contents are under pressure and dangerous when knocked over.
- Never light a torch with a cigarette lighter. Use only provided strikers.

First Aid

- There are two first aid kits in the studio, one next to the main studio tool cabinets and one in the center next to the blackboard; they are to be used for minor injuries only (small cuts, scratches and light burns). Please inform a monitor or faculty member if a First Aid kit is low on supplies.
- For more severe injuries (more severe burns and cuts needing attention or stitches) the monitor or faculty member will escort you to Crawford for further medical assistance. You must inform the monitor or faculty member of any injuries, no matter insignificant.
- For injuries requiring an ambulance you must notify the person in charge and they will call Campus Police, the number from any campus phone is 3333 or your cell at: 803-323-3333. It is recommended that you not call 911 directly, but do so if necessary.
- In the case of any chemistry getting into an eye, it is important to use the entire bottle of eyewash, even if it feels better before the end. It is important to have all eye injuries seen by a doctor.

For additional information, please contact Mike Lavine, the safety manager for the Department of Fine Arts @ 323.2332, office118 McLaurin.

All student monitors and faculty members in the department will enforce any and all of these policies. Any student not respecting these policies, the tools and equipment and/or the monitors will be asked to leave the shop and reported to the faculty.

CERAMICS STUDIOS

Responsible Faculty, Jim Connell (323-2657)

Throwing and Handbuilding:

Students must:

- ▶ Keep long hair tied back when throwing.
- Remove jewelry.
- Wear shoes.
- Attempt to keep dust under control

Clay and Glaze Room:

Students must:

- Always wear respirators when mixing glazes or making clay.
- Clearly mark any toxic materials for storage.
- ▶ Mix dry and wet glazes, and screen, OUTSIDE.
- Not use LEAD bearing materials.

Kiln Room:

Students must:

- Wear UV protected safety glasses when looking into kilns.
- ▶ Spray glazes OUTSIDE.
- Wear respirator when spraying glazes.
- Wear safety glasses when chipping glaze from kiln shelves.
- Wear protective clothing, gloves, face protection and goggles when working with Raku.

PAINTING STUDIOS

Responsible Faculty, Stacev Davidson (323-2651)

130 Rutledge Painting Studio

A. Sinks

No paint or solvent in sinks.

B. Paint

All paint scraped off of palettes must be put into the red canister for disposal.

C. Solvent

Solvent and its safe storage is provided for registered painting students. The solvent we use is Gamsol. We have 2 fire-safe metal cabinets for solvent storage: one for clean supply, which is locked; and one for student storage of jars. Jars are a non-reactive high density polyethylene plastic with liquid-tight screw on lids, supplied by the Environmental Health and Safety Department.

D. Waste Disposal

Jars with waste solvent are picked up by our Hazardous Wastes Management at the end of each semester.

E. Clean Studio Habits

Safety depends on good habits with clean-up in painting. Students are responsible for this as part of studio practice:

- 1. Brush cleaning is thoroughly demonstrated each semester
- 2. The routine for solvent use is demonstrated each semester
- 3. Palette cleaning after every session is expected.
- 4. What to do with paint scrapings and rag disposal are also demonstrated each semester
- 5. Food and drinks are not permitted in the Painting Studio

F. Hygiene

Hand-washing: necessary, encouraged, drilled into students Gloves: wearing disposable gloves is encouraged

G. Air Quality

This has not been addressed and needs to be. Our CHMM, EHS Manager has said a study would need to be done to test actual air flow. This has not been scheduled. Anecdotally, it seems we need

air flow to flush out the room. We have no ventilation system or structurally installed fans, or windows that open.

220 McLaurin

Advanced level painting students who have work-space here follow the same procedures as above. We do not have fire-safe cabinets for this room. Students who work with solvent must keep containers lidded when not in use. They leave used solvent in the fire safe cabinet in Rutledge 130. There is a working exhaust fan in this studio.

A. Air Quality

We have a large exhaust fan to flush out the air in this room, but no official testing has been done.

PHOTOGRAPHY STUDIOS

Responsible Faculty, Phil Moody (323-2667) and Mark Hamilton (323-2671)

Photography studios: student health & safety policy

The following policy is to be read and signed by every currently enrolled photography student. For your own safety, these procedures have been developed and will be the accepted practice for the photography facilities. Anyone who cannot or will not comply with this policy will not be permitted to use the facilities.

- 1. Students will be familiar with emergency procedures, especially in relation the routes to take during a fire.
- 2. The photography facilities are for use by currently enrolled students only.
- 3. Food and drinks are not allowed in the facilities. (The danger of consuming chemistry through misrecognition of a drink, or having chemistry on one's hands, is too great).
- 4. Smoking is strictly prohibited.
- 5. Aerosol products are banned from use indoors. (They pose a considerable threat to everyone's respiratory system, especially those with asthma.) Anyone caught using these will be severely sanctioned.
- 6. Keep all wet items in the sinks and away from the dry side of the room.
- 7. Make sure your hands are dry before dealing with electrical items, including enlarger timers, hair dryers, the film dryer, anything computer-related, safelights and the fluorescent room lights.
- 8. Used print developer, stop bath, film developer and stop bath, as well as fixer remover, should be disposed down the drain with copious amounts of water.
- 9. Used fixer (both for prints and film processing) should be put into the large tank for silver reclamation (marked 'used fixer').
- 10. Cleaning powders or solutions should only be used after sinks have been thoroughly washed.
- 11. Never use chlorine bleach with any other chemical present, even in the smallest amounts.
- 12. Always wear an apron and rubber gloves when handling chemistry. In the event of being splashed in the face with chemistry, wash immediately with copious amounts of water. If you have time to use the eyewash sink, go to Printmaking next door.
- 13. Avoid skin contact with chemistry.
- 14. After-hours work is subject to the lab policies. Problems should be reported to Campus Police (803-323-3333).

15.	During after-hours, monitored work periods, students will be expected to clean up after themselves, in particular making sure film developing tanks are scrubbed and stacked, and any enlarger that has been used has been switched off (the timer).
	I have read and understand the Photography Lab safety policy:
	Signed: Semester: Semester
	Date:
Photo	ography Lab monitor duties:
1.	In the event of an accident or disturbance, monitors will immediately contact Campus
	Police (803-323-3333) and Phil Moody (803-554-1454).
2.	Monitors will check that all students coming to use the lab are eligible to do so (by checking against the printed enrollment lists provided.
3.	Monitors are to be in attendance in the lab throughout the entire lab hours session.
4.	Monitors are responsible for overseeing a proper clean-up at the end of each session, including stacking the scrubbed tanks and trays, and cleaning all sinks throughouly.
5.	Monitors will make sure all enlarger stations are correctly reset (enlarger timer off, contrast filters removed, print easel and glass replaced.
6.	All electrical equipment is to be switched off after lab hours, including timers, film and print dryers, radios, safelights, and radios.
7.	Food and drink are not allowed in the labs. Please make sure students follow this rule after-hours.
8.	Monitors will have read and be fully familiar with the Health & Safety Policy.
	Signed:

PRINTMAKING

Responsible Faculty, Mike Goetz (goetzm@winthrop.edu) or Tom Stanley (323-2653)

Semester: Date:

- NEVER WORK ALONE. Arrange to have another printmaking student in the studio with you during non-class hours or, at the very least, have a friend in the studio with you (alert your friend to the dangers in the studio and advise that person to the procedures of an emergency).
- No children are allowed in the studio.
- LOCATE EXITS, WATER SOURCES (SINKS), AND EMERGENCY TELEPHONE. Memorize the telephone number for Campus Police. Set this number in your cell phone. NOTE: The emergency phone is on the wall in the hallway just outside the printmaking studio. **DIAL 803-323-3333 CAMPUS POLICE.**
- ALWAYS WEAR APPROPRIATE SAFTEY EQUIPMENT FOR THE PRINTMAKING PROCESSES THAT YOU ARE PERFORMING, i.e., eye goggles, apron, solvent and acid-resistant gloves, respirator or dust mask.

- IDENTIFY AND LOCATE FIRST AID KIT. Know how to use its contents. NOTE: The First Aid Kit is located on the wall above the sink, adjacent to the door into the hallway.
- IDENTIFY AND UNDERSTAND THE CHEMICALS AND HAZARDS THEY POSE.
- IDENTIFY AND LOCATE EYEWASH BATH. NOTE: EYEWASH BATH IS LOCATED ADJACENT TO SINK.
- AVIOD ANY RISK-TAKING SITUATIONS IN REGARD TO CHEMICALS, TOOLS, PROCESSES, ETC. Use only at designated workstations and only after engaging electric exhaust system.
- DO NOT SMOKE, DRINK, OR EAT IN THE STUDIO.
- NEVER WORK WHILE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS OF ANY SORT.
- DO NOT EXPERIMENT UNLESSS PRIOR DISCUSSION WITH INSTRUCTOR ALLOWS IT.
- LEARN TO USE SAFETY EQUIPMENT PROPERLY (exhaust fan for solvents and constant ventilation/exhaust fan for acid bath/fire extinguisher/eyewash bath.
- READ "PRINTMAKING" AND "SOLVENTS" SECTION OF <u>SAFE PRACTICES IN</u> THE ARTS AND CRAFTS A STUDIO GUIDE, pages 55-56 and pages 58-61.
- KNOW HOW TO REACT TO EACH POSSIBLE "EMERGENCY" SITUATION AS PRESENTED IN THE LECTURE ON STUDIO USE, MAINTENANCE, AND SAFETY. Check your notes.

ART EDUCATION STUDIO

Responsible Faculty, Dr. Laura Gardner (323-2654)

While the art education room is not an art studio in the traditional sense, there are some health, safety and security measures that require your attention.

• <u>Health</u>

Occasionally, during school art methods sessions, art materials are used which may be classified as hazardous unless used with proper ventilation. These materials include some paints, inks, rubber cement, paint thinner, and spray paints or adhesives. Located in the cabinet nearest the door, these materials will be used only with faculty supervision. Additional warnings for studio and school art practice can be found in the attached article about selecting and using safe materials for children.

• Safety

You will note that the printing press and the kiln are the only two pieces of equipment in the art education room, and both will be used only with faculty supervision. The press is completely manual, requiring no particular safety precautions other than common sense; that is, do not try to lift or move the press, as it is fairly heavy, and watch for finger and other injuries when operating the press.

Security

The art education room is kept locked when class is not in session. Students who desire to work in the room at other times will need to get permission from one of the art education faculty.

10. ACCIDENT PREVENTION

It is the responsibility of the administration of the Department of Fine Arts to provide safe working conditions for its students and employees. It is not sufficiently well-known that an employee may be prosecuted for failing to work in a safe manner - even if the safety involved is his own. To remove, or interfere with, a machine guard is a very serious act, and one that could easily result in legal action against the person responsible. The first requirement for achieving safety in our studios and workshops is the willingness of every person to accept his or her responsibility for the vital role he or she must play in accident prevention. The only path to effective accident prevention is knowledge, and action based on that knowledge; action practiced so often that it becomes habit.

Working safely does not necessarily mean working slowly. Often the opposite is true. The individual who makes a habit of keeping his bench and workplace tidy not only makes a useful contribution to safety but often his work is well under way while the untidy worker is still trying to organize his workplace. What is often labeled "carelessness" or "inattention" could more exactly be described as a lack of knowledge, fatigue or even human limitation. There is little use in displaying a few safety posters and hoping that they will solve the problem. A good general knowledge is required; knowledge of the hazards that cause accidents; knowledge of the procedures which will either prevent accidents, or at least gradually reduce their likelihood; knowledge too of the measure which, should a mishap occur, will reduce its consequences. And finally, knowledge of action which might, to an injured person, make all the difference between life and death.

A. HOUSEKEEPING

As poor housekeeping lies at the root of many accidents, therefore, we should begin with the elimination of this accident cause. A typical workshop accident is the outcome of a number of factors which coincide. Clearly, the more of these factors that are removed the fewer accidents there will be. Consider two workshops. In workshop "A" the workplaces are well-lighted, well laid out, clean and tidy; gangways are clear, clean and well worked, and the work benches tidy. In workshop "B" the workplaces are badly lit, disorganized, dirty and untidy; gangways are little more than rough winding tracks; work benches are piled with a jumble of tools, materials, old rags and scrap. It is easy to see why workshop B has a far greater risk of accident. In workshop A not only have many conditions been made safe which might have been dangerous if left unattended, but also any other unrelated hazard will tend to stand out more clearly. In workshop B, however, conditions, besides constituting a hazard in themselves, will effectively mask other danger points. The missing or defective guard will not look out of place, the oiled or damaged floors will be successfully camouflaged and the exposed electrical wire will remain concealed in the confused disorder.

An invaluable contribution to good housekeeping is the provision of adequate storage racks, storage space and store rooms, designed and maintained so that suitable accommodation is available for every article stored. Also, the provision of waste bins, as well as readily available means of clearing up spillage of liquids.

It is obvious that good housekeeping is something that cannot be maintained by the departmental management alone. Everyone has an important part to play. For instance, a teacher will have the earliest opportunity to notice failure of light sources or impeded ventilation while a student could pay particular attention to corners and spaces that are semi-accessible like those underneath

benches or behind cupboards where rubbish accumulates. One of the great dangers associated with hoarding rubbish is fire. A cigarette or spark might provide the occasion, but the cause is untidiness. Sometimes no external means of ignition is needed as rubbish allowed to accumulate and remain undisturbed for a period can cause spontaneous combustion. Rubbish and scrap should be cleared as soon as possible after each process or day's work.

An aspect of housekeeping which is of overriding importance is the maintenance of good clear floor surfaces throughout the workshops and studios. While the general standard should be high, it is most important that areas around machines, walkways and gangways, especially those leading to fire exits, must be carefully maintained. Damaged floors should receive early attention. Gangways should be clearly marked and kept free from obstructions. In short, everyone can do a tremendous amount in respect of good housekeeping to make the studios and workshops safer and more pleasant places.

B. MANUAL HANDLING

Tins and Containers:

Handling and carrying of open tins and containers should be avoided. Even if the contents are known to be perfectly safe, it is bad practice to engage in operations which encourage spillage of liquids or powders. It is easy to slip on a "safe" liquid. When dealing with chemicals, powders and liquids which are commonly regarded as safe in themselves it is important to remember that contact with certain atmospheres or substances may render them dangerous or lethal. Cans should be kept closed as a matter of course and a general practice should be made of labeling all substances in bottles, tins and containers.

Any floor can be made dangerous by the spillage of oil, grease or water. All accidental spillages should be cleaned up immediately and thoroughly. If sawdust is used it should be swept up afterwards and placed in the "appropriate" waste bin for immediate disposal. Oil contaminated sawdust in bulk presents a fire hazard because of the possibility of spontaneous combustion.

Hand Tools:

Accidents which happen when hand tools are being used account for approximately ten per cent of all industrial injuries.

The following points should be observed in connection with particular tools:

(A) **Hammers**

- If the head is chipped, rounded or otherwise badly worn, the hammer should be disposed of.
- The hammer head should be securely and properly attached to the shaft.
- The shaft should be in good condition. If it is split, broken or loose, the hammer should not be used.
- Keep the hammer head free from oil and grease.

(B) Chisels and Punches

- Never use a chisel with a head that is mushroomed. At the first signs of mushrooming the chisel or punch head should be correctly dressed on a grinding wheel. Sharpness and correct pitch will help to prevent mushrooming.
- Particles may also fly from the work, whether stone or metal. Use eye protection either goggles or a chip screen or both.
- Keep the chisel or punch head free from oil or grease.

(C) Wrenches

- Discard open-end wrenches which are worn or box spanners which show signs of splitting.
- Avoid the use of adjustable wrenches as much as possible. Use a rigid jawed or ring spanner in preference.
- Check wrenches or adjustable wrenches for free play, also check for splaying of jaws.
- Avoid pushing away from the body, pull the wrench towards yourself whenever possible. Do not fit improvised extension handles on wrenches for extra leverage.
- Ensure that your hands will clear obstructions: this will prevent injury if the nut "gives" suddenly.
- Use the right size of wrench for the job. Never [attempt to "make do" with a wrench that is too large] pack the gap between the wrench and the nut with shims or washers.
- Never use a wrench as a hammer.

(D) Files

- Never use a file without a handle: the tang may become embedded in the hand.
- Never use a file as a lever, hardening has made it brittle and it may well snap and inflict injury.
- When filing in the lathe, never use cloth or rag to grip the file handle as this could easily become entangled in the moving machinery.
- Keep your hand and the file clear of the chuck of the lathe.
- Always grip the file firmly.

(E) **Screwdrivers**

- A screwdriver is not a chisel do not grind it to an edge.
- Use the correct size of screwdriver for the job.
- When using a screwdriver, avoid holding the work in the hand: the screwdriver might slip.
- Never use a hammer on a screwdriver.
- Beware of split handles.

(F) Other hand tools

The precautions listed above relate to five common hand tools, but the same principles hold good forany other hand tool. If tools are neglected or abused, not only will they spoil the job and mar efficiency but they will inflict injury. The wrong handling of machine cutters has caused many accidents in industry. Mishaps have generally arisen through persons overlooking the two essential and obvious characteristics of these tools: they are sharp and hard and therefore brittle. Because of this, careful handling is necessary at all times, whether the tool is being set up in a machine or being scrapped through damage or wear. To throw a damaged tool into a box containing other metal components is highly dangerous: Shattering or splintering of the tool may take place with obvious results.

C. MACHINERY

Prime movers and transmission machinery

Simply speaking, a prime mover is the mechanism that provides the initial power to drive machinery, and transmission machinery is the mechanism which transmits this power from the prime mover to the machinery being driven.

Prime movers include electric motors, gas and oil engines. The first point to remember about prime movers is that every moving part must be regarded as highly dangerous. This applies equally to gears, pulley wheel, fly wheels, smooth cylindrical shafts.

The most effective way to deal with prime movers is to encase them. They should be "securely fenced" and protected from any direct human contact.

Transmission machinery, i.e. belts, shafts, must be "securely fenced" or encased. If, at any time, moving parts are exposed for inspection, all individuals must be kept clear. Guards must be replaced after inspection.

Clothing

Many serious and often fatal injuries have resulted from the entanglement of clothing in moving machinery. Always ensure that clothing is well-fitting with no loose ends. Ties, scarves and the like should be well tucked in. Hair should also be tied back or protective head gear worn. Generally speaking, gloves should not be worn by any individual working at machines.

The smooth revolving shaft

The essential danger of the smooth revolving shaft is its remarkable ability to "pick up" loose or flapping clothing like neck ties, loose cuffs, torn overalls, overall belts, frayed clothing, finger bandages or an odd piece of string or material protruding from pockets. A point that is not so apparent is that it is not only the shaft itself which is in motion, but the aid currents around the shaft and the article which comes into contact with it. The smooth shaft is not confined to transmission machinery. We often find it on most power driven machinery, i.e. polishing motor spindles and drilling machines. It is essential that guards be kept in position at all times.

(a) Traps between moving and fixed parts

Dangerous traps may exist between moving parts of machinery. No moving part of a self-acting machine, or any material carried on it, shall be allowed to run within eighteen inches of any fixed structure. All individuals must ensure that the work is not allowed to overhang the machine carriage to such an extent that a trap is created.

(b) The in-running "nip"

The in-running "nip" is that danger zone where a belt runs into a pulley, where a chain runs into a sprocket or where gear wheels mesh together. The danger of the nip is much more obvious than the revolving shaft. Clothing or parts of the body, particularly hands and hair, may be caught and taken in.

(c) Keeping Guards in position

It is the responsibility of every individual to ensure that guards are always kept in place. If an individual removes a guard, except for maintenance or adjustment, he may be breaking the law and surely adding to the hazards of the workshop. The same applies to failure to replace a guard after it has been removed for some necessary purpose.

Dangerous Machinery, Hazards and Precautions

The machines in this section illustrate dangers which arise in connection with the use of specific types of machines, and which have been the cause of a great many serious injuries.

Drilling Machines

Guard spindles and chucks, and ensure all set-screws are recessed. No neck-ties, loose or flapping clothing, long hair styles or finger rings. No stopping of spindles or chucks by hand after machine is turned off. Do not reach around any revolving drill. Always clamp work securely to the table - never attempt to hold the work by hand while drilling. Should work slip from the clamp, stop the machine - don't attempt to stop work with your hands. File all burrs from drilled holes. Use properly sharpened drills. Ensure that they are running true. Run the machine at the correct speed: don't force or feed too fast. If the drill stops in work, stop the machine then start the drill by hand. To adjust the belt for changing the drill speed, switch off

machine and wait until it has stopped. Always remove the chuck key or wrench from the machine before starting.

Trap between tool and die

Secure the fencing. There must be no access to the danger zone from any direction of the guard. Never attempt to circumvent or interfere with the guard. Always ensure the good condition and correct adjustment of fixed guards. Guards should always be in position whenever the press is under power, for production or testing.

Grinding Machines

Testing, setting and dressing of wheels should be performed by a person of skill and experience.

The tool rest should be adjusted as close as possible to the face of the wheel, the clearance not exceeding one eighth of an inch. Too much clearance may allow the work to jam and burst the wheel. When starting the machine stand to one side, not in front of the wheel. Apply slow, gradual pressure to the work. Use the face of the wheel only, unless it is designed for grinding on the side. Hold the work firmly to prevent slipping. Never leave wheels running when not in use, nor leave unattended during the run-down period after switching off. Always use eye protection provided even for the smallest or shortest job. There are two standard methods of eye protection during grinding:

- (a) the fixed visor type guard, rigidly attached above the wheel itself, and
- (b) the use of personal protection in the form of suitable goggles or spectacles.

Make sure the magnetic chuck of a <u>surface grinder</u> is clean. Test it before start-up of machine.

Milling Machines

Ensure that the cutter is sharp and in good condition, and that the guard is correctly adjusted. When setting up the traverse table to maximum out-run, never set it up in close proximity to the cutter, whether it is revolving or not. Do not tighten or loosen the arbor nut when the machine is running. Never reach close to a revolving cutter. Never attempt to remove chips of metal or swarf by hand, always use the brush provided.

Shears

The blades of shears should always be protected with a secure fixed guard at both the front and rear of the machine. No attempt should ever be made to work shears in the absence of guards.

Lathes

Only attend to chuck or face plate when machine is stationary. Ensure that your work, the tool holder and tail stock are properly clamped before switching on the machine. Do not try to make any adjustments or changes unless the machine is switched off. Always use a proper polishing stick. Never use strips of emery cloth for polishing work in lathers. Never leave tools on or near the machine when it s switched on.

Take only light cuts on long, thin work so that the work-piece does not fly from the machine.

Make sure all stock bars are adequately guarded for the whole of their length, including the section nearest the machine.

Planing machines

Always check that there is adequate clearance for the planning mechanism. Keep the machine

clear of materials and tools. Fasten work properly, checking stop pegs and safety dogs. Make sure the feed rod and its attachment are correctly located and working properly.

Never reach over the work or across the machine while it is in motion. Make all adjustments of length of stroke when the machine is stationary.

Other Powered Machines

There are principles which should be applied to all powered machines to prevent injury.

- Adequate training in the operation of each machine is essential.
- The machine should be set up correctly and all nuts, bolts, and clamps necessary to the safe operation should be secured.
- Guards should always be used and correctly adjusted. Always report any defect in this respect. Never use the machine unless the guards are correctly positioned.
- No loose or flapping clothing, finger rings or gloves should be worn when using a machine.
- Never interfere with or distract another person who is operating a machine.
- Never attempt to clean, adjust, oil or repair a machine unless you have been clearly instructed and authorized to do so.
- When attending to the machine make sure it is switched off and that no one can turn it on while you are working on it.
- Never try to stop moving machinery with your hands or body.
- Keep the floor around the machine clear of scrap, shavings and metal chips.
- Do not run into or around the studio workshops.

Non-Powered Machines

This term applies to machines that are powered by the operator. These machines can be much more dangerous than powered machines as many people have the mistaken idea that the machine is more under the control of the operator and therefore accidents are less likely to occur.

- If work can be done more safely by a mechanically powered machine this option should be considered.
- When blanking or shearing tools are set in hand presses effective fixed guarding should be provided.
- All guards must be in position whenever the machine is being worked.

Woodworking Machinery

(a) Table Saw

There must be a guard that covers as much of the blade as possible. To this guard must be attached an adjustable front flange which must be adjusted to the size of the work being done.

The saw blade must be fenced below the level of the bench table as well as above it. This should be done with two stout sheets of metal or other suitable material one each side of the saw blade, and not more than six inches apart.

The riving knife is a curved piece of metal situated at the rear of the circular saw running from the bench table to the rear of the top guard. It must always be firmly fixed in position, following the curve of the blade as closely as possible.

Push sticks are necessary to push the work through when feeding would otherwise require the close proximity of the hands to the blade. Circular saws are notorious examples of machines which continue in motion after the power has been switched off. Some are fitted with braking systems. On machines which do not have a braking system the only way to ensure safety is for the operator to stand by the machine until all motion has ceased.

(b) **Band Saws**

The hazards of this machine are (a) contact with the moving blade, (b) injury through being struck by the broken blade and (3) injury through contact with the moving pulleys on which the blade runs. As much of the blade as possible must be protected by the adjustable guard for each operation.

(c) **Planers**

These machines "surface" the timber. The main risks are contact with the long blades which are secured in metal cylinders and the "kicking" of the wood. The telescope guards should always be carefully adjusted to the minimum clearance necessary to permit free passage of the work. Blades should always be kept sharp.

D. ELECTRICITY

All electrical apparatus should be properly constructed, installed and maintained.

Temporary Wiring

Many times a "temporary" situation is allowed to continue so that it becomes eventually a permanent condition. Temporary wiring should only be allowed to exist where repair action is already in hand, to secure the position by conduit or similar protection.

Defects in Installation and Apparatus

Nobody should interfere with, tamper with, or attempt to repair any electrical equipment unless he is an electrician and is authorized to do so. Everyone should make a practice of reporting immediately any defects in an installation or apparatus which may come to his notice. Cracking or perishing of the cable insulation, loose joints in conduits, damaged fuse box and switch covers, damaged plugs or loose pins, faulty sockets and detached earth/ground wires are instances of some of the more common defects.

Portable Electric Tools

Anyone who uses a portable electrical tool when he knows it is not properly earthed [grounded?] is breaking the law. All voltage, including mains voltage, is potentially dangerous. Mains voltage causes paralysis of the muscles which means that if a person is holding a live conductor, he cannot release it. For this reason, if there is ever cause to believe that a person is receiving an electric shock attempts should never be made to drag that person away with the bare hands. The electrical supply should be switched off immediately if the main supply switch is nearby. If not, and as time is precious, a piece of material (like overalls) should be thrown around the victim to pull him away, or he should be pushed away from the live conduct with a poor conducting material like a length of wood. Accidents involving portable electric tools arise commonly from damage to or deterioration of the insulation of the cable and from faults in the plug or the socket. If such conditions become apparent they should be reported immediately. The way in which these tools are stored has a great bearing on the wear incurred by the parts. The frequent and regular testing of portable electric tools for each continuity by means of a suitable instrument is recommended.

Sockets

The wiring of sockets in the studio and workshops should be the province of a skilled electrician. Whenever a socket is encountered where the cable moves freely at its entry point into the socket or where the individual conductors are visible outside this entry point, it is almost certain that the socket is reaching a dangerous condition and requires attention.

The Use of Portable Electric Tools in Unsafe Atmospheres

Cellulose solutions and petroleum derivatives are two examples of liquids which have great fire and explosion risks and which give off heavy dangerous fumes at room temperature. These fumes, being heavier than air, "creep" along the floor and may easily be ignited at some distance from their source. Ordinary inspection lamps and portable electric tools provide ready means of such ignition. The flashback to source may then be expected.

Maintenance of Electrical Equipment

Rigid systems of inspection of installation of apparatus must be maintained.

Electrical Shock

Artificial respiration should be given for electrical shock. Within the workshop a chart giving instructions for the application of artificial respiration should be clearly posted.

Welding Flash or "Arc Eve"

Although this is not strictly an electrical injury, it arises in connection with electric arc welding. It is almost always a temporary condition, lasting only two or three days.

Production welding should be carried out in proper booths or in similar protected areas, while the short duration jobs around the factory should be masked by portable screens.

If it is necessary to pass in the close vicinity of arc welding operations, keep the head averted to avoid full exposure to the flash.

E. <u>COMPRESSSED AIR AND GASES</u>

The misuse of compressed air involves great danger. If a compressed air hose or jet is applied to an open cut or scratch, air can force its way under the skin and into the tissues. If it then enters the bloodstream the result can be fatal. If a jet comes into contact with any opening in the body the results may range from a perforated eardrum to possible death.

A further danger arises when compressed air is used to "blow through" machined components, or to clean metal particles or filings from work or work places. These particles can be blown into the faces of others or rebound into the face of the person using the jet.

Other Compressed Gases

Great care must be exercised not only in the use of gases but also in the handling, transport and even disposal of the cylinders.

- (a) Cylinders must always be protected from strain and stress caused by knocking or mechanical damage.
- (b) Cylinders must not be dropped or allowed to fall.
- (c) The necks of cylinders must especially be protected.
- (d) Containers designed for one gas should never be used for any other.

Storage

Store rooms should not be heated. Cylinders should always be stored away from heat sources and away from combustible or flammable material. They should not be exposed to sources of contamination or corrosion such as oil, water or acid. Cylinder valves should be protected from dirt and grit.

Uses of Gases

When handling or using oxygen cylinders gloves free of oil or grease should be worn. Gauges used for oxygen cylinders should not be tested with oil. Valves on oxygen cylinders must also be kept free from oil or grease.

Oxv-acetylene Welding and Cutting

Areas where welding takes place should have good general ventilation and work in confined areas should receive special attention. Loose material liable to ignite should be removed from the vicinity. Wooden floors should be protected by asbestos or steel mats. Fire extinguishers must be readily available.

The following safety hints for gas welding should always be observed.

- Use goggles, hand-shield or helmet with dark glass lenses.
- Release regulator screw on torch before opening gas cylinder valve.
- Open gas cylinder slowly.
- Do not weld near flammable materials.
- Do not attempt to weld enclosed vessels or tanks until safety precautions have been taken.
- Do not use the gas cylinder as a work support.
- Do not leave the torch in enclosed vessels when not in use.
- Do not weld material which has been degreased with solvents, unless it is absolutely dry.
- Do not allow any source of heat to reach the gas cylinders.
- Do not weld galvanized or coated metals without taking proper precautions against fumes.
- Use screens to protect your workmates: glare can cause eye injury up to a distance of two hundred feet.
- Turn off the gas cylinder valve when not in use.

F. SAFE HANDLING OF CHEMICALS

Storage

Chemicals coming into contact with each other may cause violent reaction or evolution of toxic vapors. Storage should therefore be so arranged that different chemicals are kept physically separated.

Instructions

Instructions and procedures for handling of chemicals must be absolutely clear and precise and must be provided on wall charts in each studio and workshop.

Containers and Materials

- (a) All containers and materials should be clearly marked to indicate properties, hazards and proper handling methods. Any unmarked containers or materials should be reported so that appropriate action may be taken.
- (b) If splashing or burning of the person occurs, the affected part must be treated immediately with large quantities of cold water. Proper medical treatment must be sought after giving this emergency care.
- (c) All splashes and spillages must be cleaned up without delay; this is best done by means of washing away with running water.
- (d) Protective clothing and equipment must be provided, clean and in good condition. Where there is even the slightest risk of eye injury, goggles should be worn.
- (e) Generally, containers should not be used for anything other than their original contents. But where it is desired to use non-returnable containers for other purposes, they should be thoroughly cleaned out so that there is no possibility of a reaction between incompatible chemicals. Such containers should always be clearly re-labeled.

G. FIRST AID

The provision of first aid equipment is a necessity. Its purpose is twofold: in the case of serious injuries, to prevent deterioration in the patient's condition before seeing a doctor; and in the case of minor injuries, to prevent serious complications arising. Small injuries should not be ignored, especially cuts, as blood poisoning can result. The best course is to get first aid for all injuries.

Eve Injuries

Immediate skilled treatment is essential for all eye injuries. Serious damage may be caused by an untrained person probing around in an endeavor to remove a foreign body.

In the event of splashing from corrosives, solvents and other harmful liquids, or the entry of dust, the eyes should be washed out immediately with either running water or an eye-wash solution.

In the case of any foreign matter becoming embedded in the eye, or any other type of eye injury which cannot be given first aid treatment, the eye should be covered and a doctor's attention sought.

Eve Protection

Most eye injuries are caused either because the management has not provided adequate eye protection or because the employee has not made full use of the eye equipment. Goggles, transparent screens and guards should always be checked.

ACCIDENT REPORT						
To the Chair:						
Date of Accident:	Time:					
Location:						
Room No.:						
Hallway:						
Other: (Please State)						
ACCIDENT - Name of a	ny injured person:					
Brief Description:						
Your Name:						
Action by the Chair						
Signed:	Date:					

Appendix A

Any hazard identified by a member of the faculty, non-teaching staff or student should be reported as soon as possible.

HAZARD REPORT								
To the Chair:								
Date:								
Location:								
Room No.:								
Hallway:								
Other: (Please State)								
HAZARD - Brief Description:								
	Your Name:							
Received by the Chair	Date:							
Action by the Chair								
G' 1	D.							
Signed:	Date:							

Appendix C

VACATION ACCESS AGREEMENT

In order to gain access to the facilities in Rutledge Building and McLaurin Hall during the vacation period I agree to the following procedural requirements:

- 1. I will ensure that I am accompanied by another authorized student in order that should I become ill or an accident occur, campus security can be informed immediately.
- 2. I will not use any equipment for which I have not received authorized training.
- 3. I will not use any power equipment while alone in the studios and/or work areas.
- 4. I will not provide any other individual access to the Rutledge Building or McLaurin Hall.
- 5. I understand that if I am not actively enrolled in classes at the time this special vacation access is being granted that the work I intend to perform, or complete, is directly related to, and strictly limited to, my course of study in the Department of Fine Arts for which I would otherwise be actively enrolled. Under no circumstances will I use this special vacation access to produce work that is not going to directly benefit and/or be applied towards my major course of studies in the Department of Fine Arts.

has s _l requi	ssor of Fine Arts pecifically assigned me to ring utilization of the Ru led in Fine Arts classes.	s suggested that I work on certain projects ies during a period when I am not actively				
	Professor of Fine Arts					
(Signa	(Signature of instructor is mandatory)					
Please print your name:			Student ID			
Your Signatu	are:	Date:				
and agree that I a privilege and	I use the facilities at my own 1	risk during a period when classes are nat privilege my access to the Rutledge	ne points (1-6) listed above. Further I understand not in session. I also agree that vacation access is e facilities will be denied indefinitely and could			
Approved:		Chair, Departmer	nt of Fine Arts			