



Laboratory Safety Plan

[Primary Investigator Name] Laboratory
[Building] [Room Number(s)]

Created By: Creator Name
Creation Date: DDMMMYYY
Last Updated: DDMMMYYYY

I. General Safety

A. Designated Responsible Parties and Contact Information

1. PI(s)

Name:

Email:

Office:

Work phone:

24-hr phone:

2. Lab Supervisor

Name:

Email:

Office:

Work phone:

24-hr phone:

3. Safety Captain

Name:

Email:

Office:

Work phone:

24-hr phone:

4. Department Safety Officer

Name:

Email:

Office:

Work phone:

24-hr phone:

5. Building Manager

Name:

Email:

Office:

Work phone:

24-hr phone:

6. EHS

safety@ttu.edu

Business hours: 806.742.3876

Non-business hours: 806.742.3328

7. Physical Plant

24hrs: 806.742.4677

8. Campus Police (TTUPD)

Non-emergency: 806.742.3931

9. Emergency First Responder (Fire, EMT, Police)

FOR EMERGENCIES CALL 911

Give your NAME, LOCATION, and the EMERGENCY

B. Document Location

1. Safety Data Sheets:
2. Standard Operating Procedures:
3. Training Certificates:
4. University Laboratory Safety Manual:
5. BMBL
6. NIH Guidelines
7. [Other Pertinent Resources]

C. Training Requirements

1. EHS Required Training

Refer to <https://www.dept.ehs.ttu.edu/ehs/ehshome/training> or contact EH&S at 806.742.3876 if you have questions regarding required trainings. Certain trainings require periodic renewal. Check all that apply below.

- | | |
|------------------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> Art Safety | <input type="checkbox"/> Laboratory Safety |
| <input type="checkbox"/> Biological Safety | <input type="checkbox"/> Laser Safety |
| <input type="checkbox"/> Bloodborne Pathogen | <input type="checkbox"/> MRI Safety |
| <input type="checkbox"/> Confined Space | <input type="checkbox"/> Radiation Safety |
| <input type="checkbox"/> Hazard Communication | <input type="checkbox"/> Respiratory Safety |
| <input type="checkbox"/> Hazardous Material Shipping | <input type="checkbox"/> Safety Awareness |

2. Laboratory-Specific Training

D. Personal Protective Equipment

1. Lab coat
2. Tyvek suit
3. Disposable Gown
4. Bonnet / hair cover
5. N95 or N100 respirators
6. Surgical mask
7. Half or full face respirator
8. Safety glasses or over-the-glasses safety glasses
UV, Impact, both, other
9. Splash goggles
10. Face shield
11. Gloves
Nitrile, latex, vinyl, thermal protection, neoprene, other
12. Shoe covers
13. Cover sleeves
14. other

E. Engineering Controls

1. Fume Hood
2. Biological Safety Cabinet
3. Centrifuge safety Cups or sealable rotor
4. Blast Shield
5. Local exhaust systems and negative pressure laboratory spaces
6. Shielding for radiation

7. Glove box
8. Gas cabinet
9. Laminar Flow Clean bench
10. Downdraft table
11. Rotary evaporator
12. Vacuum line filters

F. General Lab Rules, Policies and Practices

1. Food, drinks, medicines, and cosmetics are not permitted to be stored or consumed in the laboratory. Any of these items that must be used for research purposes must be clearly labeled as such.
2. Proper lab attire must be worn at all times in the laboratory. Perforated shoes or sandals and shorts or other garments that expose the skin of legs or feet shall not be worn in the laboratory.
3. Appropriate PPE must be worn by all individuals while in the laboratory when chemical, physical or biological hazards are present.
4. Housekeeping shall be done on an ongoing basis.
5. All storage containers should be labeled with required information, segregated by their hazard class, and stored in an appropriate manner.
6. All waste containers must be labeled with required sticker, information, segregated by their hazard class, stored in an appropriate manner, and removed by EH&S as appropriate.
7. Large or heavy items are to be stored as close to ground level as possible to make them easier to move and prevent them from falling.
8. Exits, emergency eyewashes and safety showers, and walkways must be completely unobstructed.
9. Trip hazards must be removed or mitigated.
10. [Additional rules/policies here]

G. Emergency Action Plan

Report all emergencies to the Primary Investigator / Laboratory Supervisor immediately.

1. Medical Emergency Procedure
2. Fire Procedures
3. Severe Weather Procedures
4. Bomb / Terroristic Threat Procedures
5. Extended Power Loss

H. Laboratory Hazards (examples below)

Hazard	Details	Mitigation	Reference
Fire: Chemical	Acetone Ethanol Isopropanol ETC	<ul style="list-style-type: none"> • Fume Hood • PPE: 	MSDS
Fire: Physical	Bunsen burner Hot plate ETC	<ul style="list-style-type: none"> • Turn off gas when not in use • Replace damaged tubing • Inspect cords for damage 	SOP
Particularly Hazardous Substances	Formaldehyde Ethidium Bromide ETC	<ul style="list-style-type: none"> • Use only in marked, designated area • Fume Hood • PPE: 	MSDS & SOP
Burns: Temperature	Liquid Nitrogen Ultra-Low Freezer	<ul style="list-style-type: none"> • PPE: enhanced <ul style="list-style-type: none"> ▪ Thermo-protective gloves 	SOP

	Autoclave ETC		
Burns: Chemical	Sodium Hydroxide Sulfuric Acid ETC	• PPE:	MSDS
Sharps	Scalpels Probes Syringes ETC	•	SOP
Biohazard	Microbes & Viruses	• Perform aerosolizing procedures in a BSC • PPE:	SOP
Biohazard	Human Blood	• Perform aerosolizing procedures in a BSC • PPE:	SOP
Biohazard	Biological Samples	• Use universal precautions • PPE:	SOP
		•	
		•	
		•	

II. Chemical Safety

A. Add specifics here for additional training, PPE, spills, waste, special emergency procedures with exposure, equipment used with chemicals, etc

III. Biological Safety

A. Add specifics here for additional training, PPE, spills, special emergency procedures with exposure, waste, equipment used with biologicals, need for medical surveillance, IBC documentation etc

IV. Radiation Safety

A. Add specifics here for additional training, spills, waste, equipment used with radioactive material, IRLSC information special emergency procedures with exposure, etc

V. Laser Safety

A. Add specifics here for additional training, spills, waste, equipment used with lasers, IRLSC information, PPE special emergency procedures with exposure, etc

VI. Field Safety

A. Add specifics here for additional training, spills, waste, equipment used or supplies needed in the field, special emergency procedures, etc

VII. Approved Lab Personnel

The following individuals have read and understood this Laboratory Safety Plan and all relevant documents referred to within this Laboratory Safety Plan. They have also completed all required training for working in this laboratory or workspace and are responsible for maintaining all refresher training and new training requirements.

By signing this document, each person accepts responsibility for his or her actions in this laboratory. Persons named below are responsible for following all safety practices and procedures described in this document and the Chemical Hygiene Plan. Failure to follow any safety practices or procedures will result in a documented verbal warning and in severe cases, temporary suspension from lab work & retaking of online training(s).

Worker Name	Worker Signature	Date	PI Signature	Date

VIII. General Safety Specific SOPs for Lab

- A. PPE donning, doffing, disposal and laundering
- B. Hand washing
- C. Autoclave use
- D. Chemical/biological storage
- E. Cryogenic operations
- F. Sharps
- G. Aseptic Technique
- H. Laminar Flow Hood
- I. Centrifuge
- J. Etc.

IX. Lab-Specific SOPs

These may be in a separate binder; include instructions for specialized equipment, procedures, experiments, sampling methods, etc. Don't forget SOPs for daily items such as basic housekeeping (cleaning glassware, waste management if not otherwise discussed, etc)...

It is prudent to include a table like the one below to document acknowledgement of the information and/or proficiency in a certain SOP.

Worker Name	Worker Signature	Date	PI Signature	Date