

# UNIVERSITY OF KANSAS - LAWRENCE CAMPUS

## LABORATORY SAFETY MANUAL

### PART V - LASER SAFETY PLAN

#### 4) Laser Safety-Specific Information & Training

Federal and State regulations, as well as "prudent practice," require the University to provide all faculty, staff, students, and visitors with information concerning the laser hazards present in their University environments, and sufficient training to enable them to perform their tasks safely and protect themselves from potential laser exposure.

##### 4.1) Review of Universal (Part I) Information & Training Requirements

Note: This section provides references back to the universal laboratory safety information and training requirements provided in Part I-Chapter 4, as applicable for achieving Laser Safety. References to Part I are given.

All individuals, authorized users, and authorized laboratory supervisors using non-exempt lasers shall:

##### 4.1.1) Responsibilities

4.1.1.1) Fulfill their responsibilities for universal laboratory safety information and training as identified in Part I-Chapter 4: Section 4.1 as applicable.

Note: For example, if the laser system and its use involves hazardous chemicals then Part I-4.2.1 is applicable in addition to Part I-4.2.4.

4.1.2) Required Information - Be familiar with and make the required information specified in Part I-Chapter 4: Section 4.2 available as applicable.

4.1.3) Required Training - Comply with the required training specified in Part I-Chapter 4 (specifically Sections 4.3 through 4.5) as applicable.

4.1.4) Frequency of Information & Training - Comply with the information and training frequency requirements specified in Part I-Chapter 4: Section 4.6.

4.1.5) Documentation of Information & Training - Comply with the information and training documentation requirements specified in Part I-Chapter 4: Section 4.7.

4.1.6) Information & Training Resources – see Part I-Chapter 4: Section 4.8 for EHS information and training resources.

## **4.2) Laser Safety-Specific Information**

Authorized Laboratory Supervisors shall:

### 4.2.1) General Laser Safety Information

4.2.1.1) Inform all users of non-exempt lasers in their labs with the information required under Part I-Chapter 4: Section 4.2.5.

### 4.2.2) Specific Laser Safety Information

4.2.2.1) Show the LHR form for their lab to all authorized laser users and authorized occupants and ask them to be familiar with it. See Part V: Section 3.2 for details.

4.2.2.2) Review the inventory of non-exempt lasers present in the lab with all users and occupants. See Part V: Section 3.3.1 for details.

4.2.2.3) Inform all users and occupants of the location of a copy of ANSI 136.1. (See Part V: Section 3.3.2.) A copy will be readily available in the EHS Laser Safety Office.

4.2.2.4) Inform all users and occupants about warning signs, indicators and/or annunciators and the appropriate response to them.

## **4.3) Laser Safety-Specific Training**

Authorized Laboratory Supervisors shall:

### 4.3.1) General Laser Safety Training

4.3.1.1) Provide all users of non-exempt lasers in their lab with access to initial lab safety training specified in Part I-Chapter 4: Section 4.5.6. Training for users shall cover the content of Part V and its references to other sections of the Laboratory Safety Manual.

4.3.1.2) Provide all users of non-exempt lasers in their lab with access to information on all the “Standard Operating Procedures and Practices for Laboratories Using Non-exempt Lasers” found in Part V-Chapter 2.

Note: Any user who can demonstrate prior proficiency for the required laser training may be certified by the EHS Laser Safety Officer.

### 4.3.2) Specific Laser Safety Information

4.3.2.1) Train all prospective authorized laser users about the hazards that are specific to the type and class of laser to be used.

4.3.2.2) Train all users of non-exempt lasers in their lab on the Hazard Communication & Control Procedures found in Part V-Chapter 3.

4.3.2.3) Train all users of non-exempt lasers and authorized occupants in their lab in the correct use of any required personal protective equipment, such as special laser safety goggles, and the quality assurance checks that need to be performed to verify continued effectiveness.

4.3.2.4) Train all users of non-exempt lasers in their lab on all requirements imposed upon the lab by an applicable EHS Laser Safety Registration and Use Approval. (Refer to Part V: Chapter 3-Section 3.9.)

4.3.2.5) Train all users of non-exempt lasers in their lab concerning any medical surveillance requirements based upon Part V-Chapter 5.

4.3.2.6) Train all users of non-exempt lasers in their lab on any laboratory-specific Laser Safety procedures that have been implemented by the laboratory supervisor that are above and beyond those identified in Part V of this manual.

#### **4.4) Laser Safety - Information & Training Frequency**

Laser Safety Officer shall:

4.4.1) Provide the authorized laboratory supervisor of non-exempt lasers with updated information and training documents for laboratory users at yearly intervals, as specified in Part I-Chapter 4: Section 4.6.

#### **4.5) Laser Safety-Information & Training Documentation**

Authorized Laboratory Supervisor shall:

4.5.1) Document the training of all laser users in their lab accordance with the procedures specified in Part I-Chapter 4: Section 4.7.

#### **4.6) Information & Training Resources**

Authorized Lab Supervisors and users of Biohazard/Infectious Materials shall:

4.5.1) Contact EHS (864-4089) for assistance in providing the required information and training.

4.5.2) On-line safety training: KU-EHS currently offers 80+ safety courses/modules online via KU Blackboard/Canvas and MyTalent Learning. There are 34 courses that address Lab Safety issues/concerns. May be found here: <https://ehs.ku.edu/training>

a) Many Depts/Units have already set established required minimum training grids for personnel in their units. These are available through EHS online sites per each unit page.

b) Many PI's/Lab Supervisors have lab/group specific pages that establish additional required training. These are available through EHS online sites per each PI/Class page.

4.5.3) Classroom/small group training – KU-EHS can provide a variety of training via request.