The University of Texas at Dallas
Laboratory Safety Program
Safety Training Matrix

The **UTD Laboratory Safety Training Matrix** describes the minimum safety training requirements for all personnel who work in UTD laboratories. Safety training requirements are determined by the tasks, materials and equipment associated with each laboratory. All required training courses are assigned lab personnel through the Research Laboratory Management System based on lab assignment.

Program Categories	Laboratory Responsibilities and Tasks	A	B	C	D	E	F	G	H	I	J	K	L
General Laboratory Safety	Are you a Principal Investigator or Lab Supervisor?	◆	◆										
	Will you use or be exposed to hazardous chemicals?		◆	◆									
Chemical Safety	Will you use reactives, pyrophorics or toxins?		◆	◆									
	Will work with or dispose of hazardous wastes?		◆	◆	◆								
	Will you work with controlled substances?		◆			◆							
Biological Safety	Will you work with biohazardous materials or rDNA?		◆				◆						
	Will you work with blood or any other infectious agents?		◆				◆	◆					
Radiation Safety	Will you be exposed to radioactive materials?		◆						◆				
Laser Safety	Will you use x-ray equipment?		◆							◆			
	Will you use class 3b or 4 lasers?		◆								◆		
Animal Use and Care	Will you have direct contact with live vertebrate animals?		◆									◆	
	Will you perform procedures requiring aseptic technique?		◆									◆	◆

Key	Training Course	Frequency
A	**Safety Orientation for Principal Investigators/Lab Supervisors:** Roles and responsibilities of PI's and Lab Supervisors. Review of the laboratory standard and requirements for operating a laboratory at UTD.	Annual
B	**Laboratory Safety Orientation:** Introduction to safe practices in the laboratory / research environment. Topics include: Basic information about safety, hazards (identification), controls, hazardous materials, electrical safety, earthquake safety, fire extinguishers, emergency procedures, and ergonomics.	Annual
C	**Chemical Hygiene:** Overview of the safe use of hazardous chemicals (flammables/combustibles, corrosives, reactives, and toxins). Topics include: Standards, Hazards and Controls, and Exposures.	Annual
D	**Hazardous Waste Management:** Introduction to proper determination and management of hazardous waste. Topics include labeling, storing, treating, and disposal of hazardous waste. Discussion includes physically hazardous, chemical, biohazardous, radioactive, and mixed waste	Annual
E	**Controlled Substances:** Introduction to secure use of controlled substances. Topics include: Introduction, Storage site controls and security, Orders / Delivery / Receipt, Use Logs and Biennial Inventory, Transfers / Imports / Exports, Disposal, Diversion and Loss Reporting, and Illicit Activities and Repercussions	Annual
F	**Biosafety:** Introduction to proper handling of microorganisms in teaching and research, recombinant DNA, and work conducted in a microbiological laboratory	Every three years
G	**Bloodborne Pathogens:** The Bloodborne Pathogens Standard, Epidemiology & Symptoms, Modes of Transmission, Exposure Control Plan, Tasks & Activities, Methods of Compliance, PPE Selection, PPE Decontamination & Disposal, Hepatitis B Vaccination, Emergency Procedures, Exposures, Post Exposure Evaluation & Follow-up, Signs and Labels, Waste Management	Annual
H	**Radiological Safety:** Initial hands-on and annual refresher for safe use of radioactive materials. Topics include ionizing radiation, ALARA, surveys, security and inventory control, waste management, records, rules, and lessons learned.	Once, Annual Refresher
I	**X-Ray Safety:** Overview of x-ray producing equipment including characteristics of X-radiation, units of dose and quantity of radioactivity, significance or radiation dose, levels of radiation from sources of radiation and methods of controlling radiation dose.	Annual
J	**Laser Safety:** Overview of the safe use Class 3B and Class 4 lasers. Topics include: Introduction, Hazards (Biological and Non-Beam), Engineering Controls, Administrative Controls, Work Practices, and Personal Protective Equipment (PPE)	Every two years
K	**Research Animal Use and Care:** Online and hands-on trainings are designed to provide an understanding of animal research regulations and proper care and handling of animals in a research setting. See: http://www.utdallas.edu/research/compliance/iacuc/train.html	Once
L	**Research Animal Methods:** Optional modules include techniques for aseptic surgery of rodents and anesthesia and analgesia of rodents. See: http://www.utdallas.edu/research/compliance/iacuc/train.html	Once

Training Support: Please contact us with questions regarding safety training requirements or offerings at **labsafetysupport@utdallas.edu**.