# Job Safety Analysis (JSA) Form

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| JOB TITLE:  |
| JSA #:  | **DATE:**  |
| NEW: Yes [ ]  No [ ]  |
| REVISED:  |
| TITLE OF PERSON WHO DOES JOB:  |
| SUPERVISOR:  |
| ANALYSIS PERFORMED BY:  |
| CAMPUS LOCATION:  |
| SCHOOL/DEPARTMENT:  |
| REVIEWED BY:  |

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| Job Steps:  | Potential Hazards: (*Refer to Table 1 for guidance*)  | Preventative Measures/Controls:  |
| Clean work area and prepare to setup job |  |  |
| Setup workstation: Chop Saw/drill/file station, glue station |  |  |
| Measure locations where plumbing pipe installation is required in new lab spaces (1&2) |  |  |
| Layout pipe across work bench for cutting |  |  |
| Cut pipe with chop saw to length, drill holes in pipe |  |  |
| Assemble and glue/silicone pipe |  |  |
| Clean work area post use |  |  |

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| List of Emergency Procedures and Contact Information: |
| Emergency Contact Information |
| Supervisor:  |  |
| Nearest First Aid Provider/First Aid Kit:  |  |
| If Someone requires First Air or Ambulance: |  |
| Fleming College Emergency Line:  |  |
| Other:­­­ |   |
| Other:  |   |

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| List of PPE Required  | Other Equipment  | Training/Competencies  |
| Eyewear: Footwear: Gloves: Respirator: Face shield: Hearing Protection: Other:  |  |  |

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| JSA Preparation  |
| Prepared By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  | **Approved By: \_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **JHSC Member Representative: \_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  |
| Prior to the work, this JSA has been reviewed by:  |
| Supervisor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Supervisor Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Worker(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Worker(s) Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **For Contractors** **Fleming Contact:** **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Fleming Contact Signature:** **Contractor Rep:****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Contractor Rep Signature:** **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  |

**Distribution List:**

**Hazard Control Measure**

The order of effective control of hazards are:

1. Elimination
2. Substitution
3. Engineering controls
4. Administrative controls
5. Personal protective equipment

Engineering controls include the following:

* Elimination of the hazard through design of the facility, equipment or process to remove the hazard or substitute the process, equipment, material to a less hazardous method;
* Enclose the hazard using enclosed cabs, enclosure of noisy equipment, etc.;
* Isolation of the hazard with interlocks, machine guards, blast shields, welding curtains, etc.;
* Removal or redirection of the hazard (i.e. local and exhaust ventilation).

Administrative controls include the following:

* Written safe operating procedures, work permits, and safe work practices;
* Exposure time limitations (applicable to control temperature extremes and ergonomic hazards);
* Monitoring the use of highly hazardous materials; - Alarms, signs, and warnings;
* Scheduling and training.

Personal Protective Equipment such as respirators, hearing protection, protective clothing, safety glasses, and hard hats are acceptable as a control method in the following circumstances:

* When engineering controls are not feasible or do not totally eliminate the hazard;
* While engineering controls are brought developed;
* When safe work practices do not provide sufficient additional protection;
* During emergencies when engineering controls may not be feasible.

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| Table 1: Potential Hazards to Consider (for each step) *This table does not list all potential hazards but can be used as a guide in preparing the JSA.*  |
| Chemical Hazards  | **Energy/Fire**  | **Physical Hazards**  |
| * Chemical exposure (inhalation, absorption injection by contact with needles/sharps)

Is there a risk of contact with chemicals? Is there potential for generation of airborne chemical dusts (e.g. sweeping), fumes (e.g. welding), mists or vapours (e.g. use of fast evaporating solvents from grease removal)? * Compressed Gas
* Asbestos and other insulation material
* Designated Substances

 * Asbestos (e.g. pipe insulation, floor tiles)
* Quartz/silica (e.g. fine sand dust from cutting, drilling or grinding concrete, ceramic or stone)
* Lead (e.g. lead paint)
* Mercury (e.g. thermometers)
* Arsenic (e.g. certain wood preservatives)
* Isocyanates (e.g. spray-on polyurethane products used to produce pesticides)
* Benzene (solvent found in petroleum products)
* Vinyl Chloride (precursor to polymers)
* Acrylonitrile (used in industrial chemical processes)
* Ethylene Oxide (used in industrial chemical processes)
* Cook Oven Emissions (not on campus)
 | * Electrical hazards (shock/short circuit, fire, loss of power, high voltage)
* Fire/explosion hazards: ignition sources, flammable atmosphere
* Uncontrolled energy (lock-out/tag-out)
* Utility lines (e.g. natural gas)
 | * Radiation hazards
* Noise
* Ergonomic hazards (e.g. awkward posture, repetition, materials handling (lifting, holding, carrying, lowering, pushing, pulling))

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| **Environment**  | **Physical Hazards**  |
| * Cold stress/working in cold environment
* Heat stress/working in hot environment
* Confined space/restricted space
* Fall from/working at heights
* Slip/trip hazards
* Poor house keeping
* Pedestrian traffic
* Poor lighting/visibility
* Poor ventilation
* Sloped ground/uneven surfaces
* Vehicle traffic
* Excavation
* Weather (snow/rain/wind/ice)
 | * Radiation hazards
* Noise
* Ergonomic hazards (e.g. awkward posture, repetition, materials handling (lifting, holding, carrying, lowering, pushing, pulling))
* Vibration
* Thermal burns
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| **Equipment/Tools**  |
| * Falling objects
* High pressure systems
* Pinch/wrap/shear points
* Sharp objects
* Struck by/struck against objects
* Mechanical failure
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| **Biological Hazards**  | **Other**  |
| * Biohazardous materials
* Insects, birds, and animals (including manure)
* Mould
 | * Security risks
* Work activities by others
* Working alone
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