

## DCSTEM Lab/Shop Safety Inspection Checklist

Building/Room: \_\_\_\_\_

Date: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

Inspectors: \_\_\_\_\_

Checklist Items	Yes	No	NA	Comments
<b>A. General-All Areas</b>				
1. Are all ceiling tiles in place and in good condition?				
2. Is all furniture in good/stable condition and properly adjusted?				
3. Are wall-mounted book cases free of excessive material on top and not overloaded? (Chemicals & heavy items should not be stored above head height (6 feet)).				
4. Are all walking or working surfaces free of tipping/slipping hazards?				
5. Are emergency phone numbers and procedures posted at or near telephones?				
6. Are all fans equipped with a blade guard with openings no greater than ½ inch?				
7. Is consumption of food, beverage, etc., prohibited where required?				
<b>B. Shops</b>				
1. Are machine and belt guards in place and in good condition?				
2. Is pedestal machinery securely anchored to the floor?				
3. Is equipment properly maintained and adjusted to prevent personal injury and equipment damage?				
4. Are compressed air nozzles at the correct pressure of 30 psi or less?				

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Checklist Items	Yes	No	NA	Comments
<b>B. Shops (cont.)</b>				
5. Is all piping appropriately identified as to contents/direction of flow?				
6. Are hot pipes and surfaces guarded against contact and clearly marked "HOT"?				
7. Are areas requiring use of protective equipment (e.g., Eye Protection Required, etc.) adequately posted with warning signs and enforced?				
8. Is damaged/malfunctioning equipment tagged "OUT OF SERVICE"?				
<b>C. Exits/Corridors</b>				
1. Are all corridors unobstructed?				
2. Are all exit doors unobstructed?				
3. <i>For rooms with the capacity of 50 or more occupants, are exit signs posted and properly illuminated to clearly indicate exits?</i>				
4. <i>For rooms with the capacity of 50 or more occupants, are all exit doors able to be opened from the inside without special knowledge/keys?</i>				
5. <i>For rooms with the capacity of 50 or more occupants, are exit doors free of slide bolts or locks?</i>				
<b>D. Electrical</b>				
1. Is there at least three (3) feet clearance in front of electrical panels/breaker boxes?				
2. Are electric hand tools properly grounded/double insulated?				
3. Is the area free of extension cords?				
4. Is all electrical equipment plugged directly into wall outlets?				

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<b>D. Electrical (cont.)</b>				
5. Are all cords/plugs free from damage or deterioration?				
6. Are switches and circuit breakers properly identified as to the service they are in and to what they control?				
7. Are circuit breaker panels free of combustible materials?				
8. Are covers plates in place on junction boxes to eliminate exposed wiring?				
9. Are "WARNING HIGH VOLTAGE" signs installed on high voltage enclosures for systems rated 600V or over?				
10. Is all electrical, including light fixtures, protected from physical damage by enclosure/guards?				
<b>E. Emergency Equipment</b>				
1. Is emergency equipment (alarm pull boxes, eyewashes, showers, etc.) accessible and not blocked by equipment?				
2. Are emergency eyewashes provided in the required chemical areas?				
3. Are emergency showers provided in the required chemical areas?				
4. Is all emergency equipment in good condition?				
5. Are spill kits accessible and fully stocked per list?				
<b>F. Storage – General</b>				
1. Is good housekeeping practiced in work area (Is it free of debris, combustibles, obstructions? Are aisles maintained?)?				

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<b>F. Storage – General (cont.)</b>				
2. Is storage adequately supported/stable to avoid tipping/falling?				
3. Is there at least two (2) feet clearance between stacked materials and ceiling light?				
<b>G. Storage – Fire Protection</b>				
1. Is the storage of combustibles in the work area held to a minimum to avoid a fire hazard?				
2. Is clearance of at least 18 inches maintained around fire sprinkler heads?				
3. Are flammable/combustible liquids in excess of one day's operational supply kept in approved flammable materials storage (FMS) cabinets?				
4. Are all FMS cabinets free of combustible materials (cardboard, paper, plastic, etc.)?				
5. Are all flammable containers properly closed/covered to control vapors?				
6. Are all flammable/combustible containers properly labeled/ identified?				
7. Are all refrigerators used for storage of flammable/combustible liquids/materials approved and explosion proof?				
8. Are flammable/combustible liquids returned to approved flammable liquid storage cabinets at the end of the workday?				
<b>H. Storage – Compressed Glass Cylinders</b>				
1. Are all cylinders properly secured with straps or chains to prevent tipping/falling?				

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Checklist Items	Yes	No	NA	Comments
<b>H. Storage – Compressed Glass Cylinders (cont.)</b>				
2. Are protective valve caps in place when cylinder is not in use?				
3. Are empty and full cylinders stored separately?				
4. Are only chemically compatible cylinders stored together?				
5. Are cylinder contents adequately labeled and easily seen?				
6. the correct regulator being used for the cylinder service?				
7. Are highly toxic gases stored in vented gas cabinets?				
<b>I. Personal Protective Equipment</b>				
1. Is the requirement of use of protective equipment enforced?				
2. Is the required personal protective equipment worn?				
3. When not in use, is personal protective equipment properly maintain/stored?				
4. Is personal protective equipment readily available for all personnel including visitors to the area?				
5. Is all personal protective equipment free from damage and deterioration?				
6. Are all employees using respiratory protection properly trained and authorized by EH&S?				
7. Is self-contained breathing equipment properly maintained/ inspected?				

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<b>J. Railing/Elevated Work Areas</b>				
1. Are drain openings/pits in the floor or walking surfaces guarded to prevent tripping/slipping?				
2. Are toeboards in place on elevated platforms to prevent objects from falling off the platform?				
3. Are standard guardrails provided on elevated platforms?				
4. Are handrails provided and in good condition on stairways?				
5. Are there provisions for safe access to elevated machinery/ equipment?				
<b>K. Ladders</b>				
1. Are portable ladders in good repair and safe to use?				
2. Are mobile ladder stands in good condition?				
3. Are standard guardrails provided on elevated platforms?				
4. Are handrails provided and in good condition on stairways?				
<b>L. Forklifts</b>				
1. Are defective forklifts taken out of service and tagged "DO NOT USE"?				
2. Are forklift inspection forms current and maintained in a file?				
3. Are load limits clearly posted in the area?				
4. Are forklift operating rules clearly posted in the area?				
5. Are all operators trained and authorized?				

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<b>M. Fire Protection</b>				
1. Are there current welding permits displayed in welding area?				
2. Are all self-closing doors operational?				
3. Are walls and floors free of holes/penetrations?				
4. Are fire extinguishers and signs clearly visible?				
5. Is access to fire extinguishers clear and unobstructed?				
6. Are all extinguishers in place and properly mounted?				
7. Are all extinguishers properly inspected (monthly) and maintained (annually)?				
<b>N. Training</b>				
1. Have personnel been trained in the use of personal protective equipment?				
2. Are all employees trained in hazardous substances safety?				
3. Have personnel working in high noise areas been trained in hearing conservation?				
4. Have employees who use respirators been trained, fit tested, and received the required health monitoring examination?				
5. Evac Plans				
<b>O. Computer Rooms</b>				
1. Are combustibles stored in approved, enclosed metal cabinets?				
2. Is combustible waste, e.g., trash containers, cardboard boxes, etc., removed from the room daily or more often as needed?				

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<b>O. Computer Rooms (cont.)</b>				
3. Is the computer room free of flammable/combustible liquids?				
4. Is the raised floor free of unsealed cable holes?				
5. Is the access to fire suppression and alarm systems unobstructed?				
6. Are floor tile pullers available and mounted?				
7. Are doors to the peripheral rooms closed?				
8. Is paper stored in computer room limited to a one day supply?				
9. Is the room free of repair shop operations?				
10. Is the room free of soldering irons?				
11. Is the room free of coffee makers, microwaves, electric floor/space heaters, and other small appliances, etc.?				
<b>P. Recordkeeping</b>				
1. Findings identified on previous inspections have been corrected and documented.				
2. Personnel have completed appropriate online and in person safety training modules.				
3. Hazard and emergency contact sign is in place and up to date.				
4. Chemical inventory is up to date in EHS Assistant.				
<b>Q. General Safety</b>				
1. Fume hoods are working, in use when needed, and not overly cluttered. They are not to be used as a storage cabinet. They are up to date on annual certification, and data is recorded properly.				

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<b>Q. General Safety (cont.)</b>				
2. Safety showers and eyewashes are available and accessible per our university policy. Equipment is tested and recorded by lab personnel at the appropriate intervals: Safety Showers-Quarterly, and Eyewashes monthly.				
3. Fire extinguishers are readily available and areas surrounding them is clear and accessible.				
4. Appropriate first aid and chemical spill kits are readily available.				
5. All objects are stored at least 18 inches away from the ceiling (beware of boxes stacked on cabinets).				
6. Lab floors, aisles, and adjacent hallways are unobstructed				
7. Lab floors are dry and free of slip hazards.				
8. Extension cords are only used temporarily, and power strips are not daisy-chained together.				
9. No exposed wiring or damaged electrical cords are present.				
10. Appropriate personal protective equipment (PPE) is available and being used by lab personnel. This includes goggles, lab coats, gloves, face shields, etc.				
11. Lab personnel are appropriately clothed. No open toed shoes, shorts, or short skirts are allowed. Feet and legs must be covered.				
12. Food and drinks are stored and consumed outside of the lab space. No food or drink is allowed inside of the lab				

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<b>R. Hazardous Materials &amp; Wastes</b>				
1. All containers (chemicals, water, samples, waste, etc.) are properly labeled with contents. No containers (beaker, flask, vial, test tube, etc.) shall be unlabeled.				
2. Workspaces (benchtops, common areas, storage cabinets) are organized and clean.				
3. Hazardous waste containers are labeled with contents and percentages on completed waste stickers.				
4. Chemical and hazardous waste containers are clean, structurally sound, and closed when not in use.				
5. Chemical and hazardous waste containers are properly separated according to hazard class (flammables away from oxidizers, acids away from bases and flammables, nitric acid stored away from other acids, etc.).				
6. Secondary containers are clean and free from spilled material.				
7. Flammable liquids (including flammable waste) are stored in flammable storage cabinets (Note: Up to 20 gallons may be stored outside of cabinets).				
8. No ignition sources are located near flammable materials (Bunsen burner, hot plate, vacuum pump, etc.).				

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<b>R. Hazardous Materials &amp; Wastes (cont.)</b>				
9. Sharps are placed in a designated sharps containers(biohazardous or non-biohazardous), and the containers are no more than three-quarters full.				
10. Biohazardous waste is located in red bags in hard-sided containers which are labeled with Biohazard stickers on the top and lateral sides (must be labeled on all 4 sides and top).				
11. Compressed gas cylinders are positioned so the content label is visible, and stored in a dry, well-ventilated location that is protected from heat sources.				
12. Cylinders are secured to a rigid structure with metal chains, and a maximum of 2 cylinders are used per pair of chains.				
13. Cylinder valves are closed and valve caps in place when cylinders not in use.				