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I. Safety Handbook Rules and Regulations

It is the desire of STAD to protect students and employees from accidental injury and damage to health while working in our facilities. This document provides a general overview of safety policies and procedures and presents specific policies for each of the technical areas and performance venues.

I.A. Costume Shop Rules and Policies

I.A.1. Costume Shop Safety Regulations

Students are not allowed to work in the shop alone. They must discard waste, clean the area and put away all personal and shop equipment after they are finished each day. Shoes are to be worn at all times. An emergency eyewash station is located on the wall near the laundry room. The shop supervisor will maintain a monthly inspection log. A three-foot radius of accessibility must be maintained, and all floor paths and surfaces must be kept clear at all times. All trash, including thread ends, is to be thrown away in the proper trash receptacle. A four-foot entry at the door must be kept clear as well. Keep all bags and coats out of this path at all times.

I.A.2. Dye and Laundry Rooms

There will be no use of the Dye room without faculty or staff supervision. Allow shortest possible open time for containers of solvent, dry chemicals and powders. Replace covers carefully. Transfer contents of containers that can no longer be properly sealed. Ensure proper disposal of empty containers and use protective glasses, respirator, gloves and aprons as necessary. The Dye room is not equipped with an exterior vented ventilation system. Use of toxic chemicals and spray paint use is only permitted in the Scene Shop spray booth. Chemical protective gloves are required when working with bleach, solvents or solvent based chemicals and materials. Never allow dye spills to dry, so clean up spills immediately. Clean and rinse sinks after use. Do not discard empty containers of dye powder or other chemicals without asking for faculty or staff supervision. Always restock dye and paint trays and tools in their proper place. Do not use items that have been used with dye or paint to eat or drink with. Do not use food items to paint or mix dyes without relabeling and then restocking them as such. No food or drink is permitted in the dye area at any time.

I.A.3. Fire and Emergency Telephone Numbers

A list of Fire and Emergency telephone numbers and procedures is posted on the wall near the telephone.

I.A.4. General Rules

Only students who have been given permission by the costume faculty or staff are authorized to work in the shop. This includes students currently enrolled in a costuming class, listed as costume

designer or assistant for mainstage productions, and/or employed as student workers. Any other use must be approved by the costume faculty and staff. Students must follow established procedures for equipment use and space maintenance outlined in each course syllabus. Faculty will outline rules for these procedures at the beginning of each semester.

I.A.5. Location of Fire Extinguishers

Fire extinguishers are located in the hallway outside the Costume Shop.

I.A.6. Location of First Aid Kits

The first aid kit is provided in a clearly labeled wall cabinet inside the sewing workroom next to the laundry room. If symptoms of a health problem or work-related illness appear and persist, report the matter to an instructor and go to the JMU Health Center.

I.A.7. Material Safety Data Sheets

Material Safety Data Sheets (MSDS) for chemicals and materials used in the shop are available at any time to all persons in the theatre area. MSDSs for those Costume Shop items being stored and used in the Scene Shop are kept in the shop. Workers in the shops, students and paid assistants are required to follow safety guidelines on each sheet for each material and chemical. Students should see a supervisor for clarification if they don't understand a process or have questions about anything in an MSDS.

I.A.8. Sewing Workroom

No one is allowed to use any equipment (e.g., sewing machines, irons and laundry machines) until they have been trained and approved by a faculty or staff person. Do not use any sewing equipment that is unfamiliar. Students must report any malfunctioning equipment immediately and should not adjust or attempt to repair any machine without first asking faculty or staff for help. Do not attempt to rethread any overlock or coverstitch machines without faculty or staff supervision. It is vital to keep the work space clean because the accumulation of dust, lint, fabric, and thread waste can not only interfere with proper machine working, but may also pose respiratory problems and fire hazards. Return all equipment, including thread spools, scissors, pins, and needles, to proper storage bins, drawers and shelves. Turn off all electrical equipment at the end of the day and unplug all irons. Do not eat food in the sewing workroom space. To reduce back strain, sit upright with shoulders parallel to the table and maintain proper seating height for each machine or hand sewing procedure. Adjust seat height as necessary.

I.A.9. Storage Room

There is no access to stock or storage without faculty or staff knowledge and approval. Always use the automatic locking rolling stair units to reach higher racks and shelves. Keep doorways completely clear of all movable racks, stair units and storage bins.

I.B. Electrics Shop Rules and Policies

I.B.1. Electrics Shop Policies

All students and employees can be trained in the safe operation of all equipment utilized in the Electrics Shop. No one may use any equipment on the following list without training:

1. Single and two-person lift
2. Counterweight system
3. Riser system in 1270
4. Winched lineset in 1270
5. Soldering system

All students and employees must be appropriately dressed for work; closed toed shoes, close fitting clothing, and hair tied back. All students shall work only under supervision of a JMU Electrics Shop employee. Students and employees will show up on time and be respectful and courteous of their environment and others. In case of emergency, students will notify an employee or supervisor for the proper emergency protocol to be observed. If they cannot find an employee or supervisor, students will dial x86911 immediately, then look for a supervisor.

I.B.2. Emergency Procedures

In the event of an emergency, employees, students and supervisors can contact JMU Emergency personnel by dialing x86911 from an on campus phone or (540) 568-6911 from an off campus phone as soon as possible.

I.B.3. Lighting Department Training Policies

All student-wage employees must be trained in the following procedures listed below.

I.B.3.a. Safe operation of single and two-person lift

The JMU Electrics Shop Supervisor must train all wage employees in the operation of both the single and two-person lift. This includes the use of outriggers, raising and lowering, and initial safety check of both devices. A log will be maintained in the Electrics Shop, showing all persons that have been trained (once/semester) on the lifts. No other personnel may operate the lift unless they have received training. A log of initial daily safety checks will be kept on each personnel lift.

I.B.3.b. Proper weight estimation for counterweight system

All JMU Electrics Shop employees must be trained on the proper technique for estimating weight in order to load single purchase system. A log will be maintained in the Electrics Shop. All employees will be trained every semester.

I.B.3.c. Proper loading and unloading of counterweight system

All employees and students in the JMU Electrics Shop will be trained on the proper loading and unloading procedures for the counterweight system by the Electrics Shop Supervisor or Scene Shop Supervisor. A log will be maintained in the Electrics Shop. Students and employees will be trained on an annual basis.

I.B.3.d. Proper use of shop tools, including soldering system

All employees of the JMU Electrics Shop will be trained on proper safety procedures for operating the soldering station and bench top fume collection. These include eye protection and operation of variable current station. Employees will be trained on an annual basis, and a log will be maintained.

I.B.3.e. Location of all MSDS materials

All employees and students in the JMU Electrics Shop will be advised of location of all MSDS materials. A sign will be posted in the shop. MSDSs are located in the binder outside of the Scene Shop Supervisor's office in the Scene Shop.

I.B.3.f. Company Switch

No students can perform tie-ins to the company switch. Only the trained Electrics Shop employees or supervisor can perform it. Training is be offered once a semester.

I.B.3.g. Emergency Procedures

All employees and students in the JMU Electrics Shop will be trained in proper Emergency Procedures. Signage will be posted in the shop.

I.B.4. Lighting Safety Policies in Spaces

I.B.4.a. EJ M Dance Performance Space

For EJM Dance Performance space, no student will work without the supervision of the Dance Electrician or Dance Technical Director. Any personnel operating the hand winches or riser system must have received training prior to operation. At all times, students and employees shall operate in safe conditions. If at any time, a student or employee feels unsafe, they should report to the supervisor immediately. Students and employees shall be respectful and courteous of each other. When work is being performed overhead, all personnel on the stage will wear hard hats.

I.B.4.b. Mainstage Theatre

For Mainstage Theatre, there are many general rules and procedures that must be followed. All students and employees will dress appropriately for work, including closed toed shoes. Students and employees shall follow the instruction of the designated supervisor for the day. These same rules apply to Studio Theatre and EJM Dance Performance space. No student shall work without supervision of an employee of the JMU Electrics shop employee. Students will not perform tie-ins to the company switch. Only designated and trained personnel may perform this function. At all times, students and employees shall operate in safe conditions. If at any time, a student or employee feels unsafe, they should report to the supervisor immediately. Students and employees will be respectful and courteous of each other. They will not utilize personnel lifts without proper training. At the beginning of each work day, a safety check will be performed on the lift and a log maintained. When work is being performed overhead, all personnel on the stage will wear hard hats.

I.B.4.c. Studio Theatre

In Studio Theatre, no student will work without supervision and permission of the Wampler Manager, and no student shall use the personnel lifts without training. At the beginning of each work day, students will perform a safety check on the lift and maintain a log. At all times, students and employees shall operate in safe conditions. If at any time, a student feels unsafe, they should report to the supervisor immediately. Students must be respectful and courteous of each other. Lights being hung on the balcony rail will be hung from a ladder below. At no time will the railing be removed to accommodate light hang. Students will not perform tie-ins to the company switch. Only trained employees may perform a tie in. Students must seek permission to use any item not normally maintained in the Studio inventory. When work is being performed overhead, all personnel on the stage will wear hard hats.

I.B.5. Safety Info and Location of Safety Equipment

Hard hats and eye protection are kept in the Scene Shop next to the supervisor's office. The Electrics Shop has two pairs of eye protection hanging on the board above the bench. Benchtop Fume Collector is located on bench top. Safety cables are located on storage racks in the Electrics Shop. The shop maintains a small, basic first aid kit, which is located under the sign on the gel bench. Larger, more equipped stations are located in the Scene Shop by the manager's office and downstage left on the Mainstage theatre. Dance Theatre has its own first aid kit in each rehearsal space. All MSDS materials are located in the Scene Shop supervisor's office in the Scene Shop.

I.B.6. Safety Lighting Policy

All productions must use aisle lighting in order to comply with the law and to ensure the safety of the audience. All aisles on seating platforms must be lit using the PAR 38 units designated for that purpose, regardless of configuration. All aisle ways must be lit by these units. All "built-in" stair lighting, wall lighting and under balcony lights must be utilized in combination with aisle lights throughout the entirety of the performance. The designer may choose to record these aisle

lights at no lower than 10 percent into each cue or program them into the lighting preset station. Failure to utilize safety lighting will result in forfeiture of the surety bond.

I.C. Responsibilities of Students and Employees

Students and employees share responsibility for their own safety as well as the safety of others by being aware of all surroundings. It is imperative that all students and employees know their job and how to perform all operations of their job in the safest possible manner. To maintain a safe working environment, students and employees are expected to work according to the safety rules set forth under each area's specific safety program, refrain from any unsafe activity that might endanger themselves or others (e.g., horseplay) and use all safety devices provided for their protection. It is vital that students and employees know the locations of fire extinguishers and first aid kits as well as wear suitable clothing and proper shoes. They must be alert to possible safety hazards and report them to a supervisor immediately if identified. No matter how small, all injuries or accidents must be reported immediately to the supervisor. Drinking alcoholic beverages or taking non-prescription drugs while on the job is strictly forbidden. Students on certain prescribed medications that could potentially impair the ability to safely work in shops or theatrical spaces will inform their supervisors of the situation. Any unauthorized use of tools or work area needs to be reported immediately to the supervisor.

I.D. Safety Policies and Procedures for the Studio Theatre

I.D.1. Aisle Regulations and Emergency Exits

The existing emergency exits limit the maximum occupancy load to 200 people. A 44-inch aisle clearance must be maintained from the exit of all rows of seating to the primary exit and to at least one official secondary fire exit at each level. When non-standard seating arrangements are to be used, the new seating plan must be approved in advance by both the Director of Technical Production and the Space Faculty Safety Officer. The performance and audience spaces must be kept free of all tripping hazards during the performance. Steps to seating areas must be 44" wide or wider, and no step may exceed 7.25" in rise. There will be railings at the rear of any audience riser seating sections. Any access steps more than two steps high will include stair railings. The built-in exit signs must be illuminated and visible to the audience at all times and will not be modified. When masking obscures the sign to a secondary exit, a portable illuminated exit sign that is visible to all affected seating must be employed. All aisles and pathways to exits must be illuminated at all times during the production, and all fire exits must be unblocked. Vestibules are not to be used for storage. Any doors propped open for production must be un-propped at the end of each performance and rehearsal.

I.D.2. Emergency Procedures

Emergency notification information must be posted in the hallway behind the space. In case of emergency, the faculty supervisor or Forbes Center staff will be located immediately. All other safety regulations as required by law, JMU or by JMU STAD policy must be followed. The Director of Technical Production and the Faculty Safety Officer assigned to the space will enforce these regulations and close any production that is not in compliance.

I.D.3. Safety Equipment and Substance Precaution

Safety equipment (e.g., alarm triggers, sensors and fire hoses) can't be blocked. No toxic substances (e.g., oil based paints, lacquers and solvents) may be used in the space without prior approval by the Director of Technical Production. The use of such solvent-based paints may only be done in the spray booth area of the Scene Shop. Ladders may be used, but they must be placed on a level surface and used in a safe manner. No chairs or rehearsal cubes are to be used as work platforms. Smoking as well as prop candles are not allowed in The Forbes Center spaces. Smoke effects and plans for built scenic items must be approved in advance by the Director of Technical Production and must comply with all university and school policies. Stage combat must be approved by the Director of Technical Production as well as the Faculty Coordinator of Stage Combat. When work is being done overhead, all personnel below must wear hard hats. All weapons used must adhere to university policies. All fight choreography will be under proper supervision as determined by the Faculty Coordinator of Stage Combat. Before each performance with choreography, there will be a fight call. When not in use, there will be a ghost light placed in a central location to ensure that the space has some low level of illumination.

I.E. Safety Regulations for Specific Equipment

I.E.1. Bandsaw

Students must always wear safety goggles and hearing protection as well as use the dust collection system while operating a machine. Never wear loose clothing or jewelry and always tie hair back. Clean the table and the area around the bandsaw before beginning work and once work is finished. Saw only stock that is free of dirt, paint, nails, splits, warps and loose knots. Make all adjustments to the machine before turning it on, and never open the wheel enclosure doors while the machine is in operation. Adjust the upper guide post so that it is no more than 1/4 inch above the work. If the blade is not tracking properly or needs adjustment, stop the machine and see the instructor. Do not use a dull blade when operating a bandsaw. The operator must be extremely cautious of the exposed blade and never allow their hands or fingers to be in line with the blade. Avoid backing out of saw cuts because it is possible to pull the blade off of the wheel. If a blade breaks, step back quickly, turn off the saw and report to the instructor.

I.E.2. Jointer

Students must always wear safety goggles, use hearing protection and tie hair back as well as use the dust collection system while operating a machine. Hands must always remain on top of the work. Never hang a thumb or palm over the end of the stock. Use a push stick or push block to run stock through the jointer. Do not joint end grain, ply, MDF, particle board, or stock containing splits such as checks, loose knots, dirt, paint or nails. Never run a piece of stock shorter than 14 inches across the jointer. Always turn the concave side of the stock down toward the table, and always cut with the grain. Hold the work firmly on the table and against the fence. Once a student has begun pushing stock through the machine, they can't back up. Instead, they can stop and shut the machine down. Do not operate the jointer unless the guard is in place and working. Do not attempt to run stock through the jointer unless the machine is at full speed and the knives

are sharpened. Avoid taking cuts deeper than 1/16th inch. After completing a cut, make sure the guard returns over knives before picking up material from the outfeed table. Allow machine to come to a complete stop before removing shavings with a stick or brush. Clear away all debris after use. Always return fence to its 90 degree position when finished.

I.E.3. Policy for Violations of Safety Procedures

The Scene Shop expects that all students will abide by the safety and health procedures outlined in this manual. Major and minor infractions will be addressed immediately and become part of the student's record. The instructor will identify the nature of the violation to the student and inform the student of the correct procedure. They will then observe the student performing the procedure in a proper manner. A violation may result in a student not being allowed to engage in a specific procedure unless supervised. The Violation Form shall be signed and dated by both the instructor and the student and placed in the student's file. A copy shall be given to the student. Repeated violations may result in the student's removal from the course.

I.E.4. Table Saw

It is the responsibility of those using the table saw to first determine if this machine is the best and safest way to accomplish the task.

Before Use

Clean the table of the machine and the floor around the saw before and after finishing work. Position the saw guard, splitter and anti-kickback device before turning the saw on. Always lock out power before changing the saw guard or servicing the machine in any way. Use only new stock that is free of dirt, paint, nails, screws, staples, loose knots, splits and warps. Make sure that any necessary aids such as a push-stick, push blocks, or rollers to catch outgoing materials are ready before beginning an operation. No one is allowed to stand in a direct line behind the saw. If a person is going to help the operator cut a large piece of stock, they must only support the stock and not attempt to push or pull it. The operator will control the feed and direction of the cut. Be certain the blade to be used is sharp and the proper type for the operation. Any questions about this should be asked before starting to use the equipment.

During Use

Students must always wear safety goggles and hearing protection as well as use the dust collection system while operating a machine. Never wear loose clothing or jewelry and always tie hair back. Go to the Scene Shop Supervisor or Technical Director for assistance. Adjust the height of the blade to no more than one-eighth inch above the stock to be cut. Stand to one side of the blade, and never reach across, behind or beyond the blade while cutting. Maintain a four-inch margin of safety and utilize the push stick. Always use either the rip fence or the miter gauge when cutting. Never cut stock freehand. When setting the rip fence, make sure that the fence locks parallel to the blade. Otherwise, the material can bind and kick back. Never try to support both pieces on opposing sides of the saw blade when using the miter gauge; support one portion positioned against the gauge side

only. When ripping, always support the portion that is in between the rip fence and the blade. If the user tilts the blade or changes the miter gauge, they must return it to its original position after use. When changing blades, always be sure that the washer and locknut are tight to the blade. When making a cut, the user must make sure they push the stock completely past the blade. The user must never back up the stock once they have proceeded with a cut. If need be, the user can stop and shut the machine down. Always turn the saw off before attempting to remove scrap. Users should never talk to anyone or become distracted while the saw is running. They must keep their attention focused on their work.

I.E.5. Using Other Machines and Tools

The Scene Shop has many other machines. These include a CNC router, Metal Mill, lathes, drill presses, router tables and sanders, and hand-held power tools (e.g., biscuit joiner, portable rotary saw, drills, routers, grinders and sanders, chisels, saws, carving tools, and knives). Students may not use any of these tools without instruction and supervision. All of the Scene Shop general rules and procedures apply to these tools and machines.

I.E.6. Welding Area

The welding studio includes both gas and electric welding equipment. Only students that have completed training and have approval may use the welding equipment. Every user must always work behind welding screens and watch out for others around them.

I.E.6.a. Gas Welding

Welding and cutting metal and general metal work must be done in designated areas only. All gas welding tanks must be properly secured to carts or chained to walls in designated areas. Any empty or full tanks must be labeled and properly stored. Students must wear proper fire resistant clothing (e.g., aprons, gloves and eye protection). All related metal working machinery or hand tools require the use of eye, ear and protective clothing. Any metal used in the welding area must be approved by faculty or staff. Metal maintenance, organization and cleaning is mandatory and must be done after any welding activity. Metal scraps and residue must be removed after use.

I.E.6.b. Electric Welding

Electric welding must be done in designated areas that are free of any flammable materials or water, which may cause electric shock and the exhaust system must be used. When arc welding, students must watch for wet hands or wet work in order to prevent shock. Light produced by arc can damage the retina of the eye and over exposure can cause skin cancer. To prevent these injuries, students must wear face and eye protection and ensure that there is ventilation over the work before applying electricity.

I.F. Safety Rules and Procedures

I.F.1. Accidents

All injuries and accidents must be immediately reported to the supervisor. In the event that medical attention is required, call the campus emergency at x86911 or use the designated emergency telephones located throughout the building. If a JMU employee is injured on the job, they must fill out an Employer's First Report of Accident form. This report is required by the Virginia Workers' Compensation Act.

First aid kits are located in the following strategic locations throughout the building:

- South and West walls of the Scene Shop
- Stage left and stage right in the Mainstage Theatre
- Green room of the Mainstage Theatre
- Studio Theatre production room
- Studio Theatre box office
- Mainstage Theatre box office and satellite box office
- Dance production room
- Costume Shop and the STAD work room

I.F.2. Air Tools

All air tools must be connected to regulators and correctly adjusted. Do not load or unload air tool with fasteners with the airline connected to the tool. Students and employees should never point the tool toward themselves or anyone else, whether it contains fasteners or not. All users will operate the tool with the nose squarely against a work piece of proper thickness and away from its edges. Do not remove, tamper with or otherwise cause the safety system to become inoperative. Operating a tool with a defective or disconnected safety system is extremely dangerous and must be avoided. To prevent unintended tool operation and possible injury, all users must disconnect the tool from the air line when loading and unloading the tool, leaving the tool unattended, clearing a jam or moving the tool to another location.

I.F.3. Chain Hoists

Chain hoists are only to be operated by the Faculty Technical Director, Scene Shop Supervisor or specifically trained Student Assistants. The chain hoist controller is to be kept in the Scene Shop Supervisor's office when not in use.

I.F.4. Fire Protection

Access to all available firefighting equipment shall be maintained at all times. Only approved fire extinguishers will be used, and every extinguisher will be inspected periodically and maintained properly. All job personnel will be instructed how to use them. Once a fire extinguisher is discharged, it must be removed from service and replaced with a new one until it is recharged. Smoking is prohibited inside of the Forbes Center and is only allowed in exterior locations provided with designated ash cans. Only approved containers and portable tanks can be used for the storage and handling of flammable and combustible liquids. These containers will be properly labeled. Compressed gas cylinders must be kept in approved carts or chained to the walls in designated areas for compressed gas cylinder storage.

I.F.5. Flammable Liquids

All liquids will be kept in approved, marked containers and stored in flammable storage cabinets located in either the spray booth of the Scene Shop or in the Studio Theatre Production Room.

I.F.6. Flying

Before moving battens, give a verbal warning. When loading and unloading arbors, clear area around lock rail and tie off or immobilize the arbor. All personnel must make sure the batten is properly weighted before releasing the brake. Personnel should not try to operate a lineset if they have not been properly trained. When stacking stage weights, all personnel should alternate the direction of the stage weights and never stack them above the height of the toe rail on the loading gallery.

I.F.7. Genie Lifts

All students or employees must be trained in genie lift operations before using either the single or two-person lift. They may only be used under the supervision of those officially and properly trained in their use. A log of initial daily safety checks is kept on each personnel lift. The user's manual will be kept in the baskets of each lift at all times. Genie lifts shall not be used over the traps in the Studio Theatre.

I.F.8. Housekeeping

Housekeeping is the first law of accident prevention, so maintenance of a clean work area is required at all times. Rubbish, debris and waste materials are fire hazards and must be removed from work areas, but they are not to go above the top of the recycling or trash carts. Used lumber must have all nails pulled before stacking. Structural steel, pipes, rope, bar stock and other cylindrical materials need to be stored in provided racks at all times. Rigging equipment, when not in use, will be stored in the designated locations in the designated manner. Ropes will be stored in the designated area of the materials storage room and must never be left loose or coiled on the floor. Waste material must be kept out of the red and yellow zones at all times. The stage

and shops must be swept at the end of each working day, and the loading dock must be kept clear of all rubbish and debris. Do not place anything over 3' in length in the recycling or trash carts.

I.F.9. Ladders

The use of ladders with broken or missing rungs or steps, broken or split side rails, or other faulty or defective construction is prohibited. Recycle defective ladders immediately. Portable ladder feet shall be placed on a substantial base, and the area around the top and bottom of the ladder must be kept clear. Portable ladders in use will be tied, blocked or otherwise secured to prevent their being displaced. When not in use, ladders must be stored in the secured ladder locations and fastened to the walls with the provided safety chains.

I.F.10. Lighting Equipment

All lighting instruments must have a safety cable attached and all bolts properly tightened. Stage cables and plugs for each lighting instrument must be inspected regularly, and if any visible signs of damage are evident, the plug will be immediately replaced. Do not touch the glass envelop of any stage lamp, and do not exceed the maximum allowable lamp wattage for a lighting instrument. Over wattage will damage the instrument. All circuiting of lighting equipment will take place with the power off. Before each use, test every lighting instrument and cable.

I.F.11. Mainstage Theatre Fire Curtain

The Mainstage Theatre has an automated fire curtain that is connected to the building fire prevention system. The fire curtain is routinely tested to ensure the ongoing readiness of the system.

I.F.12. Manual Lifting

To ensure that no injuries occur while lifting an object, one should follow the steps below:

- Keep back straight
- Use legs to lift gradually
- Divide weight and keep material close to body
- Get help if the load is too bulky or heavy to lift alone

I.F.13. Miscellaneous

Aisles, walkways, fire suppression doors and fire exits must be unobstructed and kept clear of tripping hazards. If a spill occurs, it must be cleaned up immediately. Desk, file and hardware drawers will not be left open, and all hardware will be sorted and stored in its proper place.

I.F.14. Orchestra Lift

The orchestra lift is only to be operated by the Faculty Technical Director, Scene Shop Supervisor or specifically trained Student Assistants. The orchestra lift controller is to be kept in the Scene Shop Supervisor's office when not in use. When the orchestra lift is in use, the yellow safety tension barrier must be used to prevent accidental falls. Gala Spiral Lifts will be inspected quarterly to ensure proper lubrication and operation.

I.F.15. Personal Protection Equipment

Eye, ear and face protective equipment and devices will be worn when using power tools, pneumatic tools or performing operations that could result in injuries to these areas. Proper respiratory protective devices shall be provided and used when exposed to harmful dust, gas or vapor. Heavy gloves will be worn when handling wire rope, welding metal or slicing metal. Personnel must wear proper work clothes and shoes at all times. Hard hats will be worn on stage at all times during strikes or in any situation where work is being performed overhead. Ear phones, ear buds, cell phones or other personal devices will not be worn or used at any time in work environments.

I.F.16. Power Tools and Hand Tools

All students and employees are to be trained before using individual tools and equipment, and no one is allowed to work on stage or in the shop alone. Power tools must always be used with the supplied safety guards which are never to be disabled during operation. Impact tools (e.g., drift pins, wedges and chisels) will be kept free of defects. Wooden handles of tools shall be kept free of splinters or cracks and be retained tight in the tool. Electric power tools must either be of the approved double insulated type or grounded properly. Extension cords that are used with portable electric tools must be of three wire type and periodically inspected prior to each use. If any student or employee finds a defective tool, they must tag it "unsafe - not to use". When a portable power tool is not being used, it must be unplugged and put it back in its designated place. No tools are to be removed from shops, and all tool storage areas must be locked when not in use.

I.F.17. Vehicle Safety

All drivers of state-owned vehicles must obey all traffic rules and laws, have a valid Virginia driver's license, and receive a pre-driving inspection of the vehicle in order to check the correct operation of all safety devices. Tail lights and turn signals must be kept clean, visible and operating. All unsafe, inoperable or defective equipment must be reported to the Faculty Technical Director immediately. Do not tailgate, block dumpsters or drive on grass. Drivers should also maintain a safe distance from the vehicle in front of them at all times. Do not exceed the posted speed limits, and keep in mind that a slower speed may be required under certain conditions (e.g., snow, rain, fog and freezing rain). Operating a company vehicle while intoxicated is strictly prohibited, and no alcoholic beverages are allowed in state-owned vehicles. Disabled vehicles must be parked completely off of the road. Keep the cab of the vehicle clean of all trash.

Drivers must be aware of their surrounding when they are attempting to back up or turn around. This may involve getting out of the truck and checking the rear. In case of an accident, the driver must not move the vehicle until receiving instruction from the campus police and Virginia State Police.

I.F.18. Welding

Welding can only take place in the designated areas of the Scene Shop, and all users must wear the proper welding masks, gloves and jackets. Before using the welder, the user must have received proper training. Welding training occurs in THEA 271, THEA 371 and in certain circumstances of THEA 200/300. When welding in the designated areas of the Scene Shop, the use of the snorkel exhaust system is required.

I.G. Scene Shop Rules and Policies

I.G.1. Fire Prevention

Do not use flammable liquids in the presence of ignition sources (e.g., open flames, heating elements, spark gaps, motors, light switches, friction or static). Flammable liquids give off vapors that may burn or explode, so be sure that they are properly stored and labeled. Do not store flammables in direct sunlight and report spills immediately. Good housekeeping is vital to fire prevention, and proper standards for the storage of flammable materials must be enforced in the shop. Do not overload electrical circuits, and immediately report all electrical malfunctions, no matter how small or seemingly insignificant, to faculty, staff, administration or campus security.

I.G.2. General Rules

No one may work alone in the Scene Shop at night. No student will operate machinery at any time unless one other person is present in the shop. Use the Scene Shop only when alert, rested and focused. Under no circumstances will a student attempt to use machinery when they are ill or their judgment is impaired due to the effects of medication, drugs or alcohol.

I.G.2.a. Before Using Machinery

All clothing, hair and jewelry must be secured before using machinery. Make sure all necessary aids (e.g., push sticks, saw horses, hold-downs or guide fences) are within reach or in their proper place. Ensure there is adequate ventilation for both dust and fumes before proceeding with a project. Approach any wood, metal, hand-held or stationary equipment with respect by examining the equipment before using it. This includes inspecting the environment that the equipment is in for potential hazards. Be alert for any unusual sounds, loose parts and dull blades when turning on or operating a machine. If there are questions about the use of any material or operation of a machine, ask for assistance before going ahead with the project. Students must familiarize themselves with all of the materials they are using and take suitable precautions.

I.G.2.b. While Using Machinery

Wear appropriate protection when using equipment (e.g., gloves, goggles, earplugs and respirator). Safety eyeglasses or goggles must be worn when using any power or pneumatic tools, filing metal or cutting wood, or working with materials that could be corrosive to eyes (e.g., plaster, solvents, varnishes or hardeners). Dust collection, welding ventilation and spray booth ventilation have been provided for students' protection. All users must keep their attention focused on both the machine and on the operation they wish to perform with it. Never distract or talk to someone who is welding, cutting metal or operating a machine. All non-users of the equipment should approach users head-on to ensure that they see the other person coming. Never force a machine to do work.

I.G.2.c. After Using Machinery

Clean up scrap wood, sawdust, metal cutoffs and other scrap materials when finished with an operation. Return the machine to a state of readiness for the next person to use. Users must return all hand-held machines to their proper storage area, clean off all work benches and dispose of scrap material properly. The last 15 minutes of each day – except Friday, which will be the last 30 minutes – will be a general housekeeping time. All students must assume responsibility in this important matter. Scrap materials (e.g., saw dust, metal, fabric) generated by both machines and handwork is a health and fire hazard and must be cleaned up daily.

I.G.2.d. Skin Caution

Stripping, painting, grinding, melting and finishing involve a wide variety of materials that must be treated with respect. Wood glues and adhesives (e.g., epoxy and phenol-formaldehyde-resin glues) can cause allergies and skin conditions. Glues and cements that contain solvents can dry and defat the skin, making it more susceptible to infection. In order to ensure safety while using more hazardous adhesives, students must avoid skin contact, use materials sparingly, keep containers closed as much as possible and have good shop ventilation. Water-based contact adhesives, casein glues, hide glues, white glue and other water-based adhesives are slightly toxic through skin contact. Dry casein glues are highly toxic by inhalation or ingestion and are moderately toxic by skin contact. The safe use of wax demands constant ventilation as do all welding fumes and dust created by the mixing of plaster and clay or silica based materials. Vibrating tools can cause health problems with extended use, so it is recommended that students get proper instruction for such tools from the instructor before use. Certain woods (e.g., Oak, Poplar and Birch), especially woods of an exotic nature or wood treated with pesticides, may be irritants or cause allergic responses. Students must be aware of these potential hazards and seek information from their instructors.

I.G.2.e. In Case of Injury

All flammables and hazardous solvents must be used in a well-ventilated area and stored in the facilities provided in the Scene Shop. Solvent soaked rags must be placed in an approved, self-closing waste disposal can, which is emptied on a regular basis. A Fire and Emergency list of telephone numbers and procedures is posted in the Scene Shop and must be consulted in the event of any incident. All accidents must be reported immediately to the instructor or person in

charge. Two first aid kits have been provided; one is located next to the dock door and the second is located next to the paint room. Faculty and staff are responsible for keeping it replenished. There are two eyewash stations located in the Scene Shop; one is located next to the paint room door the second is located next to the dock door. These must be tested monthly by the Scene Shop Supervisor. If a student's symptoms of a health problem or illness appear and persist, they will be reported to the instructor and the student will be sent to the Health Center for an exam.

I.G.3. Handling, Use and Disposal of Materials

All students must be given detailed instructions on the handling, use and disposal of all materials that pose potential health risks. Paper towels and rags used in cleanup must be disposed of in labeled, non-combustible waste disposal cans. These cans are taken to designated pickup areas in compliance with university rules and schedules. Spills must be reported immediately to faculty, school administration, university safety officers or campus security.

I.G.4. Introduction of New Materials

New products and practices that faculty or students wish to introduce into the shop must be researched before doing so. Use the information provided on MSDSs or request manufacturer information. New products and practices must have the required MSDSs included in the book and be authorized by the Faculty Technical Director or Scene Shop Supervisor.

I.G.5. Labeling of Materials

Students must read all labels carefully before using any material for the first time. Warnings and precautions, when available, will be strictly followed. If a label is non-specific, confusing or absent, seek further information before using. If no information is available from the manufacturer, consult the Materials Safety Data Sheet (MSDS) kept on file in the Scene Shop. If necessary, call the manufacturer requesting health and safety information in the form of a MSDS. The MSDSs are located in the safety station next to the Scene Shop Supervisor's office room 1231b in the Scene shop.

I.G.6. Power Tool Training

Students must be trained on each specific power tool before using. A log book is kept by the Scene Shop Supervisor, indicating which tools specific students have been trained to use. Power tool training can only be conducted by the Faculty Technical Director or Scene Shop Supervisor. During training, students will be guided through a step-by-step instruction process of the use of the power tool. Once the student has demonstrated a knowledge of the proper techniques and safety precautions necessary for the use of the power tool, the Faculty Technical Director or Scene Shop Supervisor will note in the training log that the student has been approved for using that particular power tool. Power tool training will also occur in THEA 171, THEA 271 and THEA 371. Advanced power tools (e.g., CNC Router, Shaper Table or Metal Mill) require additional training and will only be used by students who have demonstrated a proven track record of safe operation and knowledge of power tools and advanced construction techniques. Training for

these tools primarily occur as a component of a THEA 490 – Directed Project. Students will be trained in a step by step manner, beginning with safe operation of the power tool on simple applications and then building in complexity as the student demonstrates a safe working knowledge of proper use and operation of the tool.

I.G.7. Safety Equipment Locations and Additional Regulations

Personal Protection Equipment is located in the safety station next to the Scene Shop Supervisor's office room 1231b. This includes dust masks, gloves, eye protection, hearing protection and MSDSs for the Scene Shop. Eye wash stations and first aid kits are located next to the paint room and next to the dock door. Fire extinguishers are located next to the dock door and next to the door to the studio. Hard hats are located in the cubby at the end of the radial arm saw table. Nothing will be stored in the yellow zones at any times in the Scene Shop. This includes in front of the fire extinguishers, eye wash stations, first aid kits, electrical boxes and in the "safe zone" for the tools.

I.G.8. Scene Shop Operational Procedures

Smoking, eating, drinking alcohol and using drugs are not allowed in studios. Eating is allowed in the student common areas of the Studio Theater lobby only. Students should not work alone in the shop at night nor operate machinery at any time unless one other trained person is present. Hair and beards but be tied back when in the shop, and wearing loose clothing or jewelry is prohibited. Protective clothing that is worn when using hazardous material must be removed after work and carefully stored to avoid contamination. Acceptable closed-toed shoes include tennis shoes, work boots or any other shoe that provides support and protection. All aisles and exit routes must not be obstructed in any way. Exit doors will not be locked, bolted or obstructed. Any missing or malfunctioning equipment or supplies must be reported immediately to the Scene Shop Supervisor. Do not attempt to repair or alter equipment.

A general program will be initiated and enforced by faculty and staff within the shop space that outlines procedures for housekeeping and sets standards for cleanliness, equipment use and storage of all materials. Appropriate first aid equipment and supplies will be kept on hand and ready to replenish as needed. Students must wear hearing, eye, face and respiratory protective equipment wherever and whenever established by the faculty or staff member in charge. Housekeeping procedures for the cleaning of studio spaces, storage of chemicals and disposing of waste will be established by faculty or staff and carried out on a regular basis to ensure a safe environment.

I.G.9. Storage of Materials

All hazardous materials must be stored in containers that are labeled clearly with all contents listed. Containers must be tightly covered when not in use. Flammable and combustible liquids are to be stored in the approved flammables cabinet located in the spray booth room 1231. Acids are stored separate from flammable and combustible liquids.

I.H. Stage Managers Procedures and Policies

I.H.1. Facilities Malfunction

In the case of any malfunctions related to the facilities, the Stage Manager must immediately inform the Forbes Center House Manager. If it is an emergency, and the Forbes Center House Manager is unavailable, the Stage Manager will contact University Work Control at x86101 from a campus phone, or dial (540) 568-6101 from a cell phone and indicate that it is an emergency situation. An emergency situation could be anything electrical or plumbing related. Physical defects in the facilities should also be treated as an emergency if the defects seem to pose an immediate danger to audience, cast or crew. The Stage Manager will use the Campus Emergency Information Sheet to inform the Faculty Technical Director of the situation.

I.H.2. Fire Emergency Procedures

In case of fire, do not attempt to fight the fire. In the Mainstage Theatre, the Stage Manager will alert the Assistant Stage Managers to open the fire emergency box on either stage left or stage right and pull the pin releasing the fire curtain. This will lower the fire curtain in a controlled drop, notify the fire department and campus police automatically, and activate the building's automatic fire doors. In the Studio Theatre, the Stage Manager will pull the fire alarm and immediately engage Global House Lights. Assistant Stage Managers will vocally guide performers and crews to the designated exits. The Stage Manager will notify all crew members via the clear com headset system in order to evacuate the theatre through the nearest fire exit. Ushers will assist patrons in exiting the theatre. Performers, crews and patrons will completely exit the building in a controlled and orderly manner. Once outside, the Stage Manager will locate the Forbes Center House Manager to coordinate information with the Fire Department and Campus Police. The Stage Manager will use the Campus Emergency Information Sheet to inform the Faculty Technical Director of the situation.

I.H.3. General Emergency Procedures

The Campus Emergency Information Sheet is posted in the Stage Manager's booth. Audience, performers and crew safety is the paramount concern of the Stage Manager. Consult the Campus Emergency Information Sheet for specific information about University Emergency Procedures. If in doubt, contact Campus Emergency at x86911 from a campus phone, or call (540) 568-6911 from a cell phone

I.H.4. Injuries to Patrons

In case of an injury to a patron, or if a patron is experiencing a medical emergency, the Stage Manager must notify the Forbes Center House Manager immediately. The House Manager will take the appropriate action. In case the patron emergency occurs during the performance, the Stage Manager will stop the production and bring up the house lights to allow immediate medical attention for the patron.

I.H.5. Natural Disaster or Other Type of Emergency Event

The safety of audience, cast and crew is the paramount concern in any situation. In the event of an emergency situation, the production will be immediately halted, and the audience, performers and crew will be evacuated following the procedures described in the Fire Emergency Procedures. If there is a situation outside the building, the Stage Manager will work with the Forbes Center House Manager to instruct and assist the audience, performers and crew as to the proper emergency procedure. In case of a police situation, the Stage Manager must do exactly as instructed by the campus, city or state police.

I.H.6. Performer or Crew Injuries

In case of an injury to a performer or crew member during a rehearsal, performance or show preparation, contact Campus Emergency at x86911 from a campus phone, or dial (540) 568-6911 from a cell phone. Campus Emergency will dispatch an ambulance and campus police. In case of an injury sustained during a performance, causing an interruption in the performance, the Stage Manager will notify an Assistant Stage Manager to enter the stage and make a general announcement to the audience indicating that a temporary hold to the performance is required. The Stage Manager will inform the Forbes Center House Manager of the situation and help them evaluate the procedure for delaying or terminating the performance. The Stage Manager will use the Campus Emergency Information Sheet to inform the Faculty Technical Director of the situation.

I.H.7. Power Outages

The Forbes Center is equipped with an emergency backup generator, which, in the case of a campus wide power outage, will provide emergency illumination in all public areas. In case of a power outage, the Stage Manager will halt the production and inform the audience that the building is experiencing a power outage and that the performance will be delayed until power is restored. In case of a power outage, the Stage Manager must consult the Forbes Center House Manager for instructions on how to proceed.

I.H.8. Shutting Down the Theatre after a Performance

Following a performance, all perimeter doors to the theatre will be locked. Lighting consoles, sound consoles and any special effects equipment will be turned off. A ghost light will be placed center stage and turned on. All work and house lights need to be turned off prior to leaving the space. Aisle lights in the Mainstage Theatre will be on at all times.

I.H.9. Technical Malfunctions

In the event of a technical malfunction, the Stage Manager will evaluate the situation based on the risk of danger for the cast, crew and audience. If any danger exists, the show will be immediately delayed. If this occurs, the Stage Manager will consult the Campus Emergency Information Sheet and contact the appropriate faculty member.