

LABORATORY EQUIPMENT MAINTENANCE

UNIT CODE: 1022 541 07A

TVET CDACC UNIT CODE: SLT/CU/SL/CR/02/5/MA

Duration of Unit: 80 Hours

Relationship to Occupational Standards

This unit addresses the unit of competency: Maintain laboratory equipment.

Unit Description

This unit of competency covers the ability of a laboratory technologist to perform pre-use checks on laboratory equipment, perform calibration checks on laboratory equipment and perform equipment cleaning.

Summary of Learning Outcomes

By the end of this unit, the learner should be able to:

S/No	Learning Outcomes	Duration (Hours)
1.	Perform pre-use checks on laboratory equipment	20
2.	Perform calibration checks on laboratory equipment	25
3.	Perform equipment cleaning	25
	Total	70

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Perform pre-use checks on laboratory equipment.	1.1 Parts of laboratory equipment 1.2 Functions of laboratory equipment	<ul style="list-style-type: none">• Practical Assessment• Project-Based Assessment• Portfolio of Evidence• Written Assessment

2. Perform calibration checks on laboratory equipment.	2.1 Calibration of laboratory equipment 2.2 Operation procedures of laboratory equipment	<ul style="list-style-type: none"> Practical Assessment Project-Based Assessment Portfolio of Evidence Written Assessment
3. Perform equipment cleaning.	3.1 Maintenance of laboratory equipment 3.1.1 Dusting and cleaning 3.1.2 Lubrication 3.1.3 Overhaul maintenance 3.1.4 Calibration	<ul style="list-style-type: none"> Practical Assessment Project-Based Assessment Portfolio of Evidence Written Assessment

Suggested Delivery Methods

- Practical
- Projects
- Demonstrations
- Group discussions
- Direct instruction

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specifications	Quantity	Recommended Ratio (Item: Trainee)
A Learning Materials				
1.	Power point presentations	For trainer's use	1	1:25
2.	Computer	For trainer's use	1	1:25
3.	Projector		1	1:25
4.	Standard manuals/SOPs	For trainer's use	1	1:25
5.	Flip charts	For trainer's use	1	1:25
6.	Stationeries	For trainee use	25	1:1
B Learning Facilities & infrastructure				
Lecture/theory room				
	Fully equipped science laboratory	For trainee use	1	1:25

	Lecture room	For trainee use	1	1:25
C	Consumable materials			
1.	Disinfectant	For trainee use	25	1:1
2.	Gloves	For trainee use	25	1:1
3.	Laboratory coats	For trainee use	25	1:1
4.	Face Masks	For trainee use	25	1:1
D	Tools and Equipment			
1.	Projector		1	1:25
2.	First aid kit	For trainee use	1	1:25
3.	Goggles	For trainee use	25	1:1
4.	Safety boots	For trainee use	25	1:1