

**Comprehensive Workplace Safety Plan
for a Computer Laboratory**



A Safety Plan

Presented to

Ms. Nessa A. Garcia

Presented by:

Mariel Maubay
Krystelle Liray
Kurt Luchavez
Marcvon Pareja
Chicco Banguit
Brix Hao

December 08, 2025

Table Of Contents

Chapter	Title	Page
I	INTRODUCTION	1
	Proposed Workplace Name and Location	
	Proposed Address	
	Name of Key Personnel	
	Description of the Safety Plan	
	Organization Chart	2
II	WORKPLACE PROFILE	3
	Workplace Type	
	Location and Layout	
	Number of Users and Capacity	
	Daily Operations	
III	HAZARD IDENTIFICATION	4
	Physical Hazards	
	Electrical Hazards	
	Chemical Hazards	
	Ergonomic Hazards	
	Digital Hazards	

IV	PREVENTIVE AND CONTROL MEASURES	5
	Controlling Physical Hazards	
	Controlling Electrical Hazards	
	Controlling Chemical Hazards	
	Controlling Ergonomic Hazards	
	Controlling Digital Hazards	
V	EMERGENCY PREPAREDNESS AND RESPONSE	6
	Fire Evacuation Procedures and Map	
	First Aid and Medical Response	
	Emergency Contact Information	
VI	TRAINING AND COMMUNICATION PLAN	7
	Safety Orientations	
	Safety Reminders	
VII	MONITORING AND EVALUATION	8-9
VIII	REFERENCES	10

CHAPTER I

INTRODUCTION

Proposed Workplace Name and Location

Computer Laboratory Workplace - Engineering controls, personal protective equipment, hygiene, practices and administrative controls each play a role in a comprehensive laboratory safety program.(D CAMPUS – 2010) This facility provides essential technological resources, including networked computer units and specialized equipment, to support the academic and research needs of the students and faculty of the Davao Oriental International Technology College, Inc. Maintaining this critical learning environment requires strict adherence to safety protocols to prevent electrical hazards and ensure the continuous, safe delivery of computer-based education and skills development A successful safety program involves the daily commitment of everyone in the department to ensure a safe and healthy environment in which to teach and learn(.BL Foster - WORK, 2018)

Proposed Address

Inside the campus of Davao Oriental International Technology College, Inc.
Located at Madang, Central (Pob.), City of Mati, Davao Oriental, 8200 Phillipines

Name of Key Personnel

The safety effort is managed by a dedicated team with specific, assigned roles. Mariel Maubay and Krystelle Liray serve as the Plan Managers, overseeing all safety rules and documentation. Kurt Luchavez and Marcvon Pareja form the Inspection Team, responsible for checking wires, equipment, and maintaining a safe environment. Finally, Chicco Banguit and Brix Hao are the designated Emergency Responders, tasked with handling first aid and leading evacuations during any incident. This collaborative structure ensures the immediate and long-term safety of the Computer Laboratory.

Description of the Safety Plan

The primary purpose of this Comprehensive Workplace Safety Plan is to establish mandatory protocols and procedures to prevent accidents and minimize risks within the Computer Laboratory environment. This plan ensures the safety and well-being of all students, faculty, and staff using the facility.

Organization Chart

Plan Manager



Mariel Maubay



Krystelle Liray

Inspectors



Kurt Luchavez



Marcvon Pareja

Emergency Responders



Chicco Banguit



Brix Hao

CHAPTER II

WORKPLACE PROFILE

Workplace Type

This room is our Computer Lab. It is a special learning area where students and teachers use computers for classes and projects. We need to keep this high-tech space safe so learning can happen without problems.

Location and Layout

The Computer Lab is inside the campus of Davao Oriental International Technology College, Inc. in Mati City. The computers are set up in groups, not just straight rows, to help students work together. We have several doors in the room, placed to make sure everyone can get out quickly if there's an emergency.

Number of Users and Capacity

We have 33 computers ready for use. The school follows strict safety codes to ensure the room is never overcrowded. The number of people allowed in the lab at one time is strictly monitored to make sure all users can evacuate quickly and safely during any emergency.

Daily Operations

The lab is open for classes and activities during standard school operating hours. Most of the time, people are sitting and working quietly on tasks like coding or research. When the lab closes for the day, the last person must always make sure all 33 computers are turned off. Most importantly, they must shut off the main power switch for the lab to prevent any electrical fires overnight.

CHAPTER III

HAZARD IDENTIFICATION

Physical Hazards

These related hazards include flammable and pyrophoric Physical hazards. Throughout the entire process of ch (W Wang, Y Su, H Cao, D Li - Laboratories, 2025emical). These are risks related to the room itself and how clean it is. This includes slippery floors due to spills, which can easily make someone fall down, and broken chairs or unstable tables, which can cause injury or damage to the equipment.

Electrical Hazards

This is the biggest danger because of all the computers and power sources in the room. This hazard is caused by three main issues. First, exposed electrical wires or damaged power cords are extremely dangerous and can cause a fire or give someone a severe electrical shock. Second, problems happen when we have overloaded power outlets because too many devices are plugged in, or when there is use of unauthorized extension cords that are too weak for the lab's equipment, which leads to overheating. Third, the highly dangerous practice of having wet hands or liquids near electrical equipment must be avoided, as liquids can cause immediate short circuits and fire.

Chemical Hazards

Although this happens rarely, there is a risk of battery leakage from old laptops or UPS units. These liquids are dangerous chemicals that can hurt skin or eyes and need professional cleanup.

Ergonomic Hazards

These are slow, health-related risks from sitting too long. They include improper chair height causing back and neck strain when the chair is not adjusted right, poor posture while typing, and keyboards and mouse placement causing wrist discomfort. These problems build up over many hours of computer use.

Digital Hazards

These risks deal with keeping the computers and data safe. This involves using weak passwords, which makes the system easy to hack, and data loss due to improper file backups, which means you could lose all your work forever.

CHAPTER IV:

PREVENTIVE AND CONTROL MEASURES

Controlling Physical Hazards

The number one rule is the No Food or Drink Policy this stops slippery floors due to spills and protects the machines. If you see broken chairs or wobbly tables, report them immediately so they can be isolated from use and fixed quickly. To prevent tripping, all cables must be kept off the floor using cable management systems.

Controlling Electrical Hazards

To avoid fire and shock, never use personal or unauthorized extension cords. The safety team checks the wiring often to find and fix any exposed electrical wires or damaged power cords. You must never have wet hands or liquids near electrical equipment. Finally, the main power must be shut off every night to prevent electrical fires after hours.

Controlling Chemical Hazards

We check all lab-owned equipment often to prevent battery leakage from old laptops. If you see any signs of a leak from a laptop battery, report it immediately. Only trained staff wearing protective gloves and safety goggles are allowed to clear the area and clean up the spilled chemicals.

Controlling Ergonomic Hazards

This is about keeping your body safe while you work. Always adjust your chair height to prevent improper chair height causing back and neck strain. Sit up straight to maintain good posture while typing, and remember to take a short stretching break every hour to rest your body and eyes.

Controlling Digital Hazards

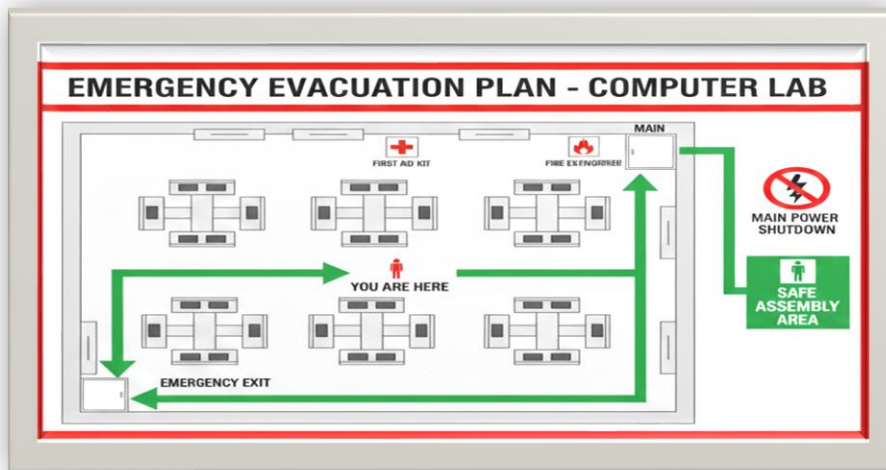
To protect the computers and your data, use strong, unique passwords that are hard to guess. The system is set up for frequent, automated file backups so you will not lose your work and prevent data loss due to improper file backups.

CHAPTER V

EMERGENCY PREPAREDNESS AND RESPONSE

Fire Evacuation Procedures and Map

If you see fire or hear the alarm, leave everything and get out immediately.



The person closest to the switch must find the Main Power Shutdown (as shown on the map) and shut off the power. Follow the green path on the Fire Evacuation Map directly to the exit. Go straight to the Designated Safe Assembly Area outside the building. Wait there until an official says it is safe to come back. Only use the Fire Extinguisher if the fire is very small and you know how to use it.

First Aid and Medical Response

We must be ready to help anyone who gets hurt. The First Aid Kit is clearly marked and easy to reach inside the lab (as shown on the map). Use the kit for small cuts. For serious injuries, call the School Clinic or Security immediately. Do not move a seriously injured person unless they are in direct danger.

Emergency Contact Information

If a big problem starts, call the right people right away. The main contact numbers for School Security or Administration, the local Fire Department, and the nearest Hospital or Clinic must be clearly posted near the lab's exit for quick reference.

CHAPTER VI:

TRAINING AND COMMUNICATION PLAN

Safety Orientations

Every new student and faculty member who uses the Computer Lab must receive a quick Safety Orientation before they start using the machines. This training will cover the most important points from this plan: where the exits are, how to turn off the main power in an emergency, and the strict No Food or Drink Policy. For the safety team, there will be special training sessions focused on using the fire extinguisher and providing basic first aid.

Safety Reminders

Safety knowledge must be kept fresh in everyone's mind. We will use simple and clear safety signs posted near every computer to remind people about good posture while typing and keeping their areas clean. Furthermore, a new Safety Tip of the Week will be posted on the lab's main announcement board or on the computer screen background to remind users of things like checking their chair height or securing their weak passwords.

CHAPTER VII

Monitoring and Evaluation

In order to facilitate a proper safety for a laboratory we should have inspector who are able to inspect the safety of our laboratory. Laboratory safety program lies in the nature of laboratories or inspector an academic laboratory where full inspector are accustomed of the organization's safety program (AK Furr - 2000) the inspectors are the following Kurt Luchavez and Marc von Pareja.

Ensuring safety in any laboratory requires trained and capable inspectors who regularly check, assess, and confirm that all safety protocols are followed. These inspectors play a crucial role because labs, especially in schools, involve activities that could expose students, faculty, and staff to various hazards. Hazards may include chemical exposure, electrical risks, improper equipment handling, biological contaminants, and unsafe work practices. Without regular monitoring, even small issues can turn into serious safety problems. Laboratory inspectors conduct routine inspections to identify unsafe conditions and ensure that all equipment works properly. They check if safety signs are visible, if emergency equipment like fire extinguishers, eyewash stations, and first-aid kits are accessible, and whether students and staff follow safety procedures. Their assessments help create a controlled environment where potential risks are reduced before they can cause accidents or injuries. Inspectors also promote good laboratory habits, raise awareness of hazards, and foster a sense of responsibility among lab users.

A strong and effective laboratory safety program relies on inspectors who understand the unique nature of academic labs. Unlike industrial settings, academic labs often have inexperienced students who are still learning proper lab behavior, equipment use, and safety protocols. Therefore, inspectors must not only enforce safety rules but also understand how teaching and learning environments work. According to A.K. Furr (2000), a safety program is most effective when inspectors are familiar with the laboratory's dynamics and the institution's established safety systems. Their knowledge of procedures, policies, and the overall lab environment enables them to make informed decisions and offer valuable recommendations for improvement. Additionally, laboratory inspectors play a key role in developing long-term safety strategies. They help update safety guidelines, train lab personnel, participate in risk assessments, and ensure compliance with local and national safety regulations. Their presence reassures stakeholders like students, teachers, parents, and administrators that the lab is a safe and supportive space for learning, experimentation, and innovation. By maintaining a consistent inspection system, the overall lab environment becomes safer, more efficient, and better suited for productive

academic work. In the end, having trained inspectors strengthens the foundation of a solid laboratory safety program. Their expertise, attentiveness, and dedication are vital for maintaining a culture of safety that protects individuals, preserves equipment, and ensures smooth lab operations. Without proper inspection and oversight, safety programs would be incomplete and much less effective in preventing risks and promoting responsible lab practices.

CHAPTER VIII

REFERENCES

<https://www.d.umn.edu/chem/pdfs/UMDChem-LSP-10.pdf>

<https://www.chemistry.wvu.edu/files/d/ea54fbfb-8f3a-4dfa-8d55-26a4d94d3b93/ta-manual-2018.pdf>

Furr, A. K. (2000). *CRC handbook of laboratory safety*.

CRC pressCAMPUS, D. (2010). LABORATORY SAFETY PLAN.

Foster, B. L. (2004). Laboratory safety program assessment in academia. *Chemical Health & Safety*, 11(5), 6-13.

Wang, W., Su, Y., Cao, H., & Li, D. (2025). Enhancing Chemical Laboratory Safety with Hazards Risks Mitigation and Strategic Actions. *Laboratories*, 2(1), 5.