

ELECTRICAL ENGINEERING

LAB SAFETY INSTRUCTIONS AND FORMS

(This document is available at ee.nd.edu)

- Laboratory Safety Checklist
- Laboratory Safety Users List
- Online Safety Training Procedures
- Laboratory Safety Sign Off Sheet
- Chemical Inventory List
- Emergency Laboratory Safety Information Sheet
- Emergency Action Plan (trifold)

Lab Safety Checklist

- 1. Come to compliance with RMS requirements including eyewashes, showers, chemicals, clutter, posting information, etc.
- 2. Assemble an up-to-date list of lab users and their contact information.
- 3. Develop a statement of required personal protective equipment (PPE) and an emergency exit plan for your lab and insert in sections 2) and 3) of the Laboratory Safety Sign-Off sheet. Each lab must specifically state what is that lab's appropriate emergency exit.
- 4. Verify that all lab users are up-to-date with their on-line safety training. Training includes completion of General Lab Safety training (annually), Fire Extinguisher Training (annually) and any other applicable training topics depending on the work activities being performed in the lab, such as biosafety and bloodborne pathogens, laser safety and radiation safety.
- 5. Create an inventory of chemicals.
- 6. Collect all MSDS data pertinent to chemical list and store them either electronically or as hard-copies.
- 7. User signatures on the Laboratory Safety Sign-off Sheet indicate that the lab user has been notified of all required training, emergency exit plan and hazards in your lab.
- 8. Make available in your lab:
 - a) Chemical inventory
 - b) MSDS data sheets
 - c) All signed sign-off sheets
 - d) Lab users list
- 9. Be sure that the Emergency Laboratory Safety Information sheet (blue color) is up-to-date and posted on lab door.
https://riskmanagement.nd.edu/assets/109440/blue_card_for_labs.xlsx%22%3Eblue_card_for_labs.xlsx

Laboratory Safety Users List

This form is required to be available in the laboratory for inspection.

Laboratory Name _____ **Building** _____ **Room#** _____
Supervisor Name _____ **Email:** _____ **Phone#** _____
Lab Phone# _____

Name	Dept.	Advisor	NetID	Phone#	Training and Date	Training and Date	Training and Date (use more lines as needed)

Online Safety Training Procedures

Online safety training is required for ALL personnel working in a Notre Dame laboratory. Faculty, staff, post-docs and graduate students must go to the link below and submit a request for training. All undergraduate student requests must be submitted by the PI (or designee) of the laboratory.

[Request to be added form](#)

https://docs.google.com/a/nd.edu/forms/d/1de_4_m1nYuk8hcVQkb8_96VEJtSIhiNFCHssBJFcJ4/viewform?c=0&w=1

Online training currently available:

- Laboratory Safety Fundamentals* (Includes Laser Safety)
- Fire Extinguisher Training*
- Biosafety and Biocontainment **
- Bloodborne Pathogens (BBP)***

* Required annually by all personnel working in an ND lab.

** Required by personnel working in biosafety levels 1 and 2

*** Required by personnel working with BSL-2 agents and/or human blood, tissues, cells, etc.

Once you submit your request, you will receive an email from Customerservice@vividlms.com with instructions to proceed. If you have not received the email within 24 hours, please check your spam. Be sure to check your email for “vividlms.”

Depending on the work activities being performed, there could be special circumstances where one may be required to complete additional training beyond these online trainings. Examples would be Respiratory Fit Testing and Training for those who are required to wear respiratory protection, or who voluntarily want to wear a ½ mask cartridge respirator. Other trainings could include Authorized Lockout/Tagout, Confined Space entry, Fall Protection, Crane Operator Training, Welding (Hot Work), Machine Specific training (use of drill presses, bench grinders, bandsaws, chop saws, lathe), etc.

Electrical Engineering

Laboratory Safety Sign-Off Sheet

Each separate laboratory must provide a separate form to each lab user, even if a lab user uses more than one laboratory. A lab-user signature is required for each laboratory sign-off sheet.

This form is required to be available in the laboratory for inspection.

1. **Laboratory Name** _____ **Building** _____ **Room#** _____
Lab Phone# _____
Supervisor Name _____ **Email:** _____ **Phone#** _____
Location of Safety Information _____

2. **PPE required for admission to laboratory:** Personal protective equipment needed for anyone to walk through the door of the lab. Fill in information everyone needs.

Voluntary users of respirators must fill out this form:

http://riskmanagement.nd.edu/assets/137578/voluntary_use_form.pdf

3. **Emergency Exit Plan:** Emergency exit plan should describe the shortest and safest route to exit the building. The designated gathering site for EE is the atrium of O'Shaughnessy Hall, east of Cushing Hall. Note: shelter-in-place in severe weather, as discussed in the EE tri-fold.

4. **Required training:** Online training is required for all lab users. These online modules are required with *yearly* updates. Other safety modules may be required, depending on hazards.

- a. Laboratory Safety Fundamentals
- b. Fire Extinguisher Training
- c. Biosafety and Bloodborne Pathogens Training (if your lab works with these)

5. **Hazards Exposure Rating:** It is assumed that most labs contain hazards of various kinds, and not all users will be exposed to all hazards. In this situation, advise each person of all hazards, what PPE is required and what special training is required. Regardless of whether a lab user will be exposed to a hazard, they must be made aware of the hazards and at the end of this form, sign that they have been so advised.

For the user who signs this version, please rate his/her potential exposure to each hazard noted below with a rating scale of 1 – 5, with “1” being “will never come in contact with this hazard” and a “5” being “will work closely with this hazard.”

a. **Nature of Hazard:** _____

Location: _____

Required PPE: _____

Special Training: _____

Hazard Exposure Rating: 1 – 5 _____

b. **Nature of Hazard:** _____

Location: _____

Required PPE: _____

Special Training: _____

Hazard Exposure Rating: 1 – 5 _____

c. Nature of Hazard: _____

Location: _____

Required PPE: _____

Special Training: _____

Hazard Exposure Rating: 1 – 5 _____

d. Nature of Hazard: _____

Location: _____

Required PPE: _____

Special Training: _____

Hazard Exposure Rating: 1 – 5 _____

e. Nature of Hazard: _____

Location: _____

Required PPE: _____

Special Training: _____

Hazard Exposure Rating: 1 – 5 _____

f. Nature of Hazard: _____

Location: _____

Required PPE: _____

Special Training: _____

Hazard Exposure Rating: 1 – 5 _____

g. Nature of Hazard: _____

Location: _____

Required PPE: _____

Special Training: _____

Hazard Exposure Rating: 1 – 5 _____

h. Nature of Hazard: _____

Location: _____

Required PPE: _____

Special Training: _____

Hazard Exposure Rating: 1 – 5 _____

i. **Nature of Hazard:** _____

Location: _____

Required PPE: _____

Special Training: _____

Hazard Exposure Rating: 1 – 5 _____

Duplicate pages as needed.

- | | |
|---|-----------------------|
| 6. Training Course: Check the boxes and fill in dates | <u>Date Completed</u> |
| <input type="checkbox"/> Laboratory Safety Fundamentals | _____ |
| <input type="checkbox"/> Fire Extinguisher Training | _____ |
| <input type="checkbox"/> Biosafety & Bloodborne Pathogens Training | _____ |

7. **By signing below, you certify that you have been advised of all laboratory safety requirements to enter, work and exit the laboratory in an emergency, and have received and read the EE Emergency Action Plan (trifold).**

This form is required to be available in the laboratory for inspection.

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Name (Please Print)

Date

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Signature

Chemical Inventory

This form is required to be available in the laboratory for inspection.

The following chemicals are present in the laboratory:

Chemical Name	Qty	Location in Laboratory

Chemical Inventory

This form is required to be available in the laboratory for inspection.

The following chemicals are present in the laboratory:

Chemical Name	Qty	Location in Laboratory

University of Notre Dame
Emergency Laboratory Safety Information

IN CASE OF EMERGENCY, CALL 911 OR FROM A CELL PHONE 574-631-5555

Department	Room	Last update:
PI/Supervisor	Office Phone	After hours number:
Alternative Contact	Office Phone	After hours number:

CAUTION

Check here if none of the following hazards are present in this lab:

LOCAL ALARM(S):	BIOHAZARD	CHEMICAL	RADIATION	PHYSICAL
Is local alarm present <input type="checkbox"/> Yes <input type="checkbox"/> No Explain what the alarm(s) indicate:	Biosafety Level: <input type="checkbox"/> NONE <input type="checkbox"/> BSL-1 <input type="checkbox"/> BSL-2 <input type="checkbox"/> BSL-3	<input type="checkbox"/> Flammables <input type="checkbox"/> Air/Water Rx <input type="checkbox"/> Toxics <input type="checkbox"/> Corrosives <input type="checkbox"/> Oxidizers <input type="checkbox"/> Gas Cylinders	<input type="checkbox"/> Laser Class ____ <input type="checkbox"/> Irradiator <input type="checkbox"/> Radioactive Mat. <input type="checkbox"/> Rad Prod. Machines	<input type="checkbox"/> Electrical Hazards (any exposed wiring/connectors)
RISK MANAGEMENT AND SAFETY 631-5037			OTHER (Specify):	

EYE PROTECTION IS REQUIRED
NO FOOD OR DRINK ALLOWED

SEE YELLOW CARD FOR UNATTENDED OPERATIONS INFORMATION



UNIVERSITY OF
NOTRE DAME

Department of Electrical Engineering

Emergency Action Plan

***Fitzpatrick /
Cushing/Stinson
Remick Halls***

For Faculty, Staff, Students
and Guests

March 2015