Instructional Laboratory and Workshop Safety Policy

Approved: October 10, 2005
Reviewed and Modified: November 16, 2015
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PURPOSE</td>
<td>1</td>
</tr>
<tr>
<td>2. SCOPE</td>
<td>1</td>
</tr>
<tr>
<td>3. DEFINITIONS</td>
<td>1</td>
</tr>
<tr>
<td>4. RESPONSIBILITIES</td>
<td>2</td>
</tr>
<tr>
<td>5. PROCEDURE</td>
<td>3</td>
</tr>
<tr>
<td>A. Administration</td>
<td>3</td>
</tr>
<tr>
<td>B. Instruction</td>
<td>4</td>
</tr>
<tr>
<td>C. Supervision</td>
<td>4</td>
</tr>
<tr>
<td>6. UPDATE AND REVIEW</td>
<td>5</td>
</tr>
<tr>
<td>7. RECORDKEEPING REQUIREMENTS</td>
<td>5</td>
</tr>
<tr>
<td>8. APPROVAL</td>
<td>6</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>7-8</td>
</tr>
</tbody>
</table>

APPENDIX A: HAZARD IDENTIFICATION
FORM APPENDIX B: VERIFICATION
1. **PURPOSE**

In order to provide a safe and healthful laboratory and workshop experience for students, all Illinois Institute of Technology (“IIT” or “University”) departments offering laboratory and/or workshops course work must provide students with laboratory and/or workshop safety instruction. Such instruction should be offered prior to the students’ use of Instructional Laboratories or Workshops, defined below. Each department shall develop and maintain a written student laboratory safety program (“Program”), consistent with this Policy, to ensure that students receive safety instruction relating to the unique risks and safety issues relevant to the department’s Instructional Laboratories or Workshops. Each department’s Program should be developed in coordination with the University’s Director of Environmental Health and Safety (“DEHS”), who will review the Program and will submit them, when he or she deems a Program acceptable, to the Campus Safety Policy Committee for final review. Departments are encouraged to develop a Program consistent with their respective plans implemented pursuant to the IIT Chemical Hygiene Policy for Lab Safety Standards and the IIT Laboratory Safety Inspection Policy.

2. **SCOPE**

The Program should inform students of the nature of Hazards that they are likely to encounter in Instructional Laboratories or Workshops while pursuing their course work. It should describe how safe operating procedures will be defined in each lab facility and how the implementation of safe operating procedures will be enforced. By way of guidance, a Program should address Hazards that include, but are not limited to, the following:

A. handling cylinder gases;
B. flammable materials, fire hazards, sparks and burn injuries;
C. handling acids, bases and corrosive chemicals;
D. handling toxic materials;
E. radiation, laser and X-ray hazards;
F. moving and lifting heavy objects and avoiding head injuries;
G. handling cryogenic materials;
H. handling extremely hot materials;
I. exposure to ultraviolet light and welding hazards;
J. exposure to dust and fumes;
K. avoiding hearing loss due to high pitched and loud noises;
L. high voltage electrical hazards;
M. fire safety and evacuation procedures; and
N. hazard communication protocols.

3. **DEFINITIONS**

**Students** – currently enrolled, part-time or full-time IIT student who is enrolled in one of IIT’s instructional laboratories or workshops.

**Hazards** – objects or circumstances that pose a threat of direct bodily harm, such as sharp objects and equipment, and the threat of long term degradation of health, such as exposure to chemical and toxic substances.
**Instructional Laboratories or Workshops** – laboratories or workshops maintained by IIT’s colleges that are intended primarily for the instruction of students. These are distinct from those workshops and laboratories that are used primarily for research purposes.

**University Laboratory Faculty Safety Coordinator (UFSC)** – a faculty member appointed by the Provost to assist departments in developing, implementing and monitoring policies, procedures and standards that are consistent with this Policy.

**Safety Data Sheet (SDS)** – a written electronic or printed document describing a hazardous chemical which is prepared in accordance with 29 CFR 1910.1200, paragraph (g). More generally, it is an informational tool generated by manufacturers and suppliers of chemicals to provide safety information. A SDS is kept for each chemical used in a laboratory.

**Personal Protective Equipment (PPE)** – equipment employees wear to provide a protective barrier between themselves and a potential hazard. Examples include, but are not limited to, safety glasses, lab coats, goggles, face shields, disposable garments, respirators and gloves.

**Work practice controls** – changes in the way an individual performs physical activities in order to reduce or control exposure or Hazards. Work practice controls involve procedures and methods for safe work and include, but are not limited to:

a. Use of neutral postures to perform tasks (straight wrists, lifting close to the body);
b. Use of two-person lift teams;
c. Technique or sequence of events for a process; and
d. Wearing specific Personal Protective Equipment.

### 4. RESPONSIBILITIES

Each department shall identify a designated safety officer (“DSO”). The DSO may be selected from the faculty or staff of that unit. The DSO for this Policy may also act as a DSO for or under other programs and policies as may be necessary. The DSO is responsible for identifying the Hazards in that department’s Instructional Laboratories or Workshops, and compiling a written list of the identified Hazards on a form similar to that attached hereto as Appendix A. The DSO works with the faculty and staff in charge of the lab space to develop programs of safety instruction, and will report to the dean or department chair, and to the DEHS concerning specific matters involving the department’s implementation of and compliance with the Program. A list of identified Hazards will be delivered to the department’s dean or chair, the department’s instructors, the DEHS and UFSC.

Instructors using Instructional Laboratories or Workshops as part of their curriculum must instruct Students in his or her class about the Hazards posed by working in that lab or workshop. An instructor may delegate this responsibility to a qualified teaching assistant or staff person, but it is the instructor’s responsibility to verify that the safety instruction is in fact completed. Verification will occur through the filing of an Instructional Safety Form, attached here as Appendix B, signed by the instructor’s dean or chairperson.

In addition, the department shall designate a lab supervisor (“Lab Supervisor”) whose duty it is to promote a safe work environment for everyone within their department’s Instructional Laboratories or Workshops.
The Lab Supervisor shall be a professor, staff person or qualified teaching assistant, and has responsibility for:

a. seeing that safe work practice controls are maintained in the facility;
   b. denying access to Students who have not received the required instruction;
   c. denying access to Students who refuse to use required work practice controls;
   d. maintaining the facility in a safe operating condition; and
   e. supplying and/or requiring the use of PPE.

5. PROCEDURE

A. Administration. Each department’s DSO will coordinate and report on the department’s Program. Duties will include, but need not be limited to:

   1) The DSO will tour that department’s laboratories and workshops and, working with the relevant faculty and staff, will prepare an itemized list identifying the hazardous materials, equipment and processes to which students will be exposed.

   2) The DSO will work with the faculty and staff in charge of the Instructional Laboratories or Workshops to develop a program of safety instruction for the students who use those labs and workshops.

   3) The DSO will document this safety program and make it available to the head of the department, DEHS and Lab Supervisor.

   4) Instructors must identify and document, using a form substantially similar to the Instructional Safety Form included as Appendix B, Students who received approved safety instruction and who are thereby entitled to work in their laboratory or workshop.

   5) The DSO will collect accident reports concerning injuries that have occurred in each department’s laboratories and workshops. Copies of these reports should be provided to the DEHS.

   6) Instructors, together with the Lab Supervisor, shall create a manual defining proper and safe working practice controls in that lab or workshop, and identify unsafe procedures as well.

   7) Instructors, the Lab Supervisor and DSO will work together to create and maintain a written emergency response plan outlining the response to possible accidents in the facility, including a list of offices and people to notify. A copy of this emergency response plan should be filed with the Director.

B. Instruction. Students must be informed of Hazards that they may face in an Instructional Laboratories or Workshops before they are permitted to work in that facility. This instruction shall include a description of the nature of the Hazards, an explanation of how to protect one’s self
from the Hazards and an explanation of what procedures to observe should an incident occur. Instruction should include, at a minimum, the following:

1) Instructors must individually certify that each student understands the Hazards and work practice controls relevant to the equipment or process by requiring that each student pass a safety test of the instructor’s devising.

2) Instructors must furnish an up to date list of Students whom they have certified as having knowledge of Hazards and work practice controls. Instructors will provide this list to the DSO and post a copy of this list in the respective facilities.

3) Instructors must demonstrate to Students the proper use of available PPE for the Instructional Laboratories or Workshops, and they must specify which items of equipment the students must furnish for themselves.

4) Instructors shall, as much as possible, provide “hands on” instruction to ensure clarity of student understanding.

C. Supervision by Lab Supervisor. Lab Supervisor who, in conjunction with possible teaching assistants, will staff the department’s Instructional Laboratories or Workshops whenever such facility is open for student use. The duties of the Lab Supervisor include the following:

1) Maintaining a file of SDS describing dangerous substances being used in each lab and will make this file accessible to anyone on request.

2) Maintaining the facility and its equipment in safe working order.

3) Having, on hand, PPE that the students are required to use but that they are not required to furnish for themselves.

4) The Lab Supervisor and Instructor will require that Students working in the Instructional Laboratories or Workshops are certified and that they comply with safe working procedures. The Lab Supervisor and/or Instructor will have the authority to expel uncertified and non-cooperating students from the facility.

5) Maintaining a general purpose first aid kit and other supplies that would be needed to respond to incidents related to Hazards particular to his or her laboratory or workshop.

6) Generating accident reports documenting injuries that occur in the facility and maintaining a file of these reports, consistent with IIT’s Incident Investigation Policy.

6. UPDATE AND REVIEW

A. Review. A department must review its Program as needed but in no event less than every two years to ensure that it is compliant with all applicable laws and IIT policies and to evaluate its effectiveness. Revised plans must be submitted to the IIT Safety Committee for final approval.
B. **Updates.** A department must complete a new Hazardous Identification Form whenever the department has experienced a material change, such as, but not limited to, the use and/or introduction of a new piece of equipment which may pose safety concerns or the addition of new chemicals, including a substantial change in the quantity, quality or use of chemicals or the discontinuation of a previously used chemical.

7. **RECORDKEEPING REQUIREMENTS**

A. **List of Safety Certified Students.** A list of students who have been instructed and certified to work in each lab or workshop will be updated at least once a semester, and this list will be posted in each lab or workshop and in a file maintained by the department’s DSO, with a copy to the DEHS.

B. **Safety Data Sheets.** Compliant with the Globally Harmonized System sheets will be kept on file in each lab or workshop covering any hazardous materials used in that facility.

C. **Accident Reports.** Reports documenting injuries suffered in each lab or workshop will be kept in a file maintained by the department’s DSO, with a copy to the DEHS.

D. **Plan and Procedure Manuals.** The department’s Plan and any written procedures defining approved work practice controls relevant to each laboratory or workshop shall be stored in a file in that facility and in a file maintained by the department’s DSO and made available upon request, with a copy to the DEHS.
8. APPROVAL

The IIT Safety Policy Committee reviewed and recommend the adoption of this Policy on September 19, 2005, and this Instructional Laboratory and Workshop Safety Policy is approved and effective this 10th day of October 2005. Modifications to this policy have been reviewed and approved and are effective as of the date noted on the cover page. The Safety Policy Committee will review the contents, implementation and effectiveness of this Policy no less than annually (but as often as necessary) to ensure that it meets all required legal and regulatory requirements and is adequately providing a safe and healthful environment for IIT faculty, employees and students.

By: /s/ Alan W. Cramb
    Alan W. Cramb, Provost and Senior Vice President

By: /s/ Bruce Watts
    Bruce Watts, Vice President for Facilities & Public Safety
**APPENDIX A**
**HAZARD IDENTIFICATION FORM**

**PLEASE INSERT ALL REQUESTED INFORMATION BELOW FOR EACH LABORATORY USED BY YOUR DEPARTMENT. A COPY THIS FORM SHOULD BE SENT TO THE DEPARTMENT'S DEAN/CHAIR, ITS INSTRUCTORS AND THE DIRECTOR OR ENVIRONMENTAL HEALTH AND SAFETY.**

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<th>EQUIPMENT</th>
<th>MAKE &amp; MODEL</th>
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Compiled by:________________________________________
(Print Name)

Signature:________________________________________

Date:________________________________________
APPENDIX B INSTRUCTIONAL SAFETY VERIFICATION FORM

This Form is to be delivered to the Department’s Designated Safety Officer,____________________, prior to students performing any course work in a laboratory or work shop.

Department:______________________________ Building & Room: ________________________

Class Title:______________________________ Instructor(s): ____________________________

Name and Title of Individual Providing Safety Instruction: __________________________________

Date Safety Instruction Provided: __________________________________

Verification

I,______________________________ , do hereby certify that Laboratory/Workshop Safety Instruction was provided to the students listed below in connection with the above-referenced class on the date and by the individual above-referenced, and that the students listed below have demonstrated an understanding of the instruction provided. This Instruction was provided in a manner that is consistent with my Department’s procedures and policies relating to laboratory/workshop safety instruction and the IIT Policy on Instructional Laboratory and Workshop Safety.

Students

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Name of Instructor: __________________________

Date: ______________________________________