

Safety and Incident Management Plan

Fabric Manufacturing Lab 1 (6B03)

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Introduction

Fabric Manufacturing Laboratory–1 is an academic and research facility dedicated to practical instruction and experimental work in knitting and fabric production processes. The laboratory supports teaching, training, and applied research activities where students, faculty members, and staff engage with weaving machines, knitting machines and testing equipment. Given the operational nature of the facility, a structured Safety and Incident Management Plan is essential to ensure a safe working environment, minimize risks, and establish clear procedures for hazard prevention, emergency response, and incident reporting. The plan also supports compliance with institutional policies and accreditation requirements while promoting a culture of safety and continuous improvement in laboratory operations.

Objective

The objective of this Safety and Incident Management Plan is to ensure a safe, systematic, and controlled working environment in Fabric Manufacturing Laboratory–1. It aims to identify and minimize operational hazards, establish clear procedures for emergency response and incident reporting, and promote a strong culture of safety among all laboratory users. The plan also supports compliance with institutional policies and accreditation requirements by maintaining documented safety practices and continuous improvement in laboratory operations.

Laboratory Safety Rules

1. General Rules

- Wear PPE: Face mask and closed-toe shoes are mandatory.
- No unauthorized entry: Only authorized students and staffs are allowed in the lab.
- Keep distance from moving parts: The students should keep a safe distance from the moving parts of any machine.
- Keep workspace clean: The laboratory environment should be kept neat and clean by avoiding spattering fiber, yarn or fabric fragments over the floor.
- No Eating or Drinking: Food and drinks are strictly prohibited to avoid contamination.

2. Behavioral Rules

- Follow the instructions of the Lab Assistant/Attendant and Lab In-Charge.
- Do not operate any machine without prior training or permission.
- Always maintain a clean and organized workspace.

3. Machine-Specific Safety

Knitting machines:

Do not insert hands into the knitting area.

Ensure closing of the cage around fabric roller.

Use the emergency stop button if needed.

Keep hands and clothing clear of moving parts.

CCI miniature weaving set-up:

Stand clear of the moving reed.

Avoid contact with hot rollers.

Do not touch the moving drum.

Avoid loose clothing around moving parts.

Use gloves while handling chemicals.

Winding machine:

Do not touch the winding drum.

Avoid loose clothing around moving parts.

Stand clear of the moving driving belt.

2. Safety Procedures and Practices

1. Before Lab Sessions

- The Lab In-Charge ensures that all machines are inspected for proper functioning weekly.
- The Lab Assistant/Attendant confirms the availability of first aid supplies and functioning of emergency equipment (fire extinguishers, alarms).
- Conduct a safety briefing at the beginning of each semester for all students.

2. During Lab Sessions

- The Lab Assistant/Attendant supervises student activities to ensure adherence to safety practices.
- Lab In-Charge ensures that only authorized students operate machines and equipment.

3. After Lab Sessions

- Machines must be powered off and inspected for any signs of wear or malfunction.
- Waste materials and debris must be disposed of following safety protocols.

3. Provisions in Case of Accidents and Health Hazards

1. Emergency Equipment

- First Aid Kit: Stocked and accessible.
- Fire Safety Equipment: Includes fire extinguishers, inspected regularly by the Lab In-Charge.
- Emergency Shut-Off Switches: Clearly marked on all machines.

2. Emergency Response

- Minor Incidents:
 - First aid administered by the Lab Assistant/Attendant.
 - Incident documented in the Lab Incident Report Log.
- Major Incidents:
 - Immediate notification to the Lab In-Charge.
 - Activation of emergency services via the AUST Campus Safety Task Force.

3. Evacuation Procedures

- Follow AUST's established evacuation plan.
- The Lab In-Charge leads the evacuation, while the Lab Assistant/Attendant ensures no students are left behind.

4. Roles and Responsibilities

1. Lab In-Charge

- Supervise overall lab safety and compliance.
- Organize regular training sessions on lab safety and machine operation.
- Report emergencies to the Warden/Assistant Warden and ensure timely action.

2. Lab Assistant/Attendant

- Ensure day-to-day implementation of safety practices.
- Conduct safety checks before and after lab sessions.
- Assist in emergency response and first aid.

3. Students

- Follow all safety rules and procedures.
- Report any unsafe conditions or incidents immediately to the Lab Assistant/Attendant.

5. Documentation for Accreditation

1. Safety Rules and Procedures

- Maintain a written manual outlining all safety rules, to be distributed to students and faculty.

2. Incident Records

- Keep a Lab Incident Report Log for all reported incidents, including date, time, nature, and actions taken.

3. Inspection Logs

- Document machine inspections, safety equipment checks, and safety training sessions.

Conclusion

This plan is designed to ensure the safety and well-being of all individuals in the Fabric Manufacturing Lab 1, provides comprehensive provisions for managing incidents, and fulfills accreditation requirements. Regular monitoring and periodic updates to this plan will ensure continuous improvement in lab safety.