



MIXED FARMING SKILLS DEVELOPMENT COURSE

COURSE OVERVIEW:

This course provides learners the opportunity to gain an understanding of Mixed Farming Systems (Plant- and Animal Production). This will allow learners to become economically active in farming practices that will have a direct impact on Local Economic Development through the production of food, the improvement of household food security and access to mainstream agriculture.

Unit Standard 116172: Apply elementary farm layout and infrastructure When you have achieved this unit standard, you will be able to:

- Apply basic physical farm layout tasks, including the construction of infrastructure for the specific farm system, environment and enterprise.
- Recognise veld, planted pasture and arable land, and understand the need to fence vegetation types separately.
- The animal life, the impact of farm animals and humans are recognized and the need for the conservation of related natural resources in the layout of the farm is understood.
- The need to plan the farm and infrastructure to limit the impact on natural resources and ensure sustainable resources use are recognized.
- Construct prevention structures and elementary infrastructure as planned for farm layout.

Learning Outcomes

At the end of this learning module, you must be able to demonstrate a basic knowledge and understanding of:

- Sustainable land-use practices and soil erosion prevention measures
- Infrastructure applications and soil erosion prevention measures that are fully functional and those that have minor faults, and
- Reporting procedures.
- Minor repairs to infrastructure applications.
- Soil erosion prevention measures.

Unit Standard 116206: Fertilize soil and attend to basic plant nutrition When you have achieved this unit standard, you will:

- Be able to apply soil nutrient preparations in a safe, effective and responsible

SAQA ID	NAME OF UNIT STANDARD	NQF LEVEL	CREDITS
116172	Apply elementary farm layout and infrastructure	1	2
116206	Fertilize soil and attend to basic plant nutrition	1	5
116201	Harvest agricultural crops	1	5
116202/116168	Maintain basic water quality & Irrigation Systems	1	2/1
116197	Observe and handle animals	1	5
116198	Harvest animal products	1	5
116157	Demonstrate an understanding of the basic concepts of sustainable farming systems	1	4
TOTAL CREDITS			29

manner to the benefit of plant/crop growth.

- Gain specific knowledge and skills in soil fertilization and plant nutrition and will be able to operate in a plant production environment implementing sustainable and economically viable production principles.
- Be capacitated to gain access to the mainstream agricultural sector, in plant production, impacting directly on the sustainability of the sub-sector. The improvement in production technology will also have a direct impact on the improvement of agricultural productivity of the sector.

Learning Outcomes

When you have achieved this unit standard you must be able to:

- Use specific types of nutrient substances.
- Work within identified safety standards.
- Measure accurately.
- Apply specified substances.
- Have a basic understanding of soil profiles, structure and texture, about the physical components of soil, the biological components of soil, how soil is formed, how nutrients are absorbed by plants.
- Know how to conduct simple soil tests and observations in order to make basic soil assessments based on texture, colour, vegetative cover, and smell.
- Know how seeds germinate and what kind of environment is needed to achieve maximum and effective germination and early root growth.
- Know what tools to achieve with which soil preparation results.
- Know the difference between wanted and unwanted vegetation

Unit Standard 116201: Harvest agricultural crops When you have achieved this unit standard, you will be able to:

- Harvest crops according to basic procedures making use of basic harvesting tools.
- Gain specific knowledge and skills in harvesting techniques.
- Operate in a plant production environment implementing sustainable and economically viable production principles.

Learning Outcomes

At the end of this learning module, you must be able to demonstrate a basic knowledge and understanding of:

- The principles of harvesting a crop.
- Names and functions of tools and materials for the harvesting process.
- Safe handling procedures of tools and materials utilized.
- The various harvesting methods.
- Plant physiology and anatomy required for the harvesting of different crops.

PRICE: R10 200.00 PER LEARNER EXCL. VAT

DATES:

Limpopo	15th - 19th April 2024
Johannesburg	22nd - 26th July 2024
KwaZulu Natal	12th - 16th August 2024
Cape Town	7th - 11th October 2024



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- Importance of harvesting area being clean from waste material.
- Occupational Health and Safety and other applicable legislation.
- Use of sensory cues to show harvest readiness.

Unit Standard 116202/116168: Maintain basic water quality & Irrigation Systems

When you have achieved this unit standard, you will be able to:

- Carry out basic irrigation system and equipment maintenance; operate an irrigation system according to set procedures; identify the basic factors affecting crop growth under irrigation.
- Gain specific knowledge and skills in plant production and will be able to operate in a plant production environment implementing sustainable and economically viable production principles.
- Be capacitated to gain access to the mainstream agricultural sector, in plant production, impacting directly on the sustainability of the sub-sector. The improvement in production technology will also have a direct impact on the improvement of agricultural productivity of the sector.
- Observe and maintain basic water quality.
- Work with the technical systems that control certain quality factors in water.
- Sample and observe water quality.
- Perform maintenance tasks on certain operational technical systems.
- Handle systems to maintain water quality.
- Record basic observations and applications regarding water quality

Learning Outcomes

When you have achieved this unit standard, you will have a basic knowledge and understanding of:

- Names and functions of tools and equipment used during irrigation.
- Function of protective clothing.
- Attributes of basic parts of the implemented irrigation system e.g. nozzles, quick coupling pipes, etc.
- Sensory cues such as visual perceptions of dry and wet spots, too high/low pressure, etc.
- Purpose of irrigation Implications of defective irrigation systems.
- Implications of not reporting non-conformance of irrigation systems.
- The names and terms related to water quality.
- Attributes and properties of water related to its quality.
- Sensory cues related to water quality and water quality maintenance systems.
- The purpose of sampling water and maintaining water quality.
- Implications related to water quality on the operation.
- Rules related to the sampling of water quality measurements.
- Recording techniques.
- Basic reporting skills.

Unit Standard 116197: Observe and handle animals **When you have achieved this unit standard, you will be able to:**

- Observe, record and report behaviour and physical attributes.
- Evaluate animal behaviour and attributes regarding abnormalities.
- Move animals to and into a holding facility.
- Restrain animals in a restraint facility.

Learning Outcomes

When you have achieved this unit standard, you will have a basic knowledge and understanding of:

- The names and functions of the various animals.
- Diseases and abnormalities.
- Symptoms relating to animal health.
- Rules and codes of conduct relating to the movement, handling and observation of animals.
- The ability to handle animals confidently, safely and humanely.

- Recording procedure as well as simple report writing skills.
- Animal retention infrastructure control and maintenance skills.

Unit Standard 116198: Harvest animal products **When you have achieved this unit standard, you will be able to:**

- Understand and identify the readiness of animal products for harvesting and explain the procedure for harvesting of specific products.
- Understand and describe the origin of animal products for harvesting and use.
- Understand and describe the indicators and their status used to describe the readiness of the animal products for harvesting.
- Understand and describe the names, identification and potential of various animal products to be harvested.
- Describe and demonstrate correct procedures for the harvesting of specific animal products.

Learning Outcomes

When you have achieved this unit standard, you will have a basic knowledge and understanding of:-

- Animals that produce animal products to be harvested.
- The origin of animal products.
- The using of animal products for the benefit of both animals and man.
- Sensory observation and evaluation of animals and their products and their readiness for harvesting.
- Observation of animal production cycles over time.
- Animal classification, nomenclature and common name terms.
- The purpose of learning about animal production and products.

Unit Standard 116157: Demonstrate an understanding of the basic concepts of sustainable farming systems

When you have achieved this unit standard, you will:

- Be able to recognize the basic concepts of sustainable farming practices and be able to perform basic tasks in applying sustainable farming practices.
- Be well positioned to extend your learning and practice into other areas of natural resource use and farming systems.
- Understand the environmental context of sustainable agricultural production.

Learning Outcomes

You must be able to demonstrate a basic knowledge of:

- Basic concepts of sustainable farming systems,
- Basic environmental patterns and processes.
- Elementary comprehension of farming systems and designs.
- Measurable indicators of sustainability,
- Local veld types and the importance of the carrying capacity of local veld types.
- Local weather and climate and basic local ecosystems.
- Importance of biodiversity in local farming systems.
- Basic input sources, markets (local and other) and income sources on a farm.
- Needs and aspirations of local communities.
- Social, economic and ecological indicators.

Terms and Conditions

- No restriction on who may attend
- Notes are provided with content in English
- The lectures are presented English
- Course fees do not include accommodation and transportation, an additional cost to transport learners to and from the practical training on farms will be charged.
- Course fees included lunch packs.
- This is a theoretical course with a practical session included
- Please make sure you are there by 8h30 for registration
- Bring along your pen and notebook, overall and gumboots for the practical is required

