

Job Hazard Assessment

Name: _____
Title: _____

All persons must obtain required safety training before undertaking related job duties and must keep training current as long as those duties continue.

Supervisors are responsible for ensuring that subordinates receive required safety training before undertaking related job duties and for ensuring that training is kept current at all times. Review the course descriptions below and check all that are applicable for the above named employee to conduct his/her duties.

New Personnel:

The supervisor must sign this form and return to LLE HR prior to the new hire starting work.

Current Personnel:

Review safety training course descriptions below and check all that are applicable to current or planned job duties and submit to the LLE Safety Office at safety_office@lle.rochester.edu when a person's job changes or during the annual JHA renewal process.

Employee's Signature _____ Date: _____

Supervisor's Signature _____ Date: _____

Everyone with badge access to LLE must take either G_001A General Laboratory Safety for non-lab workers or G_001B General Laboratory Safety for Lab Workers or G_001E General Laboratory Safety for Supervisors (must meet prerequisite requirements)

ID	Title (Periodicity)	Description	Required Attendees	Comments
<input type="checkbox"/> G_001A	General Laboratory Safety for non-lab workers (12 months)	Overview of LLE's policies; alarm response, building access, and security practices	All persons having key-card access to LLE; Remote or office work only, no lab-work	NONE
<input type="checkbox"/> G_001B	General Laboratory Safety for lab workers (12 months)	Overview of LLE's policies; alarm response, building access, and security practices; hazard management, stop work, buddy system and safe work practices	All persons working in any LLE Laboratories	NONE
<input type="checkbox"/> G_001C	Guest Worker Safety - Lab workers (12 months)	Introduces guest workers to LLE safety policies. Covers General safety & PPE, plus overview of Chemical, Electrical, Laser, and Mechanical Safety. This training satisfies most external worker needs.	Guest workers who will be working in any LLE laboratories.	Additional training is required for use of Beryllium, Compressed Gas, or Radioactive sources.
<input type="checkbox"/> G_001D	Guest Worker Safety - Non-lab workers (12 months)	Overview of LLE's policies; alarm response, building access, and security practices;	Guest workers who will be working unescorted at LLE in non-lab spaces only; not performing any hazardous work	NONE
<input type="checkbox"/> G_001E	General Lab Safety for Supervisors (24 months)	Overview of LLE's policies; alarm response, building access, and security practices; hazard management, stop work, buddy system and safe work practices	For those who are not directly exposed to LLE's lab hazards, but supervise those who are, and those who enter labs to perform work not directly related to the hazards in the area (ex. IT)	Prerequisites: G_001B, C_001, E_001, L_001 and M_001

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<input type="checkbox"/> G_002	Respiratory protection (12 months)	When respirators are required at LLE; Types of respirator used at LLE; Use, care and storage of respirator; Medical Clearance and Fit Test required through UHS	Persons who enter the OMEGA or EP target chamber or remove the lower pylon cover on OMEGA; Persons working in areas where beryllium dust contamination is likely. Note: C_002 prereq. Medical clearance and annual respirator fit-testing at UHS required.	Prerequisites: G_001B, C_002; Medical surveillance and fit check administered through UHS; Program details available on UR EHS website
<input type="checkbox"/> G_003	Fire Safety Training (12 months)	Covers components of Fire Safety; prevention, alarm systems and suppression	Required annually to maintain Hot Work Training (G_006), otherwise, voluntary	Prerequisite: G_001B; Fire Safety and Fire Extinguisher Trainings Available through
<input type="checkbox"/> G_003A	Fire Extinguisher Use Training (12 months)	Types of extinguishers, proper use, "PASS" (Point, Aim, Squeeze, Sweep). Demonstration with fire simulator.	Required annually to maintain Hot Work Training (G_006), otherwise, voluntary	Prerequisite for G_003 and G_006 Hot Work Trainees only: ; Available in-person, annually; coordinated by Fire Safety Officer; supplemental F.E. training available through MyPath
<input type="checkbox"/> G_004	First-Aid/CPR/AED (Voluntary participation) (24 months)	American Heart Assn. Basic first-aid techniques, preparation, response. Cardiopulmonary resuscitation (CPR). Indications for and use of Automated External Defibrillator (AED).	Optional	NONE
<input type="checkbox"/> G_006	Hot Work Training (12 months)	Overview of the University's hot work policy (hot work requirements, safety and welding hazards) This training is mandatory before obtaining a hot work permit for University work.	Personnel performing or supervising hot work at LLE.	Prerequisite: G_003; Administered through UR MyPath
<input type="checkbox"/> G_007	RUN. HIDE. FIGHT. Surviving an Active Shooter Event (12 months)	Prepares individuals on how to respond to, and recover from, the effects of an active shooter event	All persons having key-card access to LLE	NONE
<input type="checkbox"/> G_008	Safety footwear policy (One-Time Only)	States LLE policy for safety footwear and provides procurement instructions	LLE personnel who lift and/or move items weighing more than 50 pounds	Prerequisite G_001B
<input type="checkbox"/> G_009	Silica Safety training (12 months)	Describes health hazards, silica particulate generation, new OSHA standards, permissible exposure levels, exposure control planning	Personnel responsible for activities that can generate airborne silica particulate, such as cutting, drilling, breaking concrete & masonry	Prerequisite G_001B
<input type="checkbox"/> G_010	Facility Worker Safety (12 months)	Describes common hazards at LLE and policies for Stop Work, LLE Access, PPE, Emergency Response, Fire Safety	Environmental Service Workers responsible for building cleaning	Replaces G_001A for non-lab workers
<input type="checkbox"/> G_011	LLE Lockout/Tagout Safety Training (12 months)	Overview training of Hazardous Energy Control and Lockout/Tagout at LLE; Includes practical component	Authorized workers, i.e., those who may be responsible for maintaining equipment connected to hazardous energy sources	Prerequisites: G_001B, E_001
<input type="checkbox"/> G_012	EHS Lead Awareness Training (12 months)	Familiarize workers with the hazards of, and potential sources of, lead in the workplace	LLE staff involved with construction & demolition; or those who perform lead-based soldering	Prerequisite: G_001B; G_012 Administered through MyPath
<input type="checkbox"/> G_013	NOVEC Fire Suppression System (FSS) Safety Training (12 months)	Describes principles of operation and method of use	Persons working in, or supervising workers in, spaces protected by NOVEC FSS, including LDL Annex, Laser Computing Facility (LCF)	Prerequisite: G_001B

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<input type="checkbox"/> C_001	Chemical Safety (12 months)	Review of UR's Chemical Hygiene Program; Safe work practices; Hazard communications, MSDS; personal protective equipment, Hazardous Waste Management.	Persons who work in a laboratory with chemicals, hazardous materials and solvents, or persons who handle, work with, store, or dispense chemicals, hazardous materials and/or solvents.	Prerequisite G_001B
<input type="checkbox"/> C_002	Beryllium Safety (12 months)	Beryllium (Be) health hazards; LLE Instruction 6706; Policy for Be use and handling.	Persons who store, handle, process or use beryllium; those who handle potentially contaminated equipment, or enter the target chamber; supervisors of persons conducting the above activities.	Prerequisite: C_001; or G_001C for Guest Workers
<input type="checkbox"/> C_004	High Pressure Liquid Nitrogen Fill Station (One-Time Only)	Operation of high pressure liquid nitrogen filling station and related policies. Keys are kept with Ken Marshall, Tritium Lab, John Sawyer and West Reception	Persons who need authorization to operate high pressure liquid nitrogen fill station.	Prerequisites: C_001, M_001, M_002
<input type="checkbox"/> C_006	Hydrofluoric Acid and Ammonium Bifluoride Safety Training (12 months)	Describes the hazards, safe work practices and emergency response procedures for hydrofluoric acid and ammonium bifluoride use	All persons using Hydrofluoric Acid or Ammonium Bifluoride	Prerequisite: C_001
<input type="checkbox"/> C_007	Handling Explosives in Quantities Less than or Equal to 10 Milligrams (12 months)	LLNL course ID HS2070-W. Qualifies personnel to handle high explosives in quantities ≤ 10 mg; Hazards, packaging, labeling, transportation rules.	LLE personnel who handle high explosives to support LLNL campaigns	Administered by LLNL online training; Prerequisite: C_001
<input type="checkbox"/> E_001	Electrical Safety (12 months)	Electrical shock, fire and explosion hazard awareness; Electrical safety policies; Worker authorization & supervisor responsibilities; Safe work practices; Electrical system design; Biological	Persons who design, build, or trouble shoot electrical or electronic equipment, or who operate diagnostics or power supplies	Prerequisite G_001B
<input type="checkbox"/> E_002	NFPA 70E Arc-flash (36 months)	Electrical safety standards; Electrical Hazards, Limiting shock & flash hazards; Electrical incident & hazard prevention; Attending to electrical incident victims; Arc-flash calculations.	LLE Electricians, Power Conditioning Operators.	Required every three years; Prerequisite: E_001
<input type="checkbox"/> F_205	OMEGA 60 Laser Drivers Overview (24 months)	Overview of the function and architecture of OMEGA 60 Laser Drivers	All qualified OMEGA operators	Omega Manuals Volume 1-2, 1-6 Laser Drivers Overview
<input type="checkbox"/> F_209	Experimental Operations Knowledge Overview (24 months)	Overview of the function and purpose of the Experimental Operations Areas of the Laser Facilities including Target Bays, LaCave, and Diagnostic Bays	All qualified operators on the OMEGA 60 & EP systems	Omega Manuals Volume 1-7, 1-9, 7-7
<input type="checkbox"/> F_214	OMEGA EP Laser Sources Overview (24 months)	Overview of the function and architecture of the EP Laser Sources	All qualified EP operators	EP Manuals Volume 7-2, 7-6
<input type="checkbox"/> L_001	Laser Safety (12 months)	Fundamentals of lasers, laser radiation, hazards, and safe operating practices.	All persons who operate lasers or work in an environment where class 3B or 4 lasers are used, including all OMEGA and OMEGA EP qualified watchstanders.	Prerequisite G_001B
<input type="checkbox"/> L_003	Laser Instrument Specialist (36 months)	Process for completing safety evaluation during design and integration of lasers.	Persons responsible for overseeing integration, modification or relocation of class 3B or 4 lasers	Prerequisite: L_001
<input type="checkbox"/> M_001	General Mechanical Safety (12 months)	Overview of LLE Mechanical design policies, mechanical hazards, energy sources.	Persons who use, manufacture, assemble, rig, install, or maintain mechanical equipment, or those who work with compressed-gas systems.	Prerequisite G_001B
<input type="checkbox"/> M_002	Compressed gas safety (12 months)	Compressed gas systems & related hazards. Care, use, storage and transport of compressed gas cylinders; Regulators, pressure relief devices; Flammable gasses; Cryogenic gas & liquid handling.	Persons who use, assemble, transport or maintain compressed-gas systems and/or cryogenic liquids and gasses.	Prerequisite: M_001; or G_001C for Guest Workers;



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<input type="checkbox"/> M_003	Overhead Hoists (12 months)	Types of hoists; Load ratings; Inspection; Hoist hazards and mitigation; Preparing and executing a lift; Safe work practices.	All personnel who use hoists and/or cranes.	Prerequisite: M_001
<input type="checkbox"/> M_004	Basic Rigging (120-500 lbs) (12 months)	Rigger's responsibilities; Understand the payload; Rigging hardware & inspection; Rig, attach, move and secure the payload; Rigging calculations.	Personnel attaching 120-500 lb load to any hoist or crane. No formal training is required for loads <120 lbs.	Prerequisite: M_003
<input type="checkbox"/> M_005	Advanced Rigging (One-Time Only)	Operation of hoists and cranes with > 500 payload. Demonstrate proficiency to Mechanical Engineering/Subject Matter Expert (ME/SME). ME/SME reports completion to Safety Office for record keeping	Personnel attaching >500 lb load to any hoist or crane.	Initial training administered by external training company. Practical component requires in-house demonstration of proficiency. Prerequisite: M_001
<input type="checkbox"/> M_006	Fall protection (12 months)	When fall protection is required, types of fall protection available. Use, inspection and care of equipment. Specific uses at LLE.	Persons working on elevated platforms or structures >6' above the ground where integral fall protection (e.g. railings) is not available.	Prerequisite: M_001
<input type="checkbox"/> M_007	Powered industrial trucks (36 months)	OSHA rules regarding use. Equipment capabilities, features & pre-operation inspection; Site-specific hazards; Safe operating practices. Requires performance evaluation with equipment by a competent person.	Persons who operate or maintain any mobile power-propelled truck used to carry, push, pull, lift, stack or tier materials.	Prerequisite: M_001; Retraining required prior to three year period if unsafe operation observed or accident occurs
<input type="checkbox"/> M_008	Aerial Lifts (One-Time Only)	Definition: Any device, telescoping, articulating or both, which is used to position personnel. Equipment capabilities, features & pre-operation inspection; Site-specific hazards; Safe operating practices.	Persons who operate or maintain any aerial lift. Qualified operators must operate an aerial lift at least once annually to maintain proficiency. Failure to maintain proficiency will cause qualification to be revoked.	Prerequisite: M_001
<input type="checkbox"/> M_008A	Aerial Lifts (12 months)	Demonstrate proficiency to competent person. Competent person reports completion to Safety Office for record keeping	Qualified operators of lifts must demonstrate proficiency of lift operation at least once annually to maintain qualification. Anyone observed operating lift in an unsafe manner or involved in an accident must re-train with M_008	Prerequisite M_008
<input type="checkbox"/> M_009	Overhead Crane Operator (24 months)	Overhead crane operations; Types of overhead cranes; Load ratings; Inspection; Overhead crane hazards and mitigation; Preparing and executing a lift; Safe work practices.	Personnel operating 10-ton overhead cranes in OMEGA or OMEGA EP.	Prerequisite: M_004
<input type="checkbox"/> M_009A	Overhead Crane Operator, Practical factors (36 months)	Required for all crane operators completing M_009 for first time; Satisfactory completion of Overhead Crane Evaluation Form, submitted to Safety Office	Personnel operating 10-ton overhead cranes in OMEGA or OMEGA EP.	Prerequisite: M_009 & Supervised training
<input type="checkbox"/> M_011	Auxiliary Machine Shop Guidelines (60 months)	Policies for working in the machine shop.	All personnel using the auxiliary machine shop	Prerequisite: M_001
<input type="checkbox"/> R_001	Radiation Safety Training for all New Radiation Workers (One-Time Only)	Initial training covers the fundamentals of radiation and safe work practices and procedures for working with radiation at LLE	All new hires working with, or around, tritium contaminated materials and/or activated materials.	Prerequisite(s): G_001B, or G_001C for Guest Workers; Five 1-hr sessions

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<input type="checkbox"/> R_002	Refresher Course for all radiation workers at LLE (12 months)	Re-certification covers the fundamentals of radiation, safe work practices and LLE procedures and limits	Re-certification for general radiation workers and LLE radiation workers (includes all who work around sources, but do not directly handle them	Prerequisite R_001
<input type="checkbox"/> R_003	Refresher expanding on RW2 level, to include: Dosimetric Calculations for Qual Card Rad Worker (12 months)	Estimating exposure associated with point and diffuse sources.	Re-certification for LLE Radiation Workers working directly with (aka physically handle) radioactive sources and systems, or individuals supervising those who do (includes Shot Directors, XOPS, and Tritium Operators).	Prerequisites R_001, R_002