

No. 550

10 June 2005



Established in terms of Act 58 of 1995

SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with regulation 24(c) of the Standard Generating Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Ornamental Horticulture and Landscape

publishes the following qualifications and unit standards for public comment.

This notice contains the titles, fields, subfields, **NQF** levels, credits, and purpose of the qualifications and unit standards upon which qualifications are based. The full qualification and unit standards can be accessed via the SAQA web site at www.saqqa.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, Hatfield Forum, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the unit standards should reach SAQA at the address **below** and **no later than 11 July 2005**. All correspondence should be marked **Standards Setting – SGB for Ornamental Horticulture and Landscape** and addressed to

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DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:

SAQA QUAL ID	QUALIFICATION TITLE		
49668	General Education and Training Certificate: Horticulture		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
QUAL TYPE	FIELD	SUBFIELD	
National certificate	Agriculture and Nature Conservation	Horticulture	
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUALIFICATION CLASS
Undefined	131	Level 1	Regular-Unit Stds Based

PURPOSE AND RATIONALE OF THE QUALIFICATION

Purpose:

This qualification provides learners with a firm foundation of portable skills with which to enter the horticultural industry in its broadest sense, or if already employed in the industry, be able to look forward to a career path in any sector of the industry.

A learner achieving this qualification will be able to work effectively and productively within the field of horticulture knowing:

- > The basic differences between the various plants.
- > How plants are categorized.
- > How to prepare the soil for planting.
- > How to grow, handle and care for plants.
- > How to apply water to planted areas correctly.

The principles of health and safety are embedded in all the learning aspects of the qualification.

The qualification addresses an urgent industry needs to skill its workforce, to produce and maintain high quality plants and landscapes.

One of the first impressions that a tourist has of a country, is the beauty of its parks, gardens and sports facilities. This qualification aims to introduce and consolidate world class standards of horticultural excellence to enhance South Africa as a tourist destination. The resultant spin-offs will have a positive impact on job creation and economic empowerment in the country.

Rationale:

This qualification is aimed at those people with limited formal education. It represents a strategic development in the career and learning pathway of individuals, both from a vocational point of view, as well as from a learning point of view.

For those wishing to enter the industry, whether they are unemployed or as an Entrepreneur, this qualification offers a solid foundation of all aspects in the horticultural industry including:

- > Landscape construction and maintenance
- > Amenity horticulture
- > Sportsturf
- > Arboriculture
- > Plant propagation
- > interior plantscaping
- > Retail nurseries

> Floristry

As the core is generic to all the above sectors of the horticultural industry, the qualification embodies the principle of portability and forms the base for any future learning. Accordingly, this will facilitate the employment of learners within the industry.

This qualification addresses both the current and future needs of horticulture in South Africa. The qualification is accessible to the learner, in both the urban and rural environs. The varied scope illustrates the multiple vocations that are available.

RECOGNIZE PREVIOUS LEARNING?

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LEARNING ASSUMED TO BE IN PLACE

The industry will encourage potential Learners to embark on this qualification as it has universal relevance to the industry and is nationally recognized. Learners who would like to access this qualification should have demonstrated competency in Communication and Numeracy at ABET Level 3.

Recognition of prior learning

The qualification may be achieved in part or as a whole through the Recognition of Prior Learning.

QUALIFICATION RULES

This qualification consists of a minimum of 131 credits, composed of

- > Fundamental: 41
- > Core: 65
- > Electives: 25

EXIT LEVEL OUTCOMES

1. Apply the principles of health and safety in the horticultural environment.
2. Understand the structure of plants and the functions of their various components.
3. Demonstrate an understanding of the necessity of water for plant growth.
4. Describe the amount of water to be applied at the most suitable frequency to ensure the healthy growth and development of plants.
5. Identify the soil types that commonly occur in landscaped areas.
6. Propagate ornamental plants from seed.
7. Conduct the care of ornamental seedlings.
8. Plant and establish ornamental plants from containers into open ground.
9. Mulch and enrich the soil in established landscapes.

ASSOCIATED ASSESSMENT CRITERIA

1.
 - > The provisions of the health and safety act, as they relate to horticulture are described.
 - > The duties and responsibilities of employers and employees to provide and maintain a safe working environment are explained.
2.
 - > The role of the leaf in the structure and growth of a plant is explained.
 - > The functions of the roots and stems, in the structure and development of a plant are described.
 - > The role that the flower has in the reproductive process of a plant is explained.
3.
 - > The necessity of water for the growth and development of plants is described.
 - > The factors that affect the water requirements of plants are described.
 - > The importance of watering seedlings and newly transplanted material is explained.
- 4.

- > The ideal times and rates of application for watering are described.
 - > The scheduling of watering to meet the seasonal and climatic conditions are explained.
- 5.
- > The classifications of topsoil and subsoil are explained.
 - > The various soil types are described.
 - > The necessity of tilling and enriching the soil before planting is explained.
- 6.
- > The preparation of the seed bed and the manual sowing of seed are demonstrated.
 - > The monitoring and controlling of the germination environment is described.
- 7.
- > The maintenance and 'growing on' of seedlings is described.
 - > The 'pricking out' of seedlings and the cultural care, prior to the transplanting stage is described.
- 8.
- > The procedures for the preparation and planting of ornamentals are described.
 - > The backfilling, firming and leveling of the soil is described.
 - > The initial care that the plants require is explained.
 - > The procedures for the preparation and planting of annual is described.
- 9.
- > The materials used in mulching and the benefits derived are described.
 - > The role that organic material plays in soil enrichment is explained.
 - > The function of chemical fertilizers in soil enrichment of established plantings is explained.

Integrated assessment:

The integrated assessment allows the Learners the opportunity to show that they are able to utilize concepts, ideas and actions across unit standards. This will allow Learners to achieve competency that is in keeping with the purpose of the qualification.

An integrated assessment will indicate how theoretical learning is demonstrated in a practical environment in such a way that the application of the work learnt becomes second nature.

In conducting an assessment, the quality of the performance must also be evaluated i.e. both the performance and the thinking behind the action must be qualitative.

The assessment should include both formative and summative options and should use various assessment tools i.e. not by observation only. It is suggested that a Portfolio of Assessment form part of the summative assessment, with practical outcomes being demonstrated in a simulated or real work place situation.

A broad range of task-orientated and theoretical tools may be used, with the distinction between practical knowledge and disciplinary knowledge being maintained.

Unit Standards in the qualification must be used to assess the specific and Critical Cross Field Outcomes. It is recommended that the assessment tools give Learners the opportunity to account for their decision-making and problem solving in line with the Specific Outcomes and related Assessment Criteria.

As a result of this qualification being generic in forming the foundation for a career in horticulture, Learners should be assessed in occupational contexts and activities. The assessment should ensure that the foundational skills are portable and prepare them for further learning, whatever career path they may choose.

INTERNATIONAL COMPARABILITY

Comparisons of the unit standards from the United Kingdom, Australia and New Zealand, indicate similarities in general horticultural practices. However, given the climatic conditions relative to the countries from which the comparisons were done, deviations in content are unavoidable.

The qualifications in these countries begin at level 2. Accordingly, South Africa will be 'breaking new ground' with the advent of a level 1 qualification.

Examples of comparable qualifications from the United Kingdom include :
Amenity horticulture: L2 reference 100 / 2393 / 8

Production horticulture: L2 reference 100 12392 / 6
 Certificate in horticulture: L2 reference 100 14284 / 2
 Certificate in gardening: L2 reference 100 14231 / 3

ARTICULATION OPTIONS

The generic nature of this qualification and the focus on multi-skilling, will allow articulation within the horticultural industry sectors of :

Amenity Horticulture, Landscaping, Interior Plantscaping, Garden Design, Sports, Turf, Arboriculture, Floristry, Floriculture, Plant Propagation, Retail Nurseries and Landscape Irrigation.

As the basics of Agriculture and horticulture are parallel, articulation in the fields of Agronomy, Fruit and Vegetable Production, Nature Conservation and Forestry are possible.

MODERATION OPTIONS

Anyone assessing a learner against these unit standards must be registered as an assessor with the relevant ETQA and have experience or in depth knowledge of the horticultural industry.

Any institution offering learning that will enable achievement of these unit standards or will assess these unit standards must be accredited as a provider with the relevant ETQA. Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines in the qualification and the agreed ETQA procedure.

Therefore anyone wishing to be assessed against these unit standards may apply to be assessed by any assessment agency, assessor or provider institution which is accredited by the relevant ETQA.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

Assessors must:

- > Be accredited as an assessor by the relevant ETQA.
- > Have experience or in depth knowledge of the horticultural industry, specifically as it relates to ornamental aspects.
- > Meet any other requirements that may be stipulated by the relevant ETQA.
- > Hold a qualification in Horticulture or Agriculture at NQF Level 2 or higher.

NOTES

N/A

UNIT STANDARDS

(Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	119686 Cares for ornamental seedlings	Level 1	4	Draft - Prep for P Comment
core	119687 Demonstrate a basic understanding of the horticultural industry	Level 1	2	Draft - Prep for P Comment
core	119689 Identify the major categories of ornamental plants	Level 1	6	Draft - Prep for P Comment
core	119694 Control weeds manually in plant propagation and landscaping	Level 1	4	Draft - Prep for P Comment
core	119695 Apply fertilizers to ornamental plants and landscapes	Level 1	3	Draft - Prep for P Comment
core	119696 Identify and prepare soils for landscaped planting	Level 1	4	Draft - Prep for P Comment
core	119697 Mow lawns in landscaped areas	Level 1	3	Draft - Prep for P Comment
core	119698 Utilise growth media for ornamental plant containers	Level 1	3	Draft - Prep for P Comment
core	119702 Apply water to landscaped areas	Level 1	3	Draft - Prep for P Comment
core	119703 Mulch and enrich the soil of established landscaped areas	Level 1	5	Draft - Prep for P Comment
Core	119704 Propagate ornamental plants from seed	Level 1	5	Draft - Prep for P Comment
Core	119706 Plant and establish ornamental plants from containers into open ground	Level 1	5	Draft - Prep for P Comment
core	119707 Apply health and safety principles in horticulture	Level 1	3	Draft - Prep for P Comment

core	119708 Identify and report common pests and diseases in plant propagation and landscapes	Level 1	4	Draft - Prep for P Comment
core	119710 Prune and shape ornamental shrubs	Level 1	4	Draft - Prep for P Comment
core	119711 Demonstrate an understanding of the basic structure of ornamental plants	Level 1	4	Draft - Prep for P Comment
core	119714 Demonstrate an understanding of the role and requirements of water in plants	Level 1	3	Draft - Prep for P Comment
Elective	119688 Maintain optimal environmental conditions for floristry arrangements	Level 2	5	Draft - Prep for P Comment
Elective	119690 Establish an area of turf with grass sods	Level 2	6	Draft - Prep for P Comment
Elective	119691 Backfill compact and replant grass sods and plants in irrigation trenches	Level 2	5	Draft - Prep for P Comment
Elective	119692 Apply basic tree climbing principles	Level 2	6	Draft - Prep for P Comment
Elective	119693 Treat floristry plant material	Level 2	7	Draft - Prep for P Comment
Elective	119699 Excavate irrigation trenches in established landscapes	Level 2	5	Draft - Prep for P Comment
Elective	119700 Install irrigation piping in trenches	Level 2	10	Draft - Prep for P Comment
Elective	119701 Create an awareness of environmental protection	Level 2	4	Draft - Prep for P Comment
Elective	119705 Handle floristry plant material	Level 2	5	Draft - Prep for P Comment
Elective	119709 Maintain and conserve the flora in nature areas	Level 2	5	Draft - Prep for P Comment
Fundamental	7447 Working with numbers in various contexts	Level 1	6	Reregistered
Fundamental	7449 Critically analyse how mathematics is used in social, political and economic relations	Level 1	2	Reregistered
Fundamental	7451 Collect, analyse, use and communicate numerical data	Level 1	2	Reregistered
Fundamental	7461 Use maps to access and communicate information concerning routes, location and direction	Level 1	1	Reregistered
Fundamental	7463 Describe and represent objects and the environment in terms of shape, space, time and motion	Level 1	2	Reregistered
Fundamental	7464 Analyse cultural products and processes as representations of shape, space and time	Level 1	2	Reregistered
Fundamental	12203 Demonstrate knowledge of issues relating to HIV and AIDS	Level 1	2	Registered
Fundamental	12462 Engage in a range of speaking and listening interactions for a variety of purposes	Level 1	6	Registered
Fundamental	12469 Read and respond to a range of text types	Level 1	6	Registered
Fundamental	12470 Write for a variety of different purposes	Level 1	6	Registered
Fundamental	12471 Explore and use a variety of strategies to learn (revised)	Level 1	5	Registered
Fundamental	14084 Demonstrate an understanding of and use the numbering system	Level 1	1	Registered



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:**Apply fertilizers to ornamental plants and landscapes**

SAQA US ID	UNIT STANDARD TITLE		
119695	Apply fertilizers to ornamental plants and landscapes		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	3	Level 1	Regular

SPECIFIC OUTCOME 1

Recognise the various types of fertilizers that are utilized in plant production and landscapes and the benefits to the plants.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the role of the 3 macro elements in synthetic general fertilizers.

SPECIFIC OUTCOME 3

Describe how the life span of macro elements are affected when introduced to the soil.

SPECIFIC OUTCOME 4

Apply fertilizer to various horticultural and landscape situations.

SPECIFIC OUTCOME 5

Clean and care of fertilizer applicators and storage of unused fertilizers.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Apply health and safety principles in horticulture

SAQA US ID	UNIT STANDARD TITLE		
119707	Apply health and safety principles in horticulture		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	3	Level 1	Regular

SPECIFIC OUTCOME 1

Explain the relevant sections of the health and safety act that affect learners in the workplace.

SPECIFIC OUTCOME 2

Demonstrate an understanding of the duties and responsibilities of employers to provide a safe working environment.

SPECIFIC OUTCOME 3

Explain the duties and responsibilities of employees.

SPECIFIC OUTCOME 4

Demonstrate an understanding of the requirements for the safe transporting of staff and equipment.

SPECIFIC OUTCOME 5

React in an emergency situation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Apply water to landscaped areas

SAQA US ID	UNIT STANDARD TITLE		
119702	Apply water to landscaped areas		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	3	Level 1	Regular

SPECIFIC OUTCOME 1

Select the most appropriate time of day, or conditions to conduct watering.

SPECIFIC OUTCOME 2

Select and demonstrate the use of watering equipment to affect an application rate that suits various soil conditions.

SPECIFIC OUTCOME 3

Show an understanding of the seasonal water requirements of plants.

SPECIFIC OUTCOME 4

Modify the frequency and quantity of watering to suit the evapotranspiration and rainfall.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

SAQA US ID	UNIT STANDARD TITLE		
119686	Cares for ornamental seedlings		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 1	Regular

SPECIFIC OUTCOME 1

Maintain newly germinated seedlings.

SPECIFIC OUTCOME 2

Growing on of seedlings.

SPECIFIC OUTCOME 3

Prick out seedlings.

SPECIFIC OUTCOME 4

Grow on plants to transplanting maturity.

SPECIFIC OUTCOME 5

Control pests in seedlings.



SAQA US ID	UNIT STANDARD TITLE		
119694	Control weeds manually in plant propagation and landscaping		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 1	Regular

SPECIFIC OUTCOME 1

Demonstrate an understanding of the objectives of weed control.

SPECIFIC OUTCOME 2

Select the tools and equipment for manual weed removal.

SPECIFIC OUTCOME 3

Select the personal protective equipment needed to remove weeds by hand.

SPECIFIC OUTCOME 4

Identify common weeds and their regenerative processes.

SPECIFIC OUTCOME 5

Demonstrate a knowledge of the preparation and procedures for effective removal of weeds.

SPECIFIC OUTCOME 6

Conduct effective weed disposal.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Demonstrate a basic understanding of the horticultural industry

SAQA US ID	UNIT STANDARD TITLE		
119687	Demonstrate a basic understanding of the horticultural industry		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 1	Regular

SPECIFIC OUTCOME 1

Show an understanding of the history and development of the horticultural industry.

SPECIFIC OUTCOME 2

Indicate the importance that horticulture plays in providing beauty and functionality to the environment.

SPECIFIC OUTCOME 3

Describe the role that horticulture and landscaping have in enhancing South Africa as a tourist destination.

SPECIFIC OUTCOME 4

Outline the role players within the industry and their relationships.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD.

SAQA US ID	UNIT STANDARD TITLE		
119711	Demonstrate an understand of the basic structure of ornamental plants		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 1	Regular



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Demonstrate an understanding of the role and requirements of water in plants

SAQA US ID	UNIT STANDARD TITLE		
119714	Demonstrate an understanding of the role and requirements of water in plants		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	3	Level 1	Regular

SPECIFIC OUTCOME 1

Describe the role that water plays in the growth and development of plants.

SPECIFIC OUTCOME 2

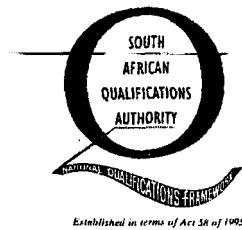
Identify the water requirements of the major plant types.

SPECIFIC OUTCOME 3

Show an understanding of the importance of watering seedlings and newly transplanted plants.

SPECIFIC OUTCOME 4

Recognise the factors that influence evapotranspiration.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

SAQA US ID	UNIT STANDARD TITLE		
119696	Identify and prepare soils for landscaped planting		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 1	Regular

SPECIFIC OUTCOME 1

Recognise the differences between topsoil and sub soil and explain why topsoil should be conserved.

SPECIFIC OUTCOME 2

Identify the three main soil types and their characteristics.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the importance of tilling and digging an area prior to planting.

SPECIFIC OUTCOME 4

Demonstrate an understanding of the importance of adding soil enrichments to the ground before planting.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

SAQA US ID	UNIT STANDARD TITLE		
119708	Identify and report common pests and diseases in plant propagation and landscapes		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture land Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 1	Regular

SPECIFIC OUTCOME 1

Identify pests and describe the consequences of their presence.

SPECIFIC OUTCOME 2

Recognise the presence of a disease and describe the consequences.

SPECIFIC OUTCOME 3

Apply preventative procedures to minimise pest and disease occurrence.

SPECIFIC OUTCOME 4

Demonstrate an understanding of the methods to control pests and diseases that occur in the horticultural environment.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

SAQA US ID	UNIT STANDARD TITLE		
119689	Identify the major categories of ornamental plants		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	6	Level 1	Regular

SPECIFIC OUTCOME 1

Categorize the major types of trees and identify 10 of these.

SPECIFIC OUTCOME 2

Categorize the basic types of shrubs and identify 15 of these.

SPECIFIC OUTCOME 3

Categorize the different types of groundcovers and identify 5 of these.

SPECIFIC OUTCOME 4

Categorize different types of bedding plants and identify 10 of these.

SPECIFIC OUTCOME 5

Categorize the different types of herbaceous plants and identify 10 of these.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Mow lawns in landscaped areas

SAQA US ID	UNIT STANDARD TITLE		
119697	Mow lawns in landscaped areas		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	3	Level 1	Regular

SPECIFIC OUTCOME 1

Identify the different types of mowers and their methods of operation.

SPECIFIC OUTCOME 2

Conduct the necessary preparations for mowing.

SPECIFIC OUTCOME 3

Apply the correct procedures and operating techniques for mowing.

SPECIFIC OUTCOME 4

Demonstrate an understanding of the importance of mower maintenance and correct storage.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Mulch and enrich the soil of established landscaped areas

SAQA US ID	UNIT STANDARD TITLE		
119703	Mulch and enrich the soil of established landscaped areas		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	5	Level 1	Regular

SPECIFIC OUTCOME 1

Show an understanding of the benefits of mulching.

SPECIFIC OUTCOME 2

Select suitable material for mulching.

SPECIFIC OUTCOME 3

Recognise the importance of using organic material when conducting regular cultivation in established plantings.

SPECIFIC OUTCOME 4

Recognise the importance of regular applications of fertilizers to the soil of established plantings.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

SAQA US ID	UNIT STANDARD TITLE		
119706	Plant and establish ornamental plants from containers into open ground		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	5	Level 1	Regular

SPECIFIC OUTCOME 1

Select plants from stockholding or the nursery and prepare for planting.

SPECIFIC OUTCOME 2

Arrange plants in the areas where they are to be planted.

SPECIFIC OUTCOME 3

Prepare a suitable hole to receive the plant.

SPECIFIC OUTCOME 4

Remove the plant from its container and place it in the hole at the correct level.

SPECIFIC OUTCOME 5

Backfill and complete planting.

SPECIFIC OUTCOME 6

Prepare bedding area and plant annuals.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:**Propagate ornamental plants from seed**

SAQA US ID	UNIT STANDARD TITLE		
119704	Propagate ornamental plants from seed		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	5	Level 1	Regular

SPECIFIC OUTCOME 1

Prepare for seed sowing.

SPECIFIC OUTCOME 2

Sow seed manually.

SPECIFIC OUTCOME 3

Apply water to sown seed.

SPECIFIC OUTCOME 4

Maintain the germination environment and monitor the process.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Prune and shape ornamental shrubs

SAQA US ID	UNIT STANDARD TITLE		
119710	Prune and shape ornamental shrubs		
SGBNAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 1	Regular

SPECIFIC OUTCOME 1

Demonstrate an understanding of the effects of pruning and the reasons why this should be conducted.

SPECIFIC OUTCOME 2

Select the appropriate tools for various pruning procedures.

SPECIFIC OUTCOME 3

Maintain pruning tools.

SPECIFIC OUTCOME 4

Effect the correct pruning cuts for various plants and shrubs.

SPECIFIC OUTCOME 5

Demonstrate an understanding of the principles of hedge pruning.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:**Utilise growth media for ornamental plant containers**

SAQA US ID	UNIT STANDARD TITLE		
119698	Utilise growth media for ornamental plant containers		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	3	Level 1	Regular

SPECIFIC OUTCOME 1

Identify the components that may be used to create a growing medium for containers.

SPECIFIC OUTCOME 2

Identify the porosity of various growth media.

SPECIFIC OUTCOME 3

Blend growth media for containers.

SPECIFIC OUTCOME 4

Mix growing media for containers.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

<i>SAQA US ID</i>	<i>UNIT STANDARD TITLE</i>		
119692	Apply basic tree climbing principles		
<i>SGB NAME</i>		<i>NSB 01</i>	<i>PROVIDER NAME</i>
SGB Ornamental Horticulture and Landscape		Agriculture and Nature Conservation	
<i>UNIT STANDARD TYPE</i>		<i>FIELD DESCRIPTION</i>	<i>SUBFIELD DESCRIPTION</i>
Regular		Agriculture and Nature Conservation	Horticulture
<i>ABET BAND</i>	<i>CREDITS</i>	<i>NQF LEVEL</i>	<i>UNIT STANDARD TYPE</i>
Undefined	6	Level 2	Regular

SPECIFIC OUTCOME 1

Identify the basic range of climbing equipment and describe the safety procedures.

SPECIFIC OUTCOME 2

Identify the range and importance of personal protective equipment worn by a climber.

SPECIFIC OUTCOME 3

Demonstrate an understanding of the importance of performing a hazard evaluation before ascending a tree.

SPECIFIC OUTCOME 4

Demonstrate a knowledge of the construction of climbing rope knots utilized as a climber.

SPECIFIC OUTCOME 5

Ascend and descend a tree using climbing equipment.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

SAQA US ID	UNIT STANDARD TITLE		
119691	Backfill compact and replant grass sods and plants in irrigation trenches		
SGB NAME	NSB01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	5	Level 2	Regular

SPECIFIC OUTCOME 3

Demonstrate a knowledge of the replacement of sods in the trenches.

SPECIFIC OUTCOME 4

Demonstrate a knowledge of the replacement of plants in the trenches.

SPECIFIC OUTCOME 5

Demonstrate a knowledge of the procedures for the 'clean-up' and care of the replanted lawn and plants.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Create an awareness of environmental protection

SAQA US ID	UNIT STANDARD TITLE		
119701	Create an awareness of environmental protection		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	4	Level 2	Regular

SPECIFIC OUTCOME 1

Demonstrate an understanding of the extent of environmental pollution.

SPECIFIC OUTCOME 2

Show an understanding of the dangers posed by water pollution.

SPECIFIC OUTCOME 3

Demonstrate a knowledge of the causes of air pollution and its effects on man and the environment.

SPECIFIC OUTCOME 4

Recognize the potential for pollution that littering, dumping and waste accumulation have on the general environment.

SPECIFIC OUTCOME 5

Identify the various sources of pollution in the work place.

SPECIFIC OUTCOME 6

Demonstrate an understanding of the need for recycling and the various materials that can be recycled.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

SAQA US ID	UNIT STANDARD TITLE		
119690	Establish an area of turf with grass sods		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQP LEVEL	UNIT STANDARD TYPE
Undefined	6	Level 2	Regular

SPECIFIC OUTCOME 1

Cultivate and prepare the soil for the establishment of turf grass.

SPECIFIC OUTCOME 2

Conduct the final grading/leveling of the area to receive grass sods.

SPECIFIC OUTCOME 3

Apply the base dressing fertilizers to the soil.

SPECIFIC OUTCOME 4

Inspect and receive the sods on site.

SPECIFIC OUTCOME 5

Lay sods on the prepared area.



SAQA US ID	UNIT STANDARD TITLE		
119699	Excavate irrigation trenches in established landscapes		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	5	Level 2	Regular

SPECIFIC OUTCOME 1

Demonstrate the manual sodding of established lawns, in preparation for the excavation of trenches.

SPECIFIC OUTCOME 2

Demonstrate a knowledge of the storage and care of sods during the irrigation installation,

SPECIFIC OUTCOME 3

Remove plants in preparation for the excavation of irrigation trenches.

SPECIFIC OUTCOME 4

Describe the storage and care of plants during the irrigation installation.

SPECIFIC OUTCOME 5

Excavate trenches to the required depth and demonstrate the preparation of a suitable bedding for the irrigation piping.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

SAQA US ID	UNIT STANDARD TITLE		
119705	Handle floristry plant material		
SGB NAME	NSB 07	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	5	Level 2	Regular

SPECIFIC OUTCOME 2

Demonstrate a knowledge of the need for adequate stock rotation.

SPECIFIC OUTCOME 3

Recognize the importance of the shelf-life of various plant materials.

SPECIFIC OUTCOME 4

Demonstrate a knowledge of stock level controlling.

SPECIFIC OUTCOME 5

Demonstrate a knowledge of the correct procedures for the handling and delivery of floral products.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Install irrigation piping in trenches

SAQA US ID	UNIT STANDARD TITLE		
119700	Install irrigation piping in trenches		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	10	Level 2	Regular

SPECIFIC OUTCOME 1

Demonstrate an understanding of the basic principles of hydraulics and their application in irrigation.

SPECIFIC OUTCOME 2

Identify the pressure rating of irrigation piping and understand how the ratings are achieved.

SPECIFIC OUTCOME 3

Show an understanding of the characteristics of LDPE piping, the fittings used for connections and the application in irrigation.

SPECIFIC OUTCOME 4

Show an understanding of the characteristics of HDPE piping, the fittings used for connections and the application in irrigation.

SPECIFIC OUTCOME 5

Show an understanding of the characteristics of PVC piping, the fittings used for connections and the application in irrigation.

SPECIFIC OUTCOME 6

Show an understanding of the characteristics of copper and polycop piping, the fittings used for connections and the application in irrigation.

SPECIFIC OUTCOME 7

Show an understanding of the characteristics of galvanized steel piping, the fittings used for connections and the application in irrigation,



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

SAQA US ID	UNIT STANDARD TITLE		
119709	Maintain and conserve the flora in nature areas		
SCB NAME	NSB 01	PROVIDER NAME	
Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	5	Level 2	Regular

SPECIFIC OUTCOME 3

Recognize and identify alien vegetation in a nature area.

SPECIFIC OUTCOME 4

Removal of alien vegetation from nature areas.

SPECIFIC OUTCOME 5

Demonstrate a knowledge of the various techniques to prevent the regrowth of alien vegetation.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:

Maintain optimal environmental conditions for floristry arrangements

SAQA US ID	UNIT STANDARD TITLE		
119688	Maintain optimal environmental conditions for floristry arrangements		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	5	Level 2	Regular

SPECIFIC OUTCOME 1

Monitoring the quality of water for the maintenance of plant material.

SPECIFIC OUTCOME 2

Maintaining the optimal temperature range for the floristry materials.

SPECIFIC OUTCOME 3

Application of lighting principals.

SPECIFIC OUTCOME 4

Demonstrate an understanding of the need of monitoring the ventilation in floristry premises.



SOUTH AFRICAN QUALIFICATIONS AUTHORITY

UNIT STANDARD:**Treat floristry plant material**

SAQA US ID	UNIT STANDARD TITLE		
119693	Treat floristry plant material		
SGB NAME	NSB 01	PROVIDER NAME	
SGB Ornamental Horticulture and Landscape	Agriculture and Nature Conservation		
UNIT STANDARD TYPE	FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	Agriculture and Nature Conservation	Horticulture	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	7	Level 2	Regular

SPECIFIC OUTCOME 1

Demonstrate a knowledge of the removal of excess foliage and thorns prior to commencing the floral arrangement.

SPECIFIC OUTCOME 2

Demonstrate a knowledge of the removal of foliage and thorns that will be below water level.

SPECIFIC OUTCOME 3

Demonstrate a knowledge of the removal of broken stems, flowers and foliage.

SPECIFIC OUTCOME 4

Explain the use of personal protective equipment and tools.

SPECIFIC OUTCOME 5

Demonstrate a knowledge of the need for re-cutting plant material.

SPECIFIC OUTCOME 6

Utilize chemical conditioners and drying agents for the preservation of floral material.

SPECIFIC OUTCOME 7

Demonstrate an understanding of the importance of conditioning plant material to ensure longevity.

SPECIFIC OUTCOME 8

Demonstrate an understanding of the need for the refrigeration of plant material to ensure longevity.