



VPA Dept. Safety Training

Visual Arts Safety Training Guide

This CSU San Marcos Safety Visual and Performing Arts department (VPA) Training Guide includes information regarding the potential hazards associated in the VPA and trains you to work safely while performing specific tasks. It is important that you adhere to these safety guidelines.

VPA training is provided to students, faculty and staff following; General Industry Safety Order Title 8 3203 (a) 3 Injury and Illness Prevention Program.

You will not be permitted to work or use equipment in the CSU VPA Department until you:

- Have read this VPA Safety Training Guide
- Have been instructed in hazards by your instructor and have had any questions answered
- Have signed off on the VPA Safety Training Guide

Safety Policy

It shall be the policy of the California State University San Marcos Visual and Performing Arts that a safe, healthy environment shall be maintained at all times within the department and its program environs, including shop and other work spaces. We recognize that many processes, techniques, materials and practices used in the studio arts contain inherent risks to individuals and if those risks cannot be adequately minimized and controlled through proper training, equipment, and use of appropriate precautions, **those things may not be used within our program.**

Furthermore, ignoring precautions and restriction shall not be allowed. No production, installation, or exhibit can ever be considered justification for risk to any member of our program, and no production, installation, or exhibit can be considered successful if someone is injured in its completion.

No activity in the studio arts is completely safe. Safety procedures considered standard in any other industry may not be practical in a studio situation. We must therefore be especially diligent in following safety rules that do apply. **FAILURE TO FOLLOW APPROPRIATE SAFETY RULES AND POLICIES MAY RESULT IN SERIOUS INJURY OR DEATH!**



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Handling Safety Issues

It is the policy of Cal State San Marcos VPA Safety Program that no safety concern is unimportant. All personnel and students within the Department are encouraged to bring such concerns to the faculty and staff, and especially to the Technical Director. In no way will doing so reflect badly on or be held against the person making the report. Rather, contributing to the health and safety of all personnel is everyone's responsibility.

Restricted Access

No one is allowed access to the wood shop unless supervisory personnel (faculty, staff or authorized student supervisor) are present.

NO ONE SHALL BE PERMITTED TO OPERATE ANY POWER TOOL IN A PERFORMANCE SPACE OR SHOP SPACE UNLESS A FACULTY MEMBER OR THE INSTRUCTIONAL TECHNICIAN IS PRESENT.

First Aid, Accidents & Reporting

A first Aid kit is maintained in the ARTS 107 (backstage between ARTS 111 and ARTS 101) and may be accessed as needed. Keys to backstage are issued to all faculty, staff and student managers who are all authorized to access the first aid supplies. An additional first aid kit is located in the Wood Shop (ARTS 344).

These kits are intended for First Aid ONLY! In the event of anything OTHER than minor incidents, accidents are to be reported IMMEDIATELY to the supervisor in charge of the area, who shall contact University Police at 3111, who are authorized to contact the proper emergency services. If the incident is serious or life-threatening, you should call 911 immediately. University Police should then be contacted as soon as practical. Render whatever first aid can be applied until emergency services arrive to relieve you.

All incidents must also be reported to Risk Management & Safety at x4502.

Emergency Procedures

FOR ANY EMERGENCY INCLUDING INJURY, ILLNESS, FIRE OR AN EXPLOSION, DIAL 3111 (UNIVERSITY POLICE) FROM ANY UNIVERSITY PHONE, OR IN EXTREME EMERGENCY DIAL 911.

Your call will be answered by an officer at University Police. Public Safety personnel will respond and determine the need for additional assistance.



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The following are recommended procedures for various types of emergencies.

Medical Emergencies

1. **If a SERIOUS INJURY occurs, immediately dial University Police at 3111 or dial 911.**
2. Never move a person suspected of serious injury unless it is a life threatening situation such as a fire. Attempts to move an injured person can cause further injury, especially to the spine and neck. Try to keep the injured person warm and still.
3. Persons with severe injuries or illnesses that require emergency department facilities for treatment are to be transported directly to the emergency room by ambulance. Staff employees with less serious conditions should obtain treatment at the Industrial & Sports Medical Center located at 740 Nordahl Road San Marcos CA after notifying Human Resources and Equal Opportunity. Students should seek medical treatment at Student Health Services.
4. Because of infection, minor cuts have the potential to become more serious. Wounds should be washed and dressed.

Fire Emergencies

In the event of a fire, University Police should be notified immediately at 3111 and the following actions are recommended.

1. Activate the fire alarm.
2. Put out the fire if you know how to do so without endangering yourself or others. Those that choose to put out small incipient stage fires (no larger than a waste paper basket) must be trained in the proper use of fire extinguishers. If a fire cannot be extinguished within the first 10 seconds leave immediately.
3. If the fire is large and spreading, leave the fire area and prevent the fire's spread by closing the doors behind you.
4. Evacuate the building and await the arrival of Fire Officials. Try to account for everyone inside the building. Do not leave the area until you have been accounted for.
5. Do not re-enter the building until you are told to do so by University Police or the Fire Marshall.



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Chemical Exposure

1. If you spill a chemical such as paint thinners or fabric dyes on your skin:
 - a. Rinse the area with water for at least 15 minutes in the emergency shower located on the west side of the patio area.
 - b. Remove any soiled clothing and jewelry while you are rinsing.
2. If you get a chemical in your eyes:
 - a. Rinse the eyes in the emergency eyewash for at least 15 minutes. The emergency eyewash is located on the west side of the patio area.
 - b. Remove contact lenses while rinsing, don't wait to remove them before you rinse.
 - c. Report the injury to Risk Management & Safety at x 4502.
3. If you inhale a chemical or are overcome by fumes.
 - a. Leave the room and move to fresh air.
 - b. Keep door of room open to vent.
 - c. Do not re-enter a contaminated area.
 - d. Call Risk Management & Safety at x 4502 to report the injury.

Chemical Spills

Risk Management & Safety serves as the campus First Responder for hazardous spills. The general procedure in the event of a spill is to notify a supervisor who will evacuate the area immediately. Call Risk Management & Safety to report the incident and wait for further instruction.

Smoking Rules

It is State Law that SMOKING IS PROHIBITED in all State buildings, university vehicles and within 15' of any door or intake.



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Safety Complaints and Hazards

Any perceived safety concerns or hazards, large or small, must be reported to the supervisor in charge of the area who shall take steps to correct the problem or to report the problem to Risk Management & Safety for action.

Electrical or maintenance services to the building shall be referred Facilities Services at x4600.

Wood Shop Safety Rules

The following should be considered as guidelines for working in the Wood Shop area. They have been written and are enforced for your safety, and as such should be followed at all times. If you have any questions regarding the safe operation of any tool or method of construction, please feel free to ask the Faculty or Staff. You are responsible to know and understand all of the following:

1. All persons working in the shops shall be properly attired. This includes long pants and close-toe shoes. Hard-sole shoes should be worn if possible since gym shoes do not afford sufficient sole and toe protection. At no time will anyone wearing a dress, shorts or sandals be allowed to work in the shop area as none of these garments give sufficient protection to the wearer. Also, long hair is to be tied back to avoid any chance of getting caught in moving machinery.
2. The Wood Shop is an eye protection area and safety glasses are required whenever entering this space. In general, when operating any power tool, safety glasses are to be worn. Also when participating in any amount of abrasive sanding or spray painting, respirators are also to be used in addition to safety glasses. Ear protection is available to all students and staff in the shop areas at all times. It is up to the student or staff members to determine when this protection is necessary.
3. Every attempt should be made to keep your work area clean and organized. This means periodically sweeping up excessive waste and returning unnecessary tools to their proper places.
4. There is to be NO SMOKING IN THE SHOP AREAS. No soft drinks or food are permitted in the shop areas.
5. No person shall work in the shops while under the influence of drugs or alcohol. Prescribed drugs which could cause drowsiness, lightheadedness, or disorientation should also not be used. Any student using such prescribed medications should



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notify both the Faculty and Staff in charge. Any person removed from the shops for the above reason shall not be allowed to return unless authorized by the Faculty.

6. Anytime that you have a problem with any tool or machine, bring it to the attention of the Staff so they may assist you. Never attempt to repair or adjust any machines. If a machine or tool is accidentally damaged, bring it to the attention of the Staff. Please do not try to hide or cover up any damages.
7. At no time shall any student operate or attempt to operate any of the following pieces of equipment without permission of the Staff.
 - a. Table Saw
 - b. Radial Arm Saw
 - c. Circular Saw
 - d. Band Saw
 - e. Sabre Saw
 - f. Drill Press
8. Before operating any power tools, make sure all allen wrenches, chuck keys or other foreign materials are clear of the machine's work area.
9. Dangling necklaces or earrings, large rings, long loose scarves or loose sleeves should not be worn in the shop as they may become entangled in moving machinery.
10. Always make sure that all power tools are turned off and the electrical power disconnected before leaving the machine. Never leave an unattended machine running, even for "one second".
11. Always unplug or disconnect from power all power tools before changing blades, bits or attachments.
12. IF YOU DON'T KNOW-ASK! There is no such thing as a dumb question, only dumb mistakes and injuries.



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Safety Notices and Bulletins

Safety rules for each of the major power tools in the wood shop are posted near each tool.

NO PERSONS WILL BE ALLOWED TO OPERATE ANY POWER TOOL UNTIL TRAINED AND APPROVED BY THE INSTRUCTOR. All required safety rules must be followed at all times.

Some guidelines for using tools include:

1. Inspect tools before use for any defects such as frayed wires, or damaged hand tools. Remove defective tools from service and have it repaired or replaced.
2. Only use power tools that are properly grounded with a 3-pronged plug or that are double insulated. A power tool with a missing grounding prong shall be considered damaged and be removed from use until repaired.
3. Never carry a power tool by its cord. Avoid wrapping cords too tightly around tools for storage to prevent damage to strain relief grommets.
4. Unplug power tools before loading the, changing blades or bits, making adjustments, or cleaning them. Follow all manufacturers' instructions for handling and adjusting.
5. Defective, damaged or unsafe equipment must be removed immediately from service if damage occurs or is detected.
6. Dull tools are unsafe and can damage the operator or work. Maintain your tools and always use sharp cutting blades.

NEVER ALTER OR REMOVE ANY MACHINE OR BLADE GUARD OR DISABLE ANY SAFETY FEATURE.

MSDS

It is imperative that you understand the hazards inherent in the art materials such as toxicity, flammability, and reactivity, and the appropriate precautions to protect yourself against illness or injury. Materials that are highly toxic, flammable, or reactive can be handled safely if the proper precautions are followed. However, even materials of low toxicity that are normally considered to be "safe" can lead to accidents and toxic exposures if you ignore appropriate procedures and precautions.



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In order to work in the VPA, you must be familiar with Material Safety Data Sheets (MSDS). An MSDS is a chemical or product specific health and safety reference document. It provides detailed information about the hazards associated with a chemical or product and precautions for handling it. The chemical or product manufacturer prepares the MSDS and it is available from the manufacturer, distributor, or importer listed on the product's label. MSDSs are kept on file in RM&S, and in the VPA shops, studios, or work areas. Consult an MSDS whenever you begin working with a new chemical or product and review MSDSs periodically to see if the information has changed.

Although the format varies widely, the information found on an MSDS is consistent and includes:

- A manufacturer's name, address, and phone number.
- A list of the product's hazardous ingredients including permissible exposure limits.
- A description of physical and chemical properties, as well as flammability and reactivity data.
- Health hazard information, including short- and long-term exposure effects, symptoms of overexposure, and a description of appropriate first aid and medical treatment to use in case of excessive exposure.
- Precautions for the safe handling, storage, and use of the product.
- A description of how to safely handle the material under normal and emergency situations.
- Finally, control measures including personal protective equipment, ventilation, and work/hygiene practices.

Under the OSHA Hazard Communication Standard, hazardous art materials, like other chemical products, must be labeled with:

1. The common name of the chemical or product;
2. The name, address, and emergency phone number of the company that manufactured the product; and
3. An appropriate hazard warning, which may include words such as DANGER, WARNING, or CAUTION.

Determining whether an art material may cause harm depends not only on the toxicity of the material, but also the dose you receive. In order for an art material to affect your health, it must first enter your body and then reach an area of the body (termed the target organ or system) in a large enough concentration or dose to cause harm. Just as you need to take a sufficient dose of a medicine to have a desired effect, so must you be exposed to a sufficient quantity of a hazardous material to be harmed. Factors such as the length of time you are exposed and how often you are exposed influence the effects.



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People involved in the arts are most likely to be exposed to toxic materials by skin contact, inhalation or ingestion. Skin burns and absorption of toxic materials through the skin can be avoided by wearing chemically impermeable gloves and other chemical protective equipment and by washing contaminated skin surfaces immediately. Work that may generate airborne contaminants must be adequately ventilated to maintain safe levels. If ventilation alone cannot maintain safe levels, a respirator may have to be worn. Ingestion may occur when material comes in contact with the mouth. Ingestion is frequently the route of exposure to metals when working with painting pigments, ceramic glazes, or welding. You should never point the tip of your paintbrush with your lips or hold the dirty handle of your brush in your teeth! Exposure through ingestion can be avoided by frequently washing your hands, not eating or smoking in the studio, and keeping all objects out of your mouth.

The manner in which you store art materials, handle them, and clean up afterwards will significantly influence the risk of accident or exposure. This is particularly true in studios handling flammable and toxic materials. In general, use small quantities of chemicals. Low amount of chemicals could lessen your exposure to the acute and chronic effects they may produce. Follow these general principals of safety storage:

1. Only store compatible materials together (identify incompatible materials on an MSDS);
2. Store chemical containers in cabinets, never on the floor or on shelves above shoulder height (particularly flammable solvents, acids, or bases) where they may fall and break; and
3. Make sure all containers are labeled and in good condition (keep materials in their original containers or containers made of the same material).

Avoid putting chemicals in breakable containers, food containers, coffee containers, or containers with loose fitting lids. Make sure that all compressed gas cylinders are secured in an upright position and have the valve protection cap on when storing or transporting them.

Dispose of all hazardous wastes in accordance with Risk Management and Safety's policies and procedures. If you have questions, RM&S x4502 in regards to separating, labeling, and storing hazardous waste. Never dispose of hazardous wastes in the normal trash or down the drain. They will need to be sent to an EPA-permitted disposal or treatment site.

Material Safety Data Sheets (MSDS) for chemicals and materials used in the shops are maintained by the Visual and Performing Arts Administrative Coordinator and are available at any time to all persons in the performing arts area. Workers in the shops, student and paid assistants are required to follow safety guidelines on each sheet for



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each material and chemical. Copies of MSDS are also available in the shop area. If you do not understand or have questions about anything in any MSDS, or about any process contact Risk Management & Safety for clarification.

Work Requiring Training

Many of the processes and systems in the theatre complex pose hazards while in use. Before students and staff are permitted to use them, they must be trained and approved by the appropriate supervisor of the area. These processes include but are not limited to:

Use of power tools in the Wood Shop:

Table Saw
 Radial Arm Saw
 Band Saw
 Stationary Drill Press
 Bench Grinder
 Circular Saw
 Mitre Saw
 Portable Drills and Drill Motors

Ventilation Systems

The Wood Shop is equipped with certain ventilation systems which shall be used at all appropriate times. These include but are not limited to:

Dust collection system must be operating when the table saw, band saw, or radial arm saw are in use. Training on these tools must include training on the ventilation system.

Spray paint use is only permitted in the patio area where outside air flow exists.

Personal Protective Equipment

In addition to normal permitted work clothing, the shops are provided with personal protective equipment. Use of such equipment is not optional and shall be used at all times when performing associated activities.

Such personal protective equipment shall include:

EYE PROTECTION: safety glasses, goggles or face shields shall be required when operating power tools.



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EAR PROTECTION: ear plugs or ear muffs shall be required when operating louder power tools such as radial arm saw, table saw, circular saw, chop saw, or portable grinder at any time, or any percussive tool (pneumatic nail gun), at ALL times. Ear plugs or ear muffs shall be required when operating ANY power tool for extended periods of time.

RESPIRATORY PROTECTION: Use of a dust mask is required for activities creating quantities of dust or if using the dust collection system is not practical for a given activity (i.e. portable tools). Other respiratory protection may be necessary when working with solvents or solvent based chemicals and materials. Please contact Risk Management & Safety for information on appropriate type of respiratory protection available for specific uses.

PROTECTIVE GLOVES: Required when working with solvents or solvent based (non water based) chemicals and materials. Extended exposure to water based chemicals (such as paint) shall also require the use of protective gloves. Refer to MSDS for guidelines as to appropriate PPE.

HEARING PROTECTION: Noise can be generated from a whole range of sources. In the VPA the most likely noise generating sources are portable or fixed machinery such as; drills, saws, etc. Regardless of the source, the effects of noise are predictable and the consequences preventable. The safe level of noise is 85 decibel (8 hour Time Weighted Average) or below. That can be equated to approximately the level in which you would produce as you raise your voice to talk to someone close by. If you are exposed to these levels, you should use hearing protection in the form of plugs or muffs. Contact RM&S if you suspect you need assistance in evaluating your noise exposure.

Physical Hazards

Physical hazards in the arts include ultraviolet and infrared radiation, noise, vibration, stress to the muscular skeletal system from repetitive motion or excessive lifting, improperly maintained equipment, and poor storage and process management. They also include injury arising from carelessness and inattention.

You must understand how to control your exposure to radiation sources by avoiding carbon-arc lighting when possible, covering skin surfaces, and wearing appropriate shaded eye protection. If you are welding, it is also important that you screen your work from others so no one will be inadvertently exposed. Radiation intensity decreases quickly with distance so you should increase your distance from radiation sources if possible and keep others away.



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Noise is common in arts studios and is produced by such things as woodworking and metal working machinery; hand, electrical, and pneumatic tools; and exhaust fans. The noise level emitted from equipment or processes may be reduced by dampening vibration, isolating noise-producing equipment, or installing sound-absorbing materials. If engineering or preventative maintenance controls are not available to reduce your exposure to noise, hearing protection in the form of earplugs or earmuffs can be worn to reduce noise exposure in noisy environments. You should be aware of the different types of ear protection and the proper use and care of this protection.

Repetitive motion, particularly of the hands, wrists, and arms, can lead to painful inflammation of muscles, tendons, and nerves over time and cause the eventual deterioration of those tissues. The symptoms associated with repetitive-motion disorders can include pain, warmth, swelling, and difficulty moving the joint involved. The continuous, often extreme bending of wrist, elbow, and shoulder joints leads to these disorders. Hand polishing, sanding, drawing and painting in awkward postures, are examples of high-risk repetitive tasks. To prevent these injuries, select appropriate tools lay out your work so you can use more neutral postures (for example, a straight wrist) while performing tasks. You should take frequent rest breaks to stretch muscles and work on alternate tasks. This allows you to use and rest different muscles. You should use as light a grip as possible when holding tools. If you cannot relieve joint pain by taking time off or reducing stress on the joint, you should seek medical assistance. Repetitive motion disorders can be disabling if not treated early.

Back injuries may occur from lifting heavy objects such as sculptures and lithography stones. Use mechanical aids such as hoists whenever possible to move heavy objects. You should lift in pairs if the object weights more than 50 pounds. Proper lifting techniques include: keeping you head up, flexing your knees, keeping your back straight, holding the load close to your body, and lifting with your legs. You should never lift and twist at the same time.

Fires and electrical shock may be caused by overloaded electrical circuits, extension cords, or power strips or tools that are not properly grounded. To avoid electric shock, use double insulated tools. Reduce the use of extension cords and power strips and use the appropriate hardwired ground fault circuit interrupter (GFCI) protected outlets whenever possible. When an extension cord must be used, purchase the type with a GFCI built into it. If an electrical circuit breaker trips, have the instructor obtain the assistance of your Instructional Support Technician and/or Facilities Services Representative. The circuit may have a short that could lead to a fire.



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Housekeeping

Poor housekeeping can create an unsafe studio and cause exposure to toxic materials. Instruct students how to clean up spilled materials and spread absorbent to dry wet spots to prevent slipping hazards. It is important that you promptly clean up your work area. At the end of each session, wet mop or vacuum with a HEPA-filtered vacuum if your work could generate highly toxic dusts such as lead, other heavy metals, or silica (fine clay). Dry sweeping re-suspends settled dust and does not remove it. Keep aisles free of obstructions such as chairs, boxes, and waste containers. Do not clutter the studio with combustible materials such as paper and cardboard.



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Visual Arts Safety Training Agreement

I have read this Visual Arts Safety Training Guide. My instructor has trained me in recognizing hazards in the studio or classroom and explained ways to protect myself from exposure to them.

By signing below, I agree that I will not attempt to operate any VPA tool or machine until I have received training in its use by a CSUSM VPA faculty or staff member. I also agree that I will not operate any VPA tool or machine if there is no CSUSM VPA faculty or staff member physically present to directly supervise such activity. I have read this Visual Arts Safety Training guide. My instructor has trained me in recognizing hazards in the studio or classroom and explained ways to protect myself from exposure to them.

Name (please print) _____ Date_____

Name (please sign) _____

Instructor or Supervisor _____ Date_____