Appendix C – Machine Shop Hazard Matrix

Hazard Level	Low	Medium	High
General Design	Hand tools (non-powered) Small powered tools Small bench top tools	Larger portable power tools Larger powerful bench top tools Light industrial tools	Large industrial tools and equipment
Common Examples	Belt sander (handheld) Dremel tool Drill (corded/cordless) Hand tools (non-powered) Heat guns Jig saw Laser cutter/engraver Oven Paint booth Palm sander Scroll saw Soldering iron	Angle grinder Belt/disc sander (pedestal) Bench grinder Circular saw Chop/miter saw Drill press (benchtop) Enclosed CNC machine Horizontal band saw Larger than 3/8" drills Manual brake Manual shear Milling machine (benchtop) Nail guns Planer Reciprocating saw Routers Water jet	Band saw (free standing) Cranes and hoists Drill press (free standing) Hydraulic/mechanical press Lathe Milling machine (standing) Open CNC mill Power press brake Power shear Radial arm saw Surface grinder Table saw Vertical band saw Welding (Hot Work)
Shop Monitoring	Equipment use is permitted in designated area of the shop or other pre-approved location. Employees - Direct monitoring is not required for low hazard level tools. Students – Direct safety monitoring is not required, but students shall not work alone with low hazard level tools; student must have prior approval to use equipment.	Equipment use is permitted only in designated areas. Employees – direct monitoring is not required, but worker should not work alone with medium hazard level tools. Students – Safety monitor MUST be present during operation to ensure safe use of equipment.	Equipment use is permitted only in designated areas. Employees – direct monitoring is not required, but worker MUST not work alone; and the monitor/supervisor must be available in the event of an emergency. Students – Safety monitor MUST be present during operation to ensure safe use of equipment
Required Training	1. General shop information 2. General shop safety training	1. General shop information 2. General shop safety training 3. Equipment specific safety training	