

**REPUBLIC OF KENYA**

**COMPETENCY BASED MODULAR CURRICULUM**

**FOR**

**SHEEP SHEARING TECHNOLOGY**

**LEVEL 3**

**ISCED PROGRAMME CODE: 0811 254 A**

Copyright © 2025

All rights reserved. No part of this curriculum may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods without the prior written permission of the…………….., except in the case of brief quotations embodied in critical reviews and certain other non-commercial uses permitted by copyright law. For permission requests, write to …………………, at the address below:

# **FOREWORD**

The provision of quality education and training is fundamental to the Government’s overall strategy for social and economic development. Quality education and training contribute to the achievement of Kenya’s development blueprint and sustainable development goals.

Reforms in the education sector are necessary to achieve Kenya Vision 2030 and meet the provisions of the Constitution of Kenya 2010. The education sector had to be aligned to the Constitution, and this resulted in the formulation of the Policy Framework for Reforming Education and Training in Kenya (Sessional Paper No. 14 of 2012). A key feature of this policy is the radical change in the design and delivery of TVET training. This policy document requires that training in TVET be competency-based, curriculum development be industry-led, certification be based on demonstration of competence, and the mode of delivery allow for multiple entry and exit in TVET programmes.

These reforms demand that Industry takes a leading role in curriculum development to ensure the curriculum addresses its competence needs. It is against this background that this curriculum has been developed. For trainees to build their skills on foundational hands-on activities of the occupation, units of learning are grouped in modules. This has eliminated duplication of content and streamlined exemptions based on skills acquired as a trainee progresses in the up-skilling process, while at the same time allowing trainees to be employable in the shortest time possible through the acquisition of part qualifications.

It is my conviction that this curriculum will play a great role in developing competent human resources for the Agriculture Sector’s growth and development.

**PRINCIPAL SECRETARY**

**STATE DEPARTMENT FOR TVET**

**MINISTRY OF EDUCATION**

**PREFACE**

Kenya Vision 2030 aims to transform Kenya into a newly industrializing middle-income country, providing high-quality life to all its citizens by the year 2030. Kenya intends to create globally competitive and adaptive human resource base to meet the requirements of a rapidly industrializing economy through lifelong education and training. TVET has a responsibility to facilitate the process of inculcating knowledge, skills, and worker behaviour necessary for catapulting the nation to a globally competitive country, hence the paradigm shift to embrace Competency-Based Education and Training (CBET).

TVET Act, CAP 210A and Sessional Paper No. 1 of 2019 on Reforming Education and Training in Kenya for Sustainable Development emphasized the need to reform curriculum development, assessment, and certification. This called for a shift to CBET to address the mismatch between skills acquired through training and skills needed by industry, as well as increase the global competitiveness of the Kenyan labour force.

This curriculum has been developed in adherence to the Kenya National Qualifications Framework and CBETA standards and guidelines. The curriculum is designed and organized into Units of Learning with Learning Outcomes, suggested delivery methods, learning resources, and methods of assessing the trainee’s achievement. In addition, the units of learning have been grouped in modules to concretize the skills acquisition process and streamline upskilling.

I am grateful to all expert trainers and everyone who played a role in translating the Occupational Standards into this competency-based modular curriculum.

# **ACKNOWLEDGMENT**

This curriculum has been designed for competency-based training and has independent units of learning that allow the trainee flexibility in entry and exit. In developing the curriculum, significant involvement and support were received from expert trainers, institutions and organizations.

I recognize with appreciation the role of the Agriculture National Sector Skills Committee (NSSC) in ensuring that competencies required by the industry are addressed in the curriculum. I also thank all stakeholders in the Agriculture sector for their valuable input and everyone who participated in developing this curriculum.

I am convinced that this curriculum will go a long way in ensuring that individuals aspiring to work in the Agriculture Sector acquire competencies to perform their work more efficiently and effectively.

# TABLE OF CONTENTS

[FOREWORD iii](#_Toc196947635)

[ACKNOWLEDGMENT v](#_Toc196947636)

[TABLE OF CONTENTS vi](#_Toc196947637)

[ABBREVIATIONS AND ACRONYMS vii](#_Toc196947638)

[COURSE OVERVIEW ix](#_Toc196947639)

[PRE-SHEARING ACTIVITIES 1](#_Toc196947640)

[SHEEP SHEARING 6](#_Toc196947641)

[FLEECE MANAGEMENT 12](#_Toc196947642)

# **ABBREVIATIONS AND ACRONYMS**

|  |  |
| --- | --- |
| PPE | Personal Protective Equipment  |

TVET Technical, Vocational Education and Training

TVETA Technical and Vocational Education and Training Authority

 **KEY TO UNIT CODE**

**Sector / Industry**

**Sub Sector**

**Occupational Area**

**Version Control**

**Unit of Competence Number**

**ISCED level, Programme Orientation and Level of Completion**

xx

x

xxx

x

xx

x

# **COURSE OVERVIEW**

Sheep shearing Technology level 3 qualification consists of competencies required by an individual to conduct pre-shearing activities, perform sheep shearing and perform fleece management

The units of learning comprising Sheep Shearing Level 3 qualification include the following core competencies:

3 include:

**Core Units of Learning**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit Code** | **Unit Title** | **Duration in Hours** | **Credit Factors** |
| 0811 251 01 A | Pre-Shearing Activities | 80 | 8 |
| 0811 251 02 A | Sheep Shearing | 80 | 8 |
| 0811 251 03 A | Fleece Management | 80 | 8 |
|  | Industrial training | 240 | 24 |
| **Grand Total** | **480** | **48** |

**Entry Requirements**

An individual entering this course should have any of the following minimum requirements:

1. Kenya Certificate of Primary Education (KCPE),

or

1. Equivalent qualification as maybe determined by relevant regulatory body.

**Trainer qualification**

A trainer for any of the units of competency in this course must:

1. Have at least sheep shearing Technology level 5 or related level 5 certificate
2. Be registered by TVETA.

**Industry Training**

It is envisioned that a trainee will undergo 240 hours industrial training and assessment within a recognized sheep shearing industry as prerequisite for completion of this course. Industrial training maybe undertaken after completion of all units for those pursuing full qualification or be distributed equally in each unit for those pursuing part qualification. Incase of dual training model industrial training shall be as guided by dual training policy.

**Assessment**

The course shall be assessed formatively and summatively:

1. During formative assessment all performance criteria shall be assessed based on performance criteria weighting.
2. Number of formative assessments shall minimally be equal to the number of elements in a unit of competency
3. Assessment of basic and common competencies shall be integrated in the core units
4. Theoretical assessment shall be integrated in practical assessment and conducted orally in both formative and summative assessments.
5. Theoretical and practical weight shall be 10:90 respectively for each unit of learning.
6. Formative and summative assessments shall be weighted at 60% and 40% respectively in the overall unit of learning score
7. Assessment performance rating for each unit of competency shall be as follows:

|  |  |
| --- | --- |
| **MARKS**  | **COMPETENCE RATING** |
| 80 -100 | Attained Mastery |
| 65 - 79 | Proficient |
| 50 - 64 | Competent |
| 49 and below | Not Yet Competent |
| Y | Assessment Malpractice/irregularities |

1. Assessment for Recognition of Prior Learning (RPL) may lead to award of part and/or full qualification.

**Certification**

An individual will be issued with a Certificate of Competency upon demonstration of competence in a unit of competency. To attain Kenya National TVET Certificate in sheep shearing level 3, one must have demonstrated competence in all the units of competency as given in qualification pack. Statement of Attainment maybe awarded upon demonstration of competence in a certifiable element within a unit.

 This qualification shall be awarded by Qualification Awarding Institution

# **PRE-SHEARING ACTIVITIES**

**UNIT CODE**: **0811 251 01 A**

**UNIT DURATION**: 80 Hours

**Relationship to occupational standards**

This unit addresses the unit of competency: Conduct Pre-Shearing Activities

**UNIT DESCRIPTION**

This unit specifies competencies required to conduct pre-shearing activities. It involves activities such as, preparing shearing flock, preparing shearing structures and preparing shearing tools and equipment.

**Summary of learning outcomes**

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

|  |  |  |
| --- | --- | --- |
| **S/No** | **Learning Outcomes** | **Duration (Hours)** |
| 1.  | Prepare shearing flock | 20 |
| 2.  | Prepare shearing structures | 30 |
| 3. | Prepare shearing tools and equipment  | 30 |
| **Total** | **80** |

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcomes** | **Content** | **Suggested Assessment Methods** |
| 1. Prepare shearing flock.
 | * 1. Shearing flock selection
		1. Age
		2. Health
		3. Fibre length
	2. Shearing flock sorting
		1. Common Wool Sheep Breeds
			1. Merino
			2. Corriedale
			3. Romney marsh
			4. Hampshire down
			5. Suffolk
			6. Dorper
			7. Red Maasai
			8. Black Headed Persian
		2. Sex
		3. Health status
	3. Shearing flock management-Conditions
		1. Dry shed housing
		2. Protection from rain and humidity
		3. Grazing in clean field
 | * Practical
* Portfolio of evidence
* Project
* Oral assessment
* Third party report
* Written tests
 |
| 1. Prepare shearing structures.
 | * 1. Types of Shearing structures
		1. Shearing sheds
		2. Holding pen
		3. Sheep manipulator
		4. Modular Sheep delivery unit
		5. Shearing benches
		6. Wool inspection tables
		7. Wool grading tables
		8. Wool store
	2. Repair and maintenance practices of shearing structures
		1. Leaking roofs
		2. Broken fences
		3. Broken benches and tables
		4. Worn out floors
		5. Electrical installation
	3. Cleaning and sanitation of shearing structures
		1. Sweeping
		2. Scrubbing
		3. Rinsing
		4. Disinfection
 | * Practical’s
* Portfolio of evidence
* Project
* Oral assessment
* Third party report
* Written tests
 |
| 3. Prepare shearing tools and equipment. | * 1. Identification of tools, equipment and materials
		1. Tools
			1. Shears
			2. Sharpening stone
			3. Combs
			4. Brush
			5. Clippers
		2. Equipment
			1. Grinder
			2. Electric shear
			3. Electric wool trimmers
			4. PPEs
			5. First aid kit
			6. Wool press
			7. Weighing scale
		3. Materials
			1. Oil
			2. Grease
			3. Wool bags
			4. Antiseptics
			5. Manila ropes
			6. Hooks
			7. Scabbard

3.2 Assessment of the condition of tools, equipment and materials* + 1. Sharpness of cutting edges
		2. Gauge accuracy
	1. Maintenance of tools and equipment
		1. Sharpening
		2. Cleaning
		3. Greasing
		4. Oiling
		5. Adjustment of screws, bolts and nuts
		6. Painting
	2. Setting and calibration of shearing tools and equipment
		1. Parts of electrical shearer
		2. Setting of electrical shearers
 | * Practical
* Portfolio of evidence
* Project
* Oral assessment
* Third party report
* Written tests
 |

**Suggested Methods of Instruction**

* Practical
* Demonstration
* Direct instruction
* Group discussion

**Recommended Resources for 25 Trainees**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/No.** | **Category/Item** | **Description/ Specifications** | **Quantity** | **Recommended Ratio**(Item: Trainee) |
| **A** | **Learning Materials**  |  |  |  |
| 1. | Textbooks |  | 5 pcs | 1:5 |
| 2. | Manuals | Livestock Production manuals |  |  |
| 3. | Guide to Shearing |  |  |  |
| 4. | Power point presentations | For trainer’s use |  |  |
| **B** | **Learning Facilities & infrastructure** |  |  |  |
| 6. | Lecture/theory room |  | 1 | 1:25 |
| 7. | Sheep farm | Demonstration Sheep Farm | 1 | 1:25 |
| **C** | **Consumable materials** |  |  |  |
| 8. | Antiseptics |  |  | 1:5 |
| 9. | First aid kit |  | 25 pcs | 1:1 |
|  | Stationeries |  |  |  |
|  | Wool basket |  | 5 pcs | 1:5 |
| **D** | **Tools and Equipment** |  |  |  |
|  12 | Sheep shearing tool box |  | 5 pcs | 1:5 |
| 13 | Electrical shearing machine |  | 5 pcs | 1:5 |
| 14 | Cutter blades  |  | 5 pcs | 1:5 |
| 15 | Shearing scissors |  | 25 pcs | 1:1 |
|  | Oil pot and shearing oil |  | 5 pcs | 1:5 |
|  | Combs |  | 5 pcs | 1:5 |
|  | Sharpening stone |  | 25 pcs | 1:1 |
|  | Sharpening files |  | 5 pcs | 1:5 |
|  | Wool clipper |  | 25 pcs | 1:1 |
|  | Scabbard |  | 25 pcs | 1:1 |
|  | Weighing scale |  | 5 pcs | 1:5 |
|  | Screw driver |  | 25 pcs | 1:1 |
|  | PPEs |  | 25 sets | 1:1 |
|  | Dummy sheep |  | 5 pcs | 1:5 |

## **SHEEP SHEARING**

**UNIT CODE: 0811 251 02 A**

**Relationship to Occupational Standards**

This unit addresses the unit of competency: Perform Sheep Shearing

**Duration of Unit:** 80 hours

**Unit Description**

This unit describes the competencies required by a sheep shearer to perform shearing. It involves conducting sheep handling, conducting shearing and post shearing practices.

**Summary of Learning Outcomes**

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

|  |  |  |
| --- | --- | --- |
| **S/No** | **Learning Outcomes** | **Duration (Hours)** |
| 1.  | Conduct sheep handling | 20 |
| 2.  | Conduct shearing  | 30 |
| 3. | Conduct post shearing practices | 30 |
| **Total** | **80** |

**Learning Outcomes, Content and Suggested Assessment Methods**

| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| --- | --- | --- |
| 1.Conduct sheep handling | * 1. Welfare issues in sheep handling

1.1.1 Safe handling procedures* 1. Catching of shearing sheep
		1. Use of catching pen
		2. Safe body parts in sheep catching
	2. Dragging of sheep
		1. Factors to consider when dragging
		2. Dragging forces
		3. Risks involved
		4. Technologies used
			1. Sheep manipulator
			2. Modular sheep delivery unit
	3. Restraining and positioning of sheep
 | * Practical
* Portfolio of evidence
* Project
* Oral assessment
* Third party report

Written tests |
| 2.Conduct shearing  | * 1. Personal Protective Equipment
		1. Overall
		2. Gloves
		3. Safety boots
		4. Googles
		5. Nose masks
	2. Sheep Shearing
		1. Reasons for shearing sheep
		2. Pillars of shearing
			1. Gear and cut
			2. Position
			3. Freehand
			4. Grip
			5. Entry
		3. Types of shearing
			1. Full body shearing
			2. Eye wigging (face shearing)
			3. Belly shearing
			4. Ringing
			5. Crutching
		4. Sheep shearing process
			1. Start with the belly
			2. Control the sheep
			3. Use a positive hand
			4. Have a good wrist
			5. Return quickly
			6. develop a rhythm
			7. Shear to a pattern
			8. Angle blows
			9. Use the left hand to guide
		5. The Bowen Method
			1. Removing the belly wool
			2. Shearing the crotch
			3. Shearing the first leg
			4. Undermine
			5. Top knot
			6. Neck and back of head
			7. First shoulder
			8. Right cheek
			9. Second shoulder
			10. Last side
			11. Shearing belly on a ram
	3. Sheep inspection, factors to consider

 2.3.1 Shearing injuries 2.3.2 Skin condition (Skin diseases) 2.2.3 Parasites affecting skin* 1. Sheep release
		1. Sheep release procedures
		2. Conditions for holding shorn sheep
	2. Sheep shearing inspection reporting
 | * Practical
* Portfolio of evidence
* Project
* Oral assessment
* Third party report
* Written tests
 |
| 3. Conduct post shearing practices | * 1. Cleaning of shearing structures
		1. Sweeping
		2. Scrubbing
		3. Rinsing
		4. Disinfection
	2. Maintenance of shearing tools and equipment
		1. Sharpening
		2. Cleaning
		3. Greasing
		4. Oiling
		5. Adjustments of screws, bolts and nuts
		6. Painting
		7. Replacing worn out parts
	3. Storing of tools and equipment
		1. Tool and equipment inventory
		2. Tools and Equipment storage structures
	4. Waste disposal
		1. Types of waste
		2. Waste handling and disposal methods
 | * Practical
* Portfolio of evidence
* Project
* Oral assessment
* Third party report
	+ Written tests
 |

**Suggested Methods of Delivery**

* Practical
* Demonstration
* Direct instruction
* Group discussion

**Recommended Resources for 25 trainees**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/No.** | **Category/Item** | **Description/ Specifications** | **Quantity** | **Recommended Ratio**(Item: Trainee) |
| **A** | **Learning Materials**  |  |  |  |
| 1. | Textbooks |  | 5 pcs | 1:5 |
| 2. | Manuals | Livestock Production manuals |  |  |
| 3. | Guide to Shearing |  |  |  |
| 4. | PowerPoint presentations | For trainer’s use |  |  |
| **B** | **Learning Facilities & infrastructure** |  |  |  |
| 5. | Lecture/theory room |  | 1 | 1:25 |
|  | Demo sheep farm | With wool sheep and shearing structures | 1 | 1:25 |
| **C** | **Consumable materials** |  |  |  |
| 7. | Antiseptics |  |  | 1:5 |
| 8. | First aid kit |  | 25 pcs | 1:1 |
| 9. | Stationeries |  |  |  |
| **D** | **Tools and Equipment** |  |  |  |
| 10 | Electrical shearing machine |  | 5 pcs | 1:5 |
| 11 | Shears |  | 25 pcs | 1:1 |
| 12 | Sharpening stone |  | 25 pcs | 1:1 |
| 13 | Wool clipper |  | 25 pcs | 1:1 |
| 14 | Scabbard |  | 25 pcs | 1:1 |
| 15 | Screw driver |  | 25 pcs | 1:1 |
| 16 | PPEs |  | 25 sets | 1:1 |
| 17 | Dummy sheep |  | 5 pcs | 1:5 |

## **FLEECE MANAGEMENT**

**UNIT CODE: 0811 251 03 A**

**UNIT DURATION:** 80 Hours

**Relationship to Occupational Standards**

This unit addresses the Unit of Competency: Perform Fleece Management

**Unit Description**

This unit describes the competencies required by a sheep shearer to perform fleece management. It involves conducting fleece collection, grading and packing

**Summary of Learning Outcomes**

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

|  |  |  |
| --- | --- | --- |
| **S/No** | **Learning Outcomes** | **Duration (Hours)** |
| 1.  | Conduct fleece collection | 20 |
| 2.  | Conduct fleece grading | 30 |
| 3. | Conduct fleece packing  | 30 |
| **Total** | **80** |

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcomes** | **Content** | **Suggested Assessment Methods** |
| * + - 1. To conduct Fleece collection
 | * 1. Personal protective equipment
		1. Face mask
		2. Goggles
		3. Gloves
		4. Safety boots
		5. Overall
		6. Hat or Hair net
	2. Fleece sorting
		1. By breeds
			1. Merino
			2. Corriedale
			3. Romney marsh
			4. Hampshire down
			5. Suffolk
			6. Dorper
			7. Red Maasai
			8. Black head Persia
		2. By sex
			1. Rams
			2. Ewes
		3. By age
		4. By body part
			1. Belly and leg wool
	3. Fleece weighing and recording
	4. Waste disposal
 | * practical’s
* Portfolio of evidence
* Project
* Oral assessment
* Third party report
* Written tests
 |
| * + - 1. To conduct Fleece grading
 | 1. Personal protective equipment
	* 1. Face mask
		2. Goggles
		3. Gloves
		4. Safety boots
		5. Overall
		6. Hat or Hair net
2. Fleece grading
	* 1. Fleece grading Methods
			1. British wool
			2. Micron system
			3. Numerical count system
			4. Blood system
		2. Fleece grading parameters
			1. Fibre length
			2. True to breed type
			3. Volume
			4. Colour
			5. Cleanliness
			6. Tensile strength
			7. Lustre
		3. Fleece grading equipment
			1. Grading tables
			2. Skirting tables
		4. Grading procedure
3. Fleece Weighing- requirements
	* 1. Weighing equipment
		2. Wool pressing machine
		3. Hooks
4. Waste disposal
	* 1. 3Rs (Reduce, Recycle and Reuse)
		2. Composting
		3. Mulching
		4. Landfill
		5. Incineration
5. Record keeping
	* 1. Fleece production record
 | * Practicals
* Portfolio of evidence
* Project
* Oral assessment
* Third party report
* Written tests
 |
| * + - 1. To conduct Fleece packing
 | 1. Packaging materials and equipment
	* 1. Packaging materials
			1. Styrofoam-packaging boxes
			2. Woven baskets
			3. Ropes
			4. Airtight plastic bags
		2. Packaging equipment
			1. Bagging machine
			2. Wool press
		3. Labelling
			1. Labelling criteria
2. Fleece packaging
3. Storage of fleece
	* 1. Fleece Storage conditions
			1. Ventilation
			2. Moisture/Humidity levels
			3. Lighting
			4. Pest status
		2. Storage facilities
			1. Open shelves
			2. Jute (burlap) bags
			3. Stores
			4. Airtight containers
		3. Fleece Stacking
 | * Practicals
* Portfolio of evidence
* Project
* Oral assessment
* Third party report
* Written tests
 |

**Suggested Methods of Instruction**

* Practical’s
* Demonstration
* Direct instruction
* Group discussion

**Recommended Resources for 25 Trainees**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S/No.** | **Category/Item** | **Description/ Specifications** | **Quantity** | **Recommended Ratio**(Item: Trainee) |
| **A** | **Learning Materials**  |  |  |  |
| 1.  | Textbooks |  | 5 pcs | 1:5 |
|  | Manuals | Livestock Production manuals | 1pc | 1:25 |
|  | Guide  | Guide to Shearing | 1pc | 1:25 |
|  | Power point presentations | For trainer’s use |  |  |
| **B** | **Learning Facilities & infrastructure** |  |  |  |
|  | Lecture/theory room |  | 1 | 1:25 |
|  | Demo sheep farm | With wool sheep, shearing and grading structures | 1 | 1:25 |
| **C** | **Consumable materials** |  |  |  |
|  | First aid kit |  | 25 pcs | 1:1 |
|  | Stationeries |  |  |  |
| **D** | **Tools and Equipment** |  |  |  |
| 9. | Woven baskets |  | 5 pcs | 1:5 |
| 10. | Shears |  | 25 pcs | 1:1 |
| 11. | Weighing balance |  | 5 pcs | 1:5 |
| 12. | Sorting and grading tables |  | 10 pcs | 2:5 |
| 13. | Sharpening stone |  | 25 pcs | 1:1 |
| 14. | Wool clipper |  | 25 pcs | 1:1 |
| 15. | Screw driver |  | 25 pcs | 1:1 |
| 16. | PPEs |  | 25 sets | 1:1 |