

## SAFETY ACTIVITY

### Robotics Lab Student Safety Safety Inspection Sheet

NAME

DATE

CLASS PERIOD

Break group into teams and have them complete this safety inspections sheet for the lab. Circle the correct response. S – satisfactory U - unsatisfactory NA - not applicable.

On the back of the sheet identify any unsatisfactory conditions and suggest ways to improve the facility.

#### General Facility Safety

- |            |   |
|------------|---|
| 1. S U NA  | 1. One instructor has the overall responsibility for each major shop facility.  |
| 2. S U NA  | 2. Each major shop facility can be locked separately.   |
| 3. S U NA  | 3. Provisions have been made for keeping inappropriate garments and other materials out of lab areas.                       |
| 4. S U NA  | 4. Good housekeeping standards are observed.  |
| 5. S U NA  | 5. Student educational cleanup program is backed up daily with complete custodial services.                                 |
| 6. S U NA  | 6. Waste is collected daily and disposed of by the custodian.   |
| 7. S U NA  | 7. Floors are maintained in a condition conducive to safe practices with nonskid surfaces provided around machines.         |
| 8. S U NA  | 8. Designated safety zone areas are provided around all dangerous work areas.   |
| 9. S U NA  | 9. Aisles are clear of protruding materials.  |
| 10. S U NA | 10. Room furniture and equipment are arranged for optimum safety.   |
| 11. S U NA | 11. Non-glare lighting is provided for all work areas according to state regulations.                                       |
| 12. S U NA | 12. Stairways within existing laboratories have safe tread and rise with unobstructed access and with approved railings.    |
| 13. S U NA | 13. Railings and treads are color coded.  |
| 14. S U NA | 14. Two widely separated marked exits are available from each major laboratory.   |
| 15. S U NA | 15. Facilities are light, pleasant, clean and conducive to good instruction.  |
| 16. S U NA | 16. Machine operation regulations and safety procedures are posted conspicuously near areas of operation.                   |
| 17. S U NA | 17. Parts of machines and equipment needing special attention or caution are painted brightly with correct color..          |
| 18. S U NA | 18. Machines and work stations are located in relationship to the amount of supervision required                            |
| 19. S U NA | 19. Machine location has been determined by needed operator space requirements and process compatibility.                   |
| 20. S U NA | 20. Health hazards were considered in plant design to minimize injuries from excess heat, noise, fire, and fume conditions. |

## Robotics Lab Student Safety Inspection Sheet

NAME	DATE	CLASS PERIOD
<b>Storage Facility Safety</b>		
21. S U NA	21. Storage racks and shelf are designed and constructed to meet storage requirements.	
22. S U NA	22. Materials are stored in a safe manner.	
23. S U NA	23. Students and instructors are protected from protruding materials and sharp edges.	
24. S U NA	24. All flammables and combustible liquids, toxics, and caustics are stored securely in proper containers, identified by name and degree of hazard.	
25. S U NA	25. Fire approved storage cabinets are provided for all flammable and combustible liquids.	
<b>Electrical Safety</b>		
26. S U NA	26. All power and wiring is installed and maintained in accordance with national electrical code and -	
a. S U NA	a. Switches are enclosed.	
b. S U NA	b. Circuits are identified.	
c. S U NA	c. All power cords are of proper length and determined by gauge and load.	
d. S U NA	d. Power supplies are provided with overload protection.	
e. S U NA	e. Lockouts are provided.	
27. S U NA	27. All outlets and machines are grounded.	
28. S U NA	28. All extension cords are provided with three pronged plugs, except those which are double insulated.	
29. S U NA	29. Readily accessible individual "off" and "on" controls are installed on all machines as well as in the room power control panel.	
30. S U NA	30. A master control "Panic Stop System" is available and conveniently located in each laboratory to shut off power.	
31. S U NA	31. Laboratory power panels have clearly identified individual power switches for each machine.	
32. S U NA	32. All hand held portable power tools are equipped with "dead man" controls only.	
33. S U NA	33. Regulators, stands and pilot lights are provided for all electrical soldering irons.	
34. S U NA	34. All electrical apparatus in areas of concentrated vapors are vapor proof.	

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### Equipment Safety

35. S U NA

35. Safety instructions for each machine are posted.

36. S U NA

36. Machines are in safe operating condition at all times.

37. S U NA

37. "Out of order" signs are secured to machines not in working condition and the power panel switch is in the "off" position.

38. S U NA

38. All machines are securely fastened in place.

39. S U NA

39. Machines and equipment are provided with guards meeting industrial standards and guards are in proper position for safe machine operation.

40. S U NA

40. Equipment control switches are readily accessible to the operator while he/she is in a normal operating position.

41. S U NA

41. A positive "off" position switch is located on each machine.

42. S U NA

42. Proper tools and materials are available for machine cleaning.

43. S U NA

43. Hand tool equipment is stored with sharp cutting edges protected.

44. S U NA

44. Hand tools are properly maintained and sharp.

45. S U NA

45. Bench tops are appropriate for the planned activities.