

MARYLAND INSTITUTE COLLEGE OF ART

Environmental Health and Safety

STUDENT ORIENTATION TRAINING

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Video Outline

“Creating Art Safely”

Hazard Communication Training

1. Know Your Materials:

- **How to find the information:**
 - ~ Always read **LABELS** on materials
 - ~ Note **SEALS of approval: Toxic vs. Non Toxic**
 - ~ **Review MSDS:**
 - List of Ingredients
 - Precautions
 - Emergency Procedures
 - Disposal Procedures
- **Potential hazards of the materials:** There are three types of hazardous and/or toxic materials:
 - ~ **Poisons:** These materials can destroy the health and possibly the life of a person once it is absorbed into their body. (Dose and quantity: Acute vs. Chronic)
 - Examples:**
 - Heavy Metals
 - Printing Solvents
 - Powders and Dusts (silica)
 - ~ **Irritants and Corrosives:** These materials can attack the exterior of the body and can cause irritations and burns, particularly to eyes.
 - Examples:**
 - Photo Chemicals
 - Solvents
 - Acids in Printmaking and Fiber
 - ~ **Flammables and Combustibles:** These materials can cause fire damage when ignited.
 - Examples:**

Solvents	Adhesives	Thinners
Catalysts	Paints	
- **Routes of Exposure:**
 - ~ Inhalation
 - ~ Ingestion
 - ~ Absorption
 - Examples:**
 - Air Quality
 - Eating and Hygiene
 - Skin Contact
- **Body Responses: Acute and Chronic:**
 - ~ Respiratory System
 - ~ Skin
 - ~ Digestive System
 - ~ Central Nervous System
 - Examples:**
 - Lung Sensitization/Coughing
 - Cracking/Peeling/Burning
 - Indigestion/Nausea
 - Narcosis/Dizziness

2. Know Your Processes, Tools, Techniques, and Hazards:

- **Read then follow directions**
- **Ask questions if you don't know how**
- **Use tools for intended purpose**

- **Cut away from body**
- **Always check guard height and use guards**
- **Avoid loose clothing**
- **Examples of Hazards:**
 - ~ Impact
 - ~ Noise
 - ~ Heat
 - ~ Radiation
 - ~ Metal Fumes
 - ~ Ultra Violet Light

3. Know How to Prepare and Respond to Emergencies:

- **Call for Assistance**
- **Keep Fire Lanes Clear**
- **Review Locations for each of the following:**
 - ~ Evacuation Routes
 - ~ Eyewash Stations
 - ~ Safety Showers
 - ~ Spill Kits
 - ~ Fire Extinguisher
 - ~ Alarm Pulls
 - ~ Shut Offs for all equipment and machinery
 - ~ In shelter Locations
 - ~ Mustering Points

4. Know Your Personal Protection Equipment (PPE):

- **“What type for each task?”** **Examples:**
 - ~ Skin protection: Gloves, Apron/Jacket
 - ~ Eye protection: Face Shields/ Goggles
 - ~ Lung protection: Dust masks/Respirators
 - ~ Ear protection: Ear Plugs/ Muffs
- **Safety Kits:** Safety Kits include the following PPE:
 - ~ Hand Sanitizer
 - ~ Barrier Cream
 - ~ Gloves (Nitrile/Latex/Cloth/Leather)
 - ~ Respirators and/or Dust masks
 - ~ Apron
 - ~ Goggles/ Face Shields
 - ~ Ear plugs

5. Know How to Work Safely (Examples):

- **Use ventilation hoods and ducts** (Local and General Exhaust)
- **Do not use breakable/food containers for chemical mixtures.**
- **Substitute Less Toxic Material** (Precautions with Liquids/Powders)
- **Label all purchased and secondary containers properly** (Use HMIS Labels)
- **Do not eat or drink in studios** (Eat in designated areas)
- **Be aware of spontaneous combustion** (Red rag/solvent cans)
- **Store Materials at below head level** (Fire Resistant Chemical cabinets)

- **Use proper lifting techniques** (Use mechanical device)
- **Repetitive motion** (Break-up work/ Stretch)
- **Do not work alone** (Periodic Checking)

6. Know Proper Housekeeping:

- **Clean-up and Wash up:**
 - ~ Cleanup after each session.
 - ~ Use a HEPA (High Efficiency Particulate Air) Filter Vacuum for silica clay.
 - ~ Use Wet Methods of Mopping.
 - ~ Clean up spills immediately.
 - ~ Practice good personal hygiene. Wash after each session and before eating.
 - ~ Never wash hands in solvent.
 - ~ Wash work clothes separately.

Health and Safety for MICA Studios

General Personal Protection:

- 1. Before using any chemical product:**
 - Turn on the ventilation.
 - Read the MSDS and check the health rating.
 - If no MSDS exist:
 - ~ -tell your shop technician or
 - ~ -call EHS 410.462.7593
 - Use personal protective equipment.
 - Read the labels and follow all directions.
 - Follow all safety and health precautions.
 - Substitute less toxic materials.
- 2. Do not eat or drink in the studio.**
- 3. Always wash your hands before eating or when leaving the studio.**
- 4. Wear protective clothing and use Personal Protective Equipment (PPE).**
 - Apron
 - Gloves
 - Goggles
 - Dust masks
 - Respirator
- 5. Wash PPE separate from other clothing and materials.**
- 6. Do not use toxic substances or processes that may affect others working in the same space.**
- 7. No spray paints, fixatives, or adhesives may be sprayed indoors, unless at an appropriate spray booth.**

Fire Regulations:

- 1. No Smoking Indoors, In Studios, Or In Your Office. Smoking Can Accelerate the Toxic Effects of Some Art Products.**
- 2. Keep All Exit Lanes, Exits, and Walkways Clear.**
- 3. Do Not Hang Anything From Light Fixtures, Plumbing & Sprinkler Systems.**
- 4. No Heaters, Hot Plates, or Open Flames of Any Kind.**
- 5. No Melting Of Waxes Of Any Kind Unless In Designated Areas. Waxes Give Off Toxic Fumes When Heated.**
- 6. Review And Know The Closest Evacuation Routes And Safe Meeting Areas.**
- 7. Temporary Wiring (Extension Cords) Are Not To Be Used For Permanent Wiring.**
- 8. Personal Appliances Are Not Permitted And No Cooking Of Any Kind Is Allowed In The Studios.**

Handling Hazardous Materials:

- 1. The sinks may not be used to dispose of chemical or paint waste.**
- 2. Use flammable storage cabinets for storage of flammable solvents and mediums (1 pint or more).**
- 3. Allow waste acrylics to dry before disposing in trash. Do not dump in sinks.**

4. Use red solvent disposal cans and oily rag waste cans for disposal of used flammable liquids and flammable rag materials.
5. All purchased hazardous materials containers must be properly labeled with the container's contents, your name and the date purchased.
6. Do not use food containers for storage of hazardous materials
 - Use HMIS Labels on all secondary containers and write:
 - ~ Contents
 - ~ Name
 - ~ Date
 - ~ Hazard rating

Handling Hazardous Materials:

1. Read all manufacturers' labels and follow safety precautions.
2. Read and use MSDS sheets (material safety data sheets)
 - Understand chemical ingredients.
 - Follow physical and health precautions.
 - Use first aid emergency procedures.
 - Use proper personal protection equipment.
3. Materials which give off noxious or toxic fumes (spray paint and fixtures) must be used:
 - Outdoors, or
 - In designated spray booth areas only.
4. Pastels and chalks should be used with caution. Some contain heavy metals. Use a dust mask.

Paint Clean-Up And Disposal:

1. No sinks may be used to dispose of paint waste.
2. Dispose of waste acrylics in trash. Do not dump in sinks. Let acrylics dry before disposing.
3. For oily liquid and solvent waste disposal, use red solvent disposal cans located at sinks.
4. Use red fire rated containers to dispose of oily rags and towels. Do not dispose in open trash containers.

Using Oil Paint:

1. Use of turpentine is prohibited. Substitute with odorless mineral spirits (gamsol) for thinning oil paints, changing colors, or a final cleaning of palette.
2. Substitute acrylic washes for under painting instead of using solvent washes, when possible.
3. Use mineral oil or vegetable oil for initial cleaning of oil palettes or brushes. Usually brushes may be cleaned with soap and water.
4. Cover brush cleaning containers with lid or aluminum foil while standing.
5. Never use solvents to clean your hands.
 - Use a barrier cream or gloves to protect your hands while oil painting.
 - Use baby oil (mineral oil) to clean your hands before washing with soap and water.
6. Using HMIS labels, clearly label all cans and secondary containers of mixtures with:
 - Your name

- Date
- Contents
- 7. **Use tightly resealable containers and avoid glass.**
- 8. **When using recycled food containers:**
 - Remove food label
 - Re-label with name, date and contents on HMIS labels

Sculpture /3-D Studios:

1. **Think safety when planning each step of your project.**
2. **If you have not been trained, do not operate equipment or machinery.**
3. **Use personal protective equipment**
 - Always wear safety glasses
 - Use a dust mask if a cutting operation is dusty.
 - Use a properly selected respirator where toxic fumes may be generated.
 - Use ear plugs or muffs when necessary.
4. **Practice good hygiene.**
 - Wash your hands regularly and before eating and drinking.
 - Do not eat, drink, or smoke in the studio.
5. **Do not operate tools while under the influence of drugs, alcohol, or medication.**
6. **Do not work by yourself.** Have someone else with you at all times in the studio or shop.
7. **Wear proper apparel**
 - Wear protective apron or coveralls and wash regularly and separately from other clothing.
 - Do not wear loose clothing, gloves, necklaces, rings, bracelets or other jewelry that may get caught in moving parts.
 - Tie back long hair or wear protective hair covering.
 - Non-slip safety shoes are recommended:
 - ~ No bare feet
 - ~ No sandals
 - ~ No open toed shoes
 - ~ No high heels
8. **Keep your work area clean and well lighted**
9. **Keep guards of power tools in place and in working order.**
10. **Make sure all tools are properly grounded.**
11. **Do not use power tools in damp or wet locations or expose them to rain.** Electric shock can cause serious damage or death!
12. **Before using any chemical product:**
 - Turn on the ventilation!
 - Use personal protective equipment
 - Read the MSDS and check the health rating. Notify your shop tech or call EHS 410-462-7593.
 - Read the label! Follow all directions.
 - Follow all safety and health precautions.
 - Ask questions if you are not sure.
 - Substitute less toxic materials.

Emergencies

Types of Emergencies

1. Life threatening emergencies:

- Examples: heart attack, unconsciousness, car accidents, narcotics overdose, fires, terrorism, explosions, etc.
- Call (9 for outside line) 911 for Baltimore city police, fire or ambulance
- Then notify guard at security desk or call mica campus safety, x3333.

2. Non-life threatening emergencies:

- Examples: cuts, slips, trips, flooding, sprains, strains, etc.
- Go to guard at lobby desk or call mica campus safety, x3333 (off-campus: 443-423-3333). After hours please leave a message on the confidential voice message system and your call will be returned.

3. First-aid injuries:

- Examples: band-aids, hot/cold therapy, removing splinters, etc.
- Call human resources (410-225-2363) or email: hli@mica.edu

Emergency Reporting:

1. Campus Safety is Trained in First Response! To Call Campus Safety, Dial x3333, or Off-Campus, 443-423-3333

- Give exact location of emergency (e.g., building, floor, room).
- Give your name the number where you are calling from.
- Describe nature of emergency (e.g., fire, injury, leak).
- Stay near phone, if possible for additional instructions.

2. Please report all hazards, concerns and near-misses to EHS (410-462-7593) or email:

- EHS Coordinator, Quentin Moseley-qmoseley@mica.edu
- EHS Manager, Denelle Bowser-dbowser@mica.edu

Emergency Evacuation Training:

1. Emergency Awareness Training Goals:

- Know the Emergency Reporting Procedures
- Know the quickest evacuation route from any area.
- Know the location of “safe meeting” areas for any building that they are in.
- Know the location of emergency and safety equipment in each area. (phones, alarms, extinguishers, eyewash, and first aid)

2. Fire Marshals

- Fire Marshals are necessary in assisting during drills and emergency events in their areas.
- A fire marshal is appointed for each floor of each building.
 - ~ RCAs are fire marshals for residence dorms.
 - ~ Faculty are fire marshals for their classes and are required to review procedures, identify evacuation routes, and make all students aware of this information in each class instructed. They shall assist in drills and evacuations as outlined below.
 - ~ Appointed Staff are fire marshals for the administrative buildings. They are people who are generally in their offices throughout the day.

3. Students **MUST** report to their Faculty or RCA for a head count.

- 4. In the event of a drill or actual emergency event, Fire Marshals, RCAs and Faculty should:**
 - Encourage orderly evacuation of the floor/area and building by directing traffic to nearest evacuation routes.
 - Check your area to see that all have evacuated (during drills and if time permits).
 - If necessary (when two designated “buddies” are not available) assist any student with a disability to either evacuate the building or to locate to a “safe refuge area”. Notify the OIC where this person is. (See Disability Evacuation Plan)
 - Once outside, assist in directing everyone to a designated “Safe Area”.
 - Report to the Campus Safety *Officer in Charge* (OIC) any particulars to your area. File an Evacuation Report within 24 hours if any problems occur.
 - Help announce information given by the OIC. Everyone should remain in the “safe meeting area” until the “Safe to Return” command is given by OIC

**Take attendance and/or assist in head count operations during a real event. **
Faculty should use Class Lists. RCAs should use Floor Occupancy Lists.
- 5. After evacuation and arrival at designated safe area, do not re-enter the building for any reason.**
- 6. No employee of MICA is required to give first aid. To do so is a voluntary decision.**

No one should administer first aid without properly being trained and taking proper precautions: (e.g., avoiding contact with blood).
- 7. First Aid Kits**
 - Small First Aid Kits are available within departments at Health and Safety centers for administering aid in small incidents.
 - Large First Aid Kits are located at some Security Desks in Academic Buildings and are for First Responder use. The responding IPO will bring large kit in an emergency.
- 8. No MICA employee should attempt to fight a fire, or use a fire extinguisher unless properly trained.**
 - Extinguishers are primarily for trained professionals responding to a fire.
 - MICA Employees may voluntarily sign up for “Fire Extinguisher Training” provided professionally at scheduled times.

Emergency Evacuation Locations:

Designated “Safe Meeting Areas” for Events/ Drills/ Disaster:

NOTE: “Safe Refuge Areas” for persons with disabilities are in concrete block stair wells.

- **Main**
Designated Meeting Area: Sidewalk, in Front of CC Church
During Inclement Weather: Lobby of Meyerhoff
Disaster Shelter: Main, Lower Level Gallery

- **Annex**
Designated: Sidewalk, across Lanvale
Inclement Weather: Lobby of Main
Disaster Shelter: Main, Lower Level Gallery

- **Mt. Royal Station**
Designated: Sidewalk, top of wooden stairs (by light rail tracks)
Inclement Weather: Lobby of Art Tech. Center
Disaster Shelter: Bunting Library, Lower Level

- **Dolphin/ College Store**
Designated: Sidewalk, top of wooden stairs (by light rail tracks)
Inclement Weather: Mt. Royal Station, First Floor
Disaster Shelter: Bunting Library, Lower Level

- **Fox**
Designated: Bunting East Parking Lot (by light rail tracks)
Inclement Weather: Lobby of Bunting
Disaster Shelter: Bunting Library, Lower Level

- **Bunting**
Designated: Bunting East Parking Lot (by light rail tracks)
Inclement Weather: Lobby of Brown
Disaster Shelter: Bunting Library, Lower Level

- **Brown**
Designated: Bunting East Parking Lot (by light rail tracks)
Inclement Weather: Lobby of Bunting
Disaster Shelter: Bunting Library, Lower Level

- **Bank**
Designated: Sidewalk on North Ave, (towards Howard)
Inclement Weather: Lobby of Brown
Disaster Shelter: Bank Building Basement

- **Meyerhoff**
Designated: Elementary School Parking Lot (Mosher side)
Inclement Weather: Commons Gate House
Disaster Shelter: Meyerhoff House Fitness Room

- **Commons**
Designated: Elementary School Parking Lot (McMechen side)
Inclement Weather: Lobby of Meyerhoff
Disaster Shelter: Commons Basement, Building 1

- **Mt. Royal Fiscal Affairs/Student Account**
Designated: North on Mt. Royal Sidewalk
Inclement Weather: Lobby of Brown
Disaster Shelter: Bunting Library, Lower Level

- **Mt Royal Apartments: (1500 Block)**
Designated: Sidewalk: Corner of McMechen & Mt. Royal
Inclement Weather: Commons Gate House
Disaster Shelter: Commons Basement, Building 1

- **1200 Block: Student Affairs, College Store, Campus Safety, Art Tech., Mt. Royal Ave.**
Designated: Sidewalk: Corner Mt. Royal & Lafayette
Inclement Weather: Lobby of Main
Disaster Shelter: Main Building, Lower Level Gallery

- **Jewelry Center**
Designated: Front Parking Area

Helpful Hints for Staying Safe

General Guidelines

1. Report all suspicious smells (e.g., gas, smoke), unsafe acts and conditions.
2. Practice drills in a respectful manner.
3. Follow safety guidelines while creating art in your classrooms, independent studios, and dorms.
4. Read your Material Safety Data Sheets.
5. Travel in groups and stay alert.
6. Do not leave valuables unattended.
7. Wear your Personal Protective Equipment.

Residence Safety

We encourage you to utilize the studio spaces, shops, and classrooms for your art making experiences, especially oil painting.

1. Call studio managers for use of the Commons and Meyerhoff studio rental signup.
Studio Space hours are:
 - Commons-- 24 hours /7 days a week, weekly rental.
 - Meyerhoff-- 24 hours /7 days a week, 2 week/4 week turn over rental.
 - Other-- Be in by 2am and, you have 24 hour access.
2. This list of chemicals can cause serious health risks if not used with proper ventilation, please refrain from using the following in your student housing:
 - Xylol
 - Acetone
 - Heating Wax
 - Lacquer Thinner
 - Glazes containing Lead
 - Mineral Spirits (Gamsol)
 - Alcohol

Computer and Office Ergonomics

1. Eye Strain:
 - Use of computers may reduce exposure of artists and designers to the hazardous materials and procedures of traditional design work, however because artists can do so much work with a computer, they end up staying in the same position for long periods of time. This can lead to repetitive stress on the body with headaches and eye and vision problems.
 - There are several ways to reduce eye discomfort from computer or video display terminal (VDT) use:
 - ~ Dimming the room lights can reduce glare. The labs at MCAD have been painted with a darker tone color to reduce the lighting levels.
 - ~ Desk lamps should be used to spotlight paperwork or notes.
 - ~ You should be able to change the contrast and brightness of the screen to comfortable settings.
 - ~ When working at the computer for extended periods of time it is important to take regular breaks to rest your eyes. For example 15 minutes per every two hours of work.

2. Computer Tips For Reducing Fatigue:

- Complaints such as back, neck, shoulder and upper arm complaints are common in constant VDT users. Repetitive wrist motions can cause strain injuries such as tendonitis and carpal tunnel syndrome.
- Suggestions for reducing the risk of developing these conditions are:
 - ~ Keep the wrists straight by using a wrist rest or arm supports.
 - ~ Practice good posture, keeping the back straight and supported by a good chair. Keep feet flat on the floor or use a footrest.
 - ~ Neck should not have to tilt up or down. The top of the monitor should be placed at eye level to allow proper head and neck position.
 - ~ Take frequent short breaks. Break up long stretches on the keyboard or mouse with alternative work involving different work motions

Student Responsibilities in Managing Food Allergies

- 1. Notify the College of his or her allergies.**
- 2. Work with the school to develop a plan that accommodates his or her needs.**
- 3. Provide written medical documentation, instructions, and medications as directed by a physician, using the Food Allergy Action Plan (available through FAAN) as a guide.**
- 4. Be proficient in the self-management of his or her food allergy including:**
 - Avoidance of unsafe foods
 - Recognition of symptoms of allergic reactions
 - How and when to tell someone they may be having an allergy-related problem
 - Knowledge of proper use of medications to treat an allergic reaction
- 5. Review policies and procedures with the school staff and his or her physician after a reaction has occurred.**
- 6. Provide emergency contact information.**
- 7. Carry prescribed medications at all times.**

RESOURCES AND PHONE NUMBERS

Campus Safety

24-Hour Emergency Line	443-423-3333
Bank Building Safety Desk	410-230-0620
Brown Center Safety Desk	410-225-2481
Bunting Center Safety Desk	410-225-2377
Campus Safety Office, non-emergency	410-225-2355
Commons Safety Desk	410-462-0886 or 0887
Fox Building Safety Desk	410-225-2245
Main Building Safety Desk	410-225-2308
Meyerhoff House Safety Desk	443-552-1600 or 1601
Mount Royal Station Safety Desk	410-225-2242

Other Helpful MICA Numbers

Building Services	410-225-2385
Counseling Center	410-225-2367
Disability Support Services	410-225-2416
Environmental Health & Safety	410-462-7593
Facilities Management	410-225-2261
Human Resources	410-225-2363
Mount Royal Medical Center	410-225-8855

Helpful Baltimore Numbers

AIDS Hotline (National)	1-800-342-AIDS
Alcoholics Anonymous hotline	410-663-1922
American Red Cross	1-800-787-8002
Baltimore City Animal Control	410-396-4694
Baltimore City Health Department	410-396-0176
Baltimore Salvation Army	410-783-2920
BG & E	410-685-0123
Center For Disease Control	1-800-232-4636
Child Abuse Prevention Center of Maryland	410-576-2414
Dental Referral	1-800-DENTIST
Drug Abuse Hotline	1-800-784-6776
Environmental Protection Agency, Region 3	1-800-438-2474
Gay/Lesbian Hotline	1-800-292-0429
Health Care Center	410-225-8855
House of Ruth	410-235-2382 or 6370
Narcotics Anonymous	410-566-4022
National Center for Missing Children	1-800-843-5678
National Response Center-Chemical/Oil/Biological Terrorism	1-800-424-8802
Planned Parenthood	410-576-1400
Poison Control Center	410-706-3100
Power Outage Helpline	1-877-778-2222
Sexual Assault Domestic Violence Center	410-828-6390
Suicide Prevention Hotline	1-800-784-2433
Weather Line	410-662-9225

**For all police, fires, and medical emergencies, dial 911.
For city hall (non-emergencies) dial 311.**