No. 432

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## SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

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

## Ornamental Horticulture and Landscape

registered by Organising Field 01 - Agriculture and Nature Conservation, publishes the following Qualification and Unit Standard for public Comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purposes of the Qualification and Unit Standard. The full Qualification and Unit Standards can be accessed via the SAQA web-site at <a href="www.saqa.org.za">www.saqa.org.za</a>. Copies may also be obtained from the Directorate for Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comments on the Qualification and Unit Standards should reach SAQA at the address **below** and no later than 01 June 2009. All correspondence should be marked Standards Setting – SGB for Ornamental Horticulture and Landscape and addressed to

The Director: Standards Setting and Development

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D. MPHUTHING

ACTING DIRECTOR: STANDARDS SETTING AND DEVELOPMENT



## QUALIFICATION: National Certificate: Horticulture

SAQA QUAL ID	QUALIFICATION TITLE	QUALIFICATION TITLE			
66589	National Certificate: Hor	ticulture			
ORIGINATOR	PROVIDER				
SGB Ornamental Horticulture and Landscape					
QUALIFICATION TYPE	FIELD	SUBFIELD			
National Certificate	1 - Agriculture and Nature Conservation	Horticulture			
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUAL CLASS		
Undefined	120	Level 2	Regular-Unit Stds Based		

This qualification does not replace any other qualification and is not replaced by another qualification.

## PURPOSE AND RATIONALE OF THE QUALIFICATION

Purpose of the Qualification:

This qualification provides learners with a comprehensive base of portable skills that will enable them to progress within all spheres of the horticultural industry. This qualification forms an integral step in the career paths of the various disciplines in ornamental horticulture and follows on from the NQF Level 1 Certificate. For those already employed in the industry, this qualification will offer learners the opportunity to hone their skills and receive recognition for their competencies.

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

- Identify the major soil types and their uses in plant propagation and landscaping.
- Utilise manual irrigation systems to provide the correct application of water to plants.
- · Produce ornamental plants from stem cuttings.
- Apply pest control practices in plant production and landscaping.
- Utilise the principles and practices of providing plant care and nutrition for ornamental plants and landscapes.
- Recognition of common ornamental plants and their uses.

For those wishing to enter the industry, whether unemployed or as an Entrepreneur, this qualification offers a solid foundation in all aspects of the horticultural industry. This qualification represents a vital step in the development of a career and learning pathway of individuals, both from a vocational point of view, as well as from a learning point of view.

#### Rationale of the Qualification:

South Africa is renowned as an ideal tourist destination. The beauty of the gardens and landscapes in leisure facilities, parks and gardens, is an important factor in assuring that South Africa is considered a prime tourist attraction. To advance and improve our position in this important economic area the "Green Industry" must up-skill its workforce, for the creation of excellent landscapes.

The provision and maintenance of sports fields to world class standards is a perquisite for the 2010 World Cup Soccer tournament. This qualification addresses the industry's need to provide the basic skills to establish and maintain sports turf facilities.

The skills gained through this qualification will ensure that quality ornamental plants will be produced and marketed to the consumers.

The qualification will facilitate job creation and self employment opportunities, while furthering the aims of economic empowerment in South Africa.

The qualification includes the skills necessary to safely use various chemicals, including fuels, fertilisers, pest control agents, accordingly, the principles of health and safety are embedded in all the learning aspects of the qualification.

As the core is generic to all sectors of the horticultural industry, the qualification embodies the principle of portability and is integral to further learning. Through the wide scope of electives, the specialisations of the various sectors are catered for.

The sectors of the horticultural industry that will benefit from this qualification include:

- Landscape construction and maintenance.
- · Amenity horticulture.
- · Sports turf.
- · Arboriculture.
- Plant propagation.
- · Interior plantscaping.
- Retail nurseries.
- · Floristry.

This qualification addresses both the current and future needs of horticulture in South Africa.

## RECOGNIZE PREVIOUS LEARNING?

#### LEARNING ASSUMED 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:

- Literacy and Numeracy at NQF Level 1.
- ID 119687: Demonstrate a basic understanding of the horticultural industry, NQF Level 1.

Recognition of Prior Learning:

The qualification may be achieved wholly or in part through the Recognition of Prior Learning and the qualification may be granted to learners who have acquired the skills and knowledge without attending formal courses providing they can demonstrate competence in the outcomes of the individual Unit Standards as required by the Fundamental, core and Elective areas stipulated in the Qualification and by the Exit Level Outcomes.

An RPL process may also be used to credit learners with Unit Standards in which they have developed the necessary competency as a result of workplace and experiential learning.

#### **QUALIFICATION RULES**

The certificate is made up of a planned combination of learning outcomes that have a defined purpose and will provide qualifying learners with applied competence and a foundation for further learning.

The qualification consists of a minimum of 120 credits, composed of:

- Fundamental; 36 credits (compulsory).
- Core; 71 credits (compulsory).
- Electives; Learners must choose suitable Unit Standards from the listed elective to obtain a total of not less than 13 credits.

#### **EXIT LEVEL OUTCOMES**

- 1. Identify the different organisms of the plant kingdom and their uses in horticulture.
- 2. Identify the different soil types and describe their uses in plant propagation and landscaping.
- 3. Operate a manual irrigation system and schedule the applications to suit the plants water requirements.
- 4. Utilise stem cuttings for the propagation of plants.
- 5. Implement the appropriate care for ornamental plants.
- 6. Identify ornamental plants commonly used in the workplace.

#### ASSOCIATED ASSESSMENT CRITERIA

Associated Assessment Criteria for Exit Level Outcome 1:

- 1.1 The various organisms of the plant kingdom are described in terms of their unique characteristics.
- 1.2 The role that organisms play in an ecosystem is explained within the context of the specific functions that they each perform.
- 1.2 An organism's environmental requirements are described in accordance with the particular conditions that are best suited to their growth and developmental needs.
- 1.4 The reproduction of organisms is explained within the context of the methods that are utilised to achieve their procreation.

Associated Assessment Criteria for Exit Level Outcome 2:

- 2.1 The main soil types are classified and described in accordance with their structure and composition.
- 2.2 Topsoil is defined in terms of its colouration, organic content and benefit to the growing environment for plants.
- 2.3 The determination of the infiltration rate of a soil is explained within the context of the factors that effect the speed of movement of water in the soil.
- **2.4** Capillary action is explained in terms of the role that it performs in the storage and transference of water in various soil types.

Associated Assessment Criteria for Exit Level Outcome 3:

- 3.3 Watering frequencies for various plants are determined in relation to prevailing climatic conditions.
- 3.4 Operating periods for the various zones of an irrigation system are selected to ensure that applications suit the plant's requirements and the soil's infiltration rate.
- 3.3 Basic maintenance procedures and techniques are utilised to effect minor repairs to irrigation equipment.

Associated Assessment Criteria for Exit Level Outcome 4:

- 4.1 The various stem types are identified in relation to their suitability for use as propagation material.
- 4.2 The selection criteria for stem cutting material is explained in terms of the specific requirements of each stem type.
- 4.3 The various stem cuts are made in accordance with the particular techniques that are required for the different stems types.
- 4.4 Cuttings are placed in a rooting media to optimise the growth and developmental potential of the plants.
- 4.5 The provision of primary care and "hardening off" procedures are performed within the specific requirements of each stem type.

Associated Assessment Criteria for Exit Level Outcome 5:

- 5.1 The necessity of providing the optimum environmental conditions for ornamental plants is explained within the context of the positive effects that these have on their growth and development.
- 5.2 Plants that require support are identified and the techniques used for staking and tying these are performed in accordance with the objectives of optimising their structure.
- 5.3 The need to deadhead specific plants is explained in terms of the necessity of conducting the practice.
- 5.4 The techniques for the formative pruning of certain plants are performed in accordance with the objectives.
- 5.5 The function and role of the feeding, weeding and pest control programs are explained and implemented to ensure that optimal plant growth is achieved.

Associated Assessment Criteria for Exit Level Outcome 6:

- 6.1 Trees, shrubs, climbing plants, ground covers, annuals and herbaceous plants that are commonly used in the workplace are described in terms of their particular characteristics.
- 6.2 The environmental conditions that the commonly used plants require are described in accordance with the particular conditions that are best suited to their growth and developmental needs.
- 6.3 The specific needs of the commonly used plants are identified and described in terms of the enhancement and maintenance of their growth.

## 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

Over the last 40 years, South Africa has been an active member of the International Federation of Parks and Recreation Administration. Each year this body holds a congress in a different international city. These congresses serve to highlight the international best practices for the horticultural industry. Parks and gardens are showcased to exhibit the latest trends in amenity landscaping and garden maintenance. The congresses also provide the members with the opportunity to examine the training facilities and courses offered by the host countries.

South Africa's representative has served on the executive committee for the past decade and has conducted specific comparative research for this qualification and for the Landscape qualifications for Levels 3 and 4.

Worldwide, the horticultural industry is composed of distinct disciplines, each catering to a particular sector of the market. In the past, training concentrated on the production of generalist horticulturalists. As in other industries, technological advancements have engendered a move to specialisation.

Internationally, some countries commence their specialisations at level 1. Examples include the USA and Australia. In contrast, other countries have elected to begin their specialisations at levels 2 or 3.

Various factors influence this, the most notable include:

- Climatic conditions which restrict normal horticultural activities.
- Economic constraints, typically the poorly developed economies where horticulture has a low priority.
- Relatively small markets, where economies of scale preclude specialisation. With the
  exception of the Western Cape and Gauteng, South African horticulture tends to fall into this
  category.

Consequently, the level 1 and 2 qualifications which comprise the foundational learning in horticultural practices are generic. They are specifically constructed to have general applicability to all sectors of the industry. Specialisations are catered for in the elective unit standards of these qualifications. This ensures portability and yet allows learners to progress in their particular field of specialisation.

The SADC countries fall into categories 2 and 3 as mentioned above and as a consequence no specific horticultural training is conducted in these areas. Their horticulturists are either sourced from South Africa or they obtain their qualifications from our tertiary institutions.

Various international qualifications with similar content to this qualification were sourced. In examining these, the following have been used for benchmarking and comparison, although

they do not necessarily address the subjects from the same perspective, they do contain aspects relevant to those used in South Africa.

The following qualifications and the particular unit standards that were selected for comparison with various components of this qualification are listed here under:

#### Australia:

In terms of climate, Australia has similar climatic zones and conditions to South Africa. Their horticultural industry is well advanced and as mentioned above, specialisation is conducted from level 1. A number of the unit standards are common to the majority of their level 2 qualifications and particular focus has been paid to these generic unit standards.

The following qualifications were examined, and the notable similarities are:

Certificate II in Horticulture (Landscape)-Reference No RTF20403:

Of all the worldwide searches that were conducted, this level 2 qualification has the greatest similarity to its South African counterpart. The relevant unit standards are as follows:

- Reference No RTC2701A-Follow OHS procedures:
- o This level 2 unit standard addresses the practices and procedures necessary to adhere to the Australian Occupational Health and Safety Act.
- o The "Utilize health and safety principles in horticulture" unit standard has a similar intent to the above, in that it also refers to the local Occupational Health and Safety Act, but has in addition the particular safety practices that are peculiar to the horticultural industry.
- Reference No RTC2504A-Determine basic properties of soil/growing media:
- o This level 2 unit standard is concerned with the identification of the various soil types and their uses in the horticultural environment.
- The "Recognize the various soil types and their uses in plant propagation and landscaping" utilises a similar approach to the classification and use of soil for propagation and landscaping.
- Reference No RTC2016A-Recognise plants:
- o This level 2 unit standard serves to familiarise learners with plants that are in general use in various landscapes and gardens.
- o The "Identify common ornamental plants" has the same objective as the above the only difference lies in the format in which the plants are categorised and the number of plants that must be identified.
- Reference No RTE 2603A-Lay irrigation and/or drainage pipes:
- o This level 2 unit standard covers the techniques and procedures used in the installation of piping in a horticultural environment.
- o The "Install irrigation piping in landscaped areas" unit standard follows similar principles and practices with the above with the exception of drainage piping, which is usually regarded as being part of the site preparation that occurs prior to an irrigation installation.
- Reference No RTE2602A-Assist with the operation of pressurised irrigation:
- o This level 2 unit standard is concerned with the operation of sprinkler and emitter irrigation that is commonly used in the plant propagation and landscaping environments.
- The "Utilize irrigation equipment and operate manual sprinkler systems" unit standard incorporates a similar approach to the above with an emphasis on water conservation and preventative maintenance procedures.
- Reference No RTF2017A-Prune shrubs and small trees:

- This level 2 unit standard covers the practices and procedures used in maintaining the form and shape of various shrubs and trees in the landscape environment.
- o The "Prune and shape shrubs" unit standard is intended for shrubs not trees, which are covered in the level 3 Landscaping qualification. In essence, the same procedures and methodology are followed in both unit standards.

Certificate II in Horticulture (Wholesale Nursery) Reference No RTF20603:

- Reference No RTF2008A-Maintain indoor plants:
- o This level 2 unit standard covers the practices and procedures used in providing care for previously propagated plants that are intended for indoor use.
- o Two unit standards in the South African qualification have similar procedures The "Provide care for ornamental plants" incorporates the maintenance and care for indoor plants and the second unit standard "Prepare plants for interior environments" is primarily focused on the interior plantscaping and display functions. Both include similar cultural practices to keep ornamental plants in their optimal condition.
- Reference No RTF2026A-Undertake propagation activities:
- o This level 2 unit standard incorporates a variety of propagation methods, including propagation from cuttings.
- o The propagation function is pivotal to the success of a nursery and to that end, each propagation method is treated separately and covered to a greater depth than the above generalist unit standard. Accordingly, the "Propagate plants from stem cuttings' unit standard covers the entire spectrum of these activities including the provision of initial care.
- Reference No RTF2024A-Tend nursery plants:
- o This level 2 unit standard covers the practices and procedures used in promoting growth and maintaining the condition of plants in a nursery.
- o The "Provide care for ornamental plants" addresses the principles and disciplines in the above unit standard. In addition provision has been made for this unit standard to encompass the initial care for establishing newly planted ornamentals in landscapes.

Certificate II in Horticulture (Turf) Reference No RTF20803:

- Reference No RTF2023A-Support turf establishment:
- o This level 2 unit standard covers the practices and procedures used in the planting and initial care of sportsturf, incorporating the practices for sods and seed.
- o The "Establish an area of turf with grass sods" unit standard concentrates on the sodding aspect of grass establishment, as lawn seeding is normally reserved for overseeding of existing turf which entails specific pre-seeding preparations. This is covered in the Sportsturf level 3 qualification.
- Reference No RTC2307A-Operate machinery and equipment:
- o This level 2 unit standard covers the universal principles and practices for the operation of basic machinery used in sportsturf maintenance.
- o The "Operate specialised walk behind mowers" provides the learner with in depth knowledge and competencies for the operation of mowers for all sportsturf disciplines including soccer, golf, cricket and bowls.
- Reference No RTF2015A-Prepare turf surfaces for play:
- o This level 2 unit standard covers the principles and practices for the preparation of sportsturf for the major sports that are played in Australia.
- o The "Maintain turf cricket pitches and outfields" unit standard is specifically intended for the lawn cricket environment and as such, the specific cultural practices that are necessary for cricket are covered.

Certificate II in Horticulture (Arboriculture) Reference No RTF20203:

- Reference No RTC2304A-Operate and maintain chainsaws:
- This level 2 unit standard covers the use and care of chainsaws, specifically in the context of arboriculture.
- The "Operate chainsaws for limbing and logging at ground level" unit standard has similar safety and operational practices as the above, including the techniques for ground based trimming of felled trees.
- Reference No RTF2027A-Undertake standard climbing techniques:
- This level 2 unit standard has as its main focus the safe application of various tree climbing techniques.
- The "Apply basic tree climbing practices" utilises similar practices and methodologies as the above including the essential safety procedures for the ascent and descent from trees.
- Reference No RTC2005A-Fell small trees:
- o This level 2 unit standard provides learners with the skills and competencies to remove small trees in a horticultural environment.
- o The "Conduct controlled tree felling in various locations" unit standard has similar safety and operational practices as the above, with particular emphasis on the procedures to protect the surrounding infrastructure when felling.

#### United Kingdom:

The United Kingdom has a long history of horticultural practice and is considered to be the origin of the modern horticultural foundational practice. South Africa has long been seen as an ideal horticultural environment, considering that it has the richest floral kingdom in the world. As a result many South African plants have been cultivated and hybridised in the United Kingdom with the loss of research and income to the country. It is imperative that, against this background, studies in horticultural practices in South Africa follow a professional path and are comparable, at least, to the best studies in the United Kingdom, but also within the broader international horticultural community.

The qualifications from the United Kingdom at level 2 that may be favourably compared to the South African Horticulture Level 2 qualification are the:

- Level 2 BTEC First Diploma in Horticulture.
- Level 2 BTEC First Certificate in Horticulture.
- NPTC Level 2 NVQ in Production Horticulture.
- RHS Level 2 Certificate in Horticulture.
- NPTC Level 2 NVQ in Amenity Horticulture.
- NPTC Level 2 National Certificate in Horticulture.

#### The relevant unit standards are:

- Registration No M/500/1020-Introduction to Animal and Plant Biology:
- o This level 2 unit standard provides a basic introduction to the natural science of plants.
- o The "Recognize different organisms in the plant kingdom" unit standard has a similar intent to the above, in that it also refers to the structural and functional aspects of plants.
- Registration No T/500/4047-Sustainable horticultural and ecological principles:
- o This level 2 unit standard serves to familiarise the learner with the horticultural and ecological principles for sustainability.
- o The "Create an awareness of environmental protection" and "Maintain and conserve the flora in nature areas" unit standards provide the learner with a background to the importance of horticultural practices relevant to the conservation of nature areas. It is of particular importance

to the South African context as it relates to the tourism sector where sustainability of the flora in natural areas such as game parks and conservation areas is vital.

- Registration No M/500/2958-Turf establishment and maintenance:
- This level 2 unit standard covers the practices and procedures necessary to establish and maintain turf sites.
- The "Maintain turf cricket pitches and outfields" and "Establish an area of turf with grass sods" (SAQA ID 119690) unit standards has a similar intent to the above, while the aforementioned unit standard focuses on the specific practices to establish and maintain a cricket pitch and its outfield.
- Registration No K/500/2957-Horticultural Plants Nursery Stock Production:
- o This level 2 unit standard covers various methods of plant production for a nursery.
- The "Propagate plants from stem cuttings" unit standard covers one specific method of propagation and is supported at various levels with other propagation methods commensurate to the level of the activity and the competency required of the learner.
- Registration No D/102/5823-Horticulture II Ornamentals, principles and maintenance:
- o This level 2 unit standard focuses on the maintenance aspects for ornamentals and the principles that govern such maintenance.
- o The "Provide care for ornamental plants" unit standard highlights the importance of on-going care for ornamental plants once they have been planted, potted up for growing on or have been re-sited. The specific aim of the unit standard is to impress on the learner the specific care that a newly planted ornamental requires.
- Registration No J/101/4623-Monitor and Maintain Health and Safety:
- o This level 2 unit standard is concerned with the monitoring and maintenance of health and safety aspects.
- o The "Utilize health and safety principles in horticulture" unit standard has a similar intent to the above, although its focus is more on the application of the health and safety principles specific to the horticultural industry in order to meet the relevant statutory requirements.
- Registration No F/101/0120-Identification and Use of Plants:
- o This level 2 unit standard highlights the characteristics by which plants may be identified and informs the learner of the ways in which the plants may be used.
- The "Identify common ornamental plants" unit standard has a similar purpose in that the learner will learn how to identify specific categories of plants and understand where they may be used to optimum effect.
- Registration No H/101/5262-Identify the Presence of Pests, Diseases and Disorders, and Assist with their Control:
- o This level 2 unit standard incorporates the various factors that may adversely affect the development of plants.
- The "Apply pest control practices in ornamental plant production and landscaping" unit standard aims to provide the learner with the necessary information in order to understand various practices used to control pests specific in the horticultural environment and how to apply the relevant practice to control pests in a specific situation.
- Registration No L/101/4896-Propagate Plants by Vegetative Methods:
- o This level 2 unit standard serves to familiarize learners with the manner in which plants are propagated by vegetative means.
- o Various methods of propagation may be applied in the horticultural environment and each requires specific skills and competencies. The "Propagate plants from stem cuttings" unit standard addresses one form of propagation determined to be relevant to the skills and competencies required of a learner at NQF Level 2 within the South African horticultural context. The propagation of plants by seed has been covered in the level 1 Qualification.

- Registration No J/101/4900-Maintain Plants Outdoors:
- o This level 2 unit standard addresses the general maintenance practices as they are applied to outdoor plants.
- o The "Schedule the application of water to plants and landscapes" and "Provide nutrition to plants and landscapes" unit standards are comparable to the above in their purpose, but, within the South African horticultural context, the maintenance of horticultural material has been divided into the various maintenance aspects, as well as focussing on the specific maintenance required in each environment or sector such as sports fields, artificial plants, indoor plants and floristry. This is advantageous to the learner as opportunities for specialization, employment or entrepreneurial options are enhanced.
- Registration No D/101/4868-Present, Maintain and Repair Sports Turf Surfaces for Play:
   This level 2 unit standard covers the entire spectrum of activities related to ensuring general sports turf surfaces are ready for play, can be maintained and be repaired when necessary.
   The "Maintain turf cricket pitches and outfields" and "Establish an area of turf with grass sods" (SAQA ID 119690) unit standards may be compared to the above in terms of the general practices applicable, but the sporting requirements, soil and weather factors in South Africa necessitate the separation of practices to ensure the sports fields are correctly established, maintained and repaired for local conditions and requirements. This further benefits the learner through enabling specialization and thereby greater opportunity for employment or provision of services through entrepreneurial opportunities.

#### **ARTICULATION OPTIONS**

The generic nature of this qualification and its focus on the foundational multi-skilling, facilitates the vertical articulation within the horticultural industry, to any of the following qualifications.

#### Horizontal Articulation:

- ID 48975: National Certificate in Plant production; NQF Level 2.
- ID 59389: National Certificate in Resource Guardianship; NQF Level 2.
- ID 49410: National Certificate in Construction; NQF Level 2.

#### Vertical Articulation:

• ID 49052: National Certificate in Plant production; NQF Level 3.

As the basics of Agriculture and horticulture are parallel, horizontal 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 5 or higher.

## **UNIT STANDARDS**

	<u>ID</u>	UNIT STANDARD TITLE	LEVEL	CREDITS
Fundamental	115000	Demonstrate understanding of everyday aural texts in X	Level 2	4
Fundamental	7480	Demonstrate understanding of rational and irrational numbers and number systems	Level 2	3
Fundamental	114998	Demonstrate understanding of selected texts in X	Level 2	6
Fundamental	9008	Identify, describe, compare, classify, explore shape and motion in 2-and 3-dimensional shapes in different contexts	Level 2	3
Fundamental	12444	Measure, estimate and calculate physical quantities and explore, describe and represent geometrical relationships in 2-dimensions in different life or workplace contexts	Level 2	3
Fundamental	114999	Speak and respond in everyday situations in X	Level 2	6
Fundamental	7469	Use mathematics to investigate and monitor the financial aspects of personal and community life	Level 2	2
Fundamental	9007	Work with a range of patterns and functions and solve problems	Level 2	5
Fundamental	114993	Write texts on relevant topics in X	Level 2	4
Core	264185	Apply pest control practices in ornamental plant production and landscaping	Level 2	6
Core	119701	Create an awareness of environmental protection	Level 2	4
Core	264191	Demonstrate an understanding of a flowering plant's reproductive cycle	Level 2	5
Core	264184	Identify common ornamental plants	Level 2	8
Core	264177	Identify the different organisms of the plant kingdom	Level 2	4
Core	264179	Identify the various soil types and their uses in plant propagation and landscaping	Level 2	4
Core	264190	Plant and establish herbaceous plants in landscaped areas	Level 2	6
Core	264188	Propagate plants from stem cuttings	Level 2	5
Core	264192	Provide care for ornamental plants	Level 2	8
Core	264180	Provide nutrition to plants and landscapes	Level 2	6
Core	264176	Prune and shape shrubs	Level 2	6
Core	263995	Schedule the application of water to plants and landscapes	Level 2	3
Core	264058	Utilise health and safety principles in horticulture	Level 2	3
Core	264017	Utilize irrigation equipment and operate manual sprinkler systems	Level 2	3
Elective	264174	Acclimatise Plants for Interior Plantscaping	Level 2	6
Elective	119692	Apply basic tree climbing principles	Level 2	6
Elective	119691	Backfill compact and replant grass sods and plants in irrigation trenches	Level 2	5
Elective	264178	Clean interior plants	Level 2	6
Elective	264175	Conduct post harvest treatment of cut roses	Level 2	6
Elective	264189	Develop the cut rose frame	Level 2	4
Elective	119690	Establish an area of turf with grass sods	Level 2	6
Elective	119699	Excavate irrigation trenches in established landscapes	Level 2	5
Elective	119705	Handle floristry plant material	Level 2 Level 2	<u>5</u>
Elective Elective	264187 119700	Harvest cut roses Install irrigation piping in trenches	Level 2	10
Elective	264036	Install irrigation sprinklers and emitters in landscaped areas	Level 2	12
Elective	119709	Maintain and conserve the flora in nature areas	Level 2	5_
Elective	119688	Maintain optimal environmental conditions for floristry arrangements	Level 2	5
Elective	264181	Maintain turf cricket pitches and outfields	Level 2	8
Elective	264193	Manage the cut rose canopy	Level 2	6
Elective	264182	Operate brushcutters in the horticultural environment	Level 2	4
Elective	264195	Operate chainsaws for limbing and logging at ground level	Level 2	6

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Elective	264194	Operate specialised walk-behind mowers	Level 2	5
Elective	264183	Prepare Plants for Interior Environments	Level 2	6
Elective	119693	Treat floristry plant material	Level 2	7
Elective	264186	Conduct controlled tree felling in various locations	Level 3	6

# LEARNING PROGRAMMES RECORDED AGAINST THIS QUALIFICATION None



## **UNIT STANDARD:**

## Acclimatise Plants for Interior Plantscaping

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE			
264174	Acclimatise Plants for Interior	Plantscaping			
ORIGINATOR	PROVIDER				
SGB Ornamental H	orticulture and Landscape				
FIELD		SUBFIELD			
1 - Agriculture and I	Nature Conservation	Horticulture			
ABET BAND UNIT STANDARD TYPE		NQF LEVEL	CREDITS		
Undefined	Regular	Level 2	6		

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

#### SPECIFIC OUTCOME 1

Apply health and safety practices when acclimatising interior plants.

## **SPECIFIC OUTCOME 2**

Describe the biological processes that occur during a plants acclimatization to an indoor environment.

#### **SPECIFIC OUTCOME 3**

Provide the necessary cultural practices and conditions to harden-off and acclimatize a plant to an indoor environment.

## **SPECIFIC OUTCOME 4**

Describe the negative aspects of using unacclimatised plants in an interior environment.

	ID	QUALIFICATION TITLE	LEVEL	
Elective	66589	National Certificate: Horticulture	Level 2	



#### **UNIT STANDARD:**

## Conduct post harvest treatment of cut roses

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE			
264175	Conduct post harvest treatme	ent of cut roses			
ORIGINATOR	PROVIDER				
SGB Ornamental H	orticulture and Landscape				
FIELD		SUBFIELD			
1 - Agriculture and I	Nature Conservation	Horticulture			
ABET BAND	D UNIT STANDARD TYPE NQF LEVEL CREDITS		CREDITS		
Undefined	Regular	Level 2 6			

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

#### **SPECIFIC OUTCOME 1**

Apply health and safety in post harvest treatment of cut roses.

## SPECIFIC OUTCOME 2

Utilise the necessary tools and equipment for post harvest treatment of cut roses.

## **SPECIFIC OUTCOME 3**

Describe the practices that serve to maximize the vase-life of cut roses.

#### **SPECIFIC OUTCOME 4**

Perform the bunching of cut roses.

#### **SPECIFIC OUTCOME** 5

Describe the various aspects that influence the grading and value of a cut rose harvest.

	ID	QUALIFICATION TITLE	LEVEL
Elective	66589	National Certificate: Horticulture	Level 2



#### **UNIT STANDARD:**

## Prune and shape shrubs

SAQA US ID	UNIT STANDARD TITLE		
264176	Prune and shape shrubs		
ORIGINATOR	RIGINATOR PROVIDER		
SGB Ornamental He	orticulture and Landscape		
FIELD		SUBFIELD	
1 - Agriculture and I	Nature Conservation	Horticulture	
ABET BAND UNIT STANDARD TYPE		NQF LEVEL	CREDITS
Undefined	Regular	Level 2	6

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## SPECIFIC OUTCOME 1

Apply health and safety practices when pruning and shaping shrubs.

## **SPECIFIC OUTCOME 2**

Describe the principles and practices for the pruning of shrubs.

#### **SPECIFIC OUTCOME 3**

Describe the pruning practices that will assist the rejuvenation of through selective pruning.

## **SPECIFIC OUTCOME 4**

Identify the pruning requirements of a variety of shrubs.

## **SPECIFIC OUTCOME** 5

Formative trimming, pinching and pruning of young plants.

## **SPECIFIC OUTCOME** 6

Provide post pruning care for plants.

	D	QUALIFICATION TITLE	LEVEL
Core	66589	National Certificate: Horticulture	Level 2



#### **UNIT STANDARD:**

## Identify the different organisms of the plant kingdom

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE			
264177	Identify the different organism	ns of the plant kingdom			
ORIGINATOR	GINATOR PROVIDER				
SGB Ornamental H	orticulture and Landscape				
FIELD		SUBFIELD			
1 - Agriculture and I	Nature Conservation	Horticulture			
ABET BAND UNIT STANDARD TYPE NQF LEVEL CREDITS			CREDITS		
Undefined	Regular	Level 2 4			

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

#### SPECIFIC OUTCOME 1

Describe the basic structure and function of fungi and the roles that they play in the environment.

#### **SPECIFIC OUTCOME 2**

Describe the basic structure and function of algae and the roles that they play in the ecosystem.

## **SPECIFIC OUTCOME 3**

Describe the basic structure and function of moss and the roles that they play in the environment.

#### **SPECIFIC OUTCOME 4**

Describe the basic structure, function and reproduction of ferns.

#### **SPECIFIC OUTCOME 5**

Describe the basic structure and function of gymnosperms and their methods of reproduction.

	ID	QUALIFICATION TITLE	LEVEL
Core	66589	National Certificate: Horticulture	Level 2



#### **UNIT STANDARD:**

## Clean interior plants

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE		
264178	Clean interior plants			
ORIGINATOR		PROVIDER		
SGB Ornamental H	SGB Ornamental Horticulture and Landscape			
FIELD		SUBFIELD		
1 - Agriculture and	Nature Conservation	Horticulture		
ABET BAND UNIT STANDARD TYPE		NQF LEVEL	CREDITS	
Undefined	Regular	Level 2 6		

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

#### SPECIFIC OUTCOME 1

Apply health and safety practices when cleaning interior plants.

#### **SPECIFIC OUTCOME 2**

Recognise the importance that plant cleaning has on the health and sustainability of plants in an office environment.

#### SPECIFIC OUTCOME 3

Describe the interior plant cleaning tools and equipment and demonstrate their correct usage.

#### **SPECIFIC OUTCOME 4**

Describe the principles and practices of plant cleaning and their application in the pre-delivery preparation of indoor plants.

## **SPECIFIC OUTCOME 5**

Demonstrate an understanding of the role that plant cleaning plays in maintaining the aesthetic value of plants.

	ID	QUALIFICATION TITLE	LEVEL
Elective	66589	National Certificate: Horticulture	Level 2



#### **UNIT STANDARD:**

## Identify the various soil types and their uses in plant propagation and landscaping

SAQA US ID	UNIT STANDARD TITLE			
264179	Identify the various soil types and their uses in plant propagation and landscaping			
ORIGINATOR		PROVIDER	PROVIDER	
SGB Ornamental H	orticulture and Landscape			
FIELD		SUBFIELD		
1 - Agriculture and	Nature Conservation	Horticulture		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL CREDITS		
Undefined	Regular	Level 2	4	

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## **SPECIFIC OUTCOME 1**

Describe the characteristics of topsoil and its importance for plant establishment and growth.

## **SPECIFIC OUTCOME 2**

Identify the main soil types and describe their major characteristics.

#### **SPECIFIC OUTCOME 3**

Recognise the role that water plays in cultivated soils and the factors that influence the infiltration rate in the different soil types.

#### **SPECIFIC OUTCOME 4**

Explain the role that capillary action plays in the transference and storage of water in the soil.

## **SPECIFIC OUTCOME 5**

Explain the role that aeration plays in the maintenance of soil fertility and the factors that cause poor aeration.

ID	QUALIFICATION TITLE	LEVEL
Core 66589	National Certificate: Horticulture	Level 2



## **UNIT STANDARD:**

#### Provide nutrition to plants and landscapes

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE		
264180	Provide nutrition to plants and	Provide nutrition to plants and landscapes		
ORIGINATOR	PROVIDER			
SGB Ornamental Horticulture and Landscape				
FIELD		SUBFIELD		
1 - Agriculture and Nature Conservation		Horticulture		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL CREDITS		
Undefined	Regular	Level 2 6		

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## **SPECIFIC OUTCOME 1**

Describe the various nutrients required by garden plants and the methods of providing these.

#### **SPECIFIC OUTCOME 2**

Conduct soil sampling to obtain a nutrient analysis.

## **SPECIFIC OUTCOME 3**

Identify the different types of organic material, their value to plants and the methods of application.

## SPECIFIC OUTCOME 4

Identify the different types of synthetic fertilisers, their value to plants and the methods of application.

	ID	QUALIFICATION TITLE	LEVEL
Core	66589	National Certificate: Horticulture	Level 2



## **UNIT STANDARD:**

## Maintain turf cricket pitches and outfields

SAQA US ID	UNIT STANDARD TITLE			
264181	Maintain turf cricket pitches a	Maintain turf cricket pitches and outfields		
ORIGINATOR	PROVIDER			
SGB Ornamental H	orticulture and Landscape			
FIELD		SUBFIELD		
1 - Agriculture and I	Nature Conservation	Horticulture		
ABET BAND UNIT STANDARD TYPE NQF LEVEL			CREDITS	
Undefined	Regular	Level 2 8		

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## **SPECIFIC OUTCOME 1**

Apply the principles and practices of health and safety for cricket field maintenance.

## **SPECIFIC OUTCOME 2**

Describe the cultural practices that are required for the maintenance of turf pitches and turf practice nets.

#### **SPECIFIC OUTCOME 3**

Describe the cultural practices that are required for the maintenance of a cricket outfield.

## **SPECIFIC OUTCOME 4**

Operate the turf maintenance equipment to produce consistently good quality turf.

## **SPECIFIC OUTCOME** 5

Perform routine preventative maintenance on the pitch and outfield equipment.

	ID	QUALIFICATION TITLE	LEVEL
Elective	66589	National Certificate: Horticulture	Level 2



## **UNIT STANDARD:**

#### Operate brushcutters in the horticultural environment

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE				
264182	Operate brushcutters in the h	Operate brushcutters in the horticultural environment				
ORIGINATOR		PROVIDER				
SGB Ornamental H	Ornamental Horticulture and Landscape					
FIELD			SUBFIELD			
1 - Agriculture and I	Nature Conservation	Horticulture				
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS			
Undefined	Regular	Level 2 4				

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## **SPECIFIC OUTCOME 1**

Apply the appropriate safety precautions when operating and maintaining a brushcutter.

## **SPECIFIC OUTCOME 2**

Select the appropriate attachments for trimming/cutting and prepare the work area.

## **SPECIFIC OUTCOME 3**

Cut and trim using a brushcutter.

## **SPECIFIC OUTCOME 4**

Perform routine preventative maintenance on a brushcutter.

	ID	QUALIFICATION TITLE	LEVEL
Elective	66589	National Certificate: Horticulture	Level 2



## **UNIT STANDARD:**

## Prepare Plants for Interior Environments

SAQA US ID	UNIT STANDARD TITLE			
264183	Prepare Plants for Interior En	Prepare Plants for Interior Environments		
ORIGINATOR	PROVIDER			
SGB Ornamental H	Ornamental Horticulture and Landscape			
FIELD	FIELD			
1 - Agriculture and	Nature Conservation	Horticulture		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL CREDITS		
Undefined	Regular	Level 2	6	

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## SPECIFIC OUTCOME 1

Apply health and safety principles and practices in pre-delivery plant preparation.

#### SPECIFIC OUTCOME 2

Describe the pre-delivery plant preparation processes and the role that this has in ensuring a quality display.

#### SPECIFIC OUTCOME 3

Select the appropriate tools and equipment and carry out the pre-delivery preparations.

#### SPECIFIC OUTCOME 4

Describe the factors that influence productivity and quality assurance in plant preparation.

	ID	QUALIFICATION TITLE	LEVEL
Elective	66589	National Certificate: Horticulture	Level 2



## **UNIT STANDARD:**

#### Identify common ornamental plants

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE		
264184	Identify common ornamental	Identify common ornamental plants		
ORIGINATOR	ATOR PROVIDER			
SGB Ornamental H	orticulture and Landscape			
FIELD		SUBFIELD		
1 - Agriculture and	1 - Agriculture and Nature Conservation			
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL CREDITS		
Undefined	Regular	Level 2 8		

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## **SPECIFIC OUTCOME 1**

Describe the characteristics and growth requirements of trees commonly found in the workplace.

#### **SPECIFIC OUTCOME 2**

Describe the characteristics and growth requirements of shrubs commonly found in the workplace.

#### **SPECIFIC OUTCOME 3**

Describe the characteristics and growth requirements of climbing plants commonly found in the workplace.

## **SPECIFIC OUTCOME 4**

Describe the characteristics and growth requirements of ground covers commonly found in the workplace.

#### **SPECIFIC OUTCOME** 5

Describe the characteristics and growth requirements of annual bedding plants commonly found in the workplace.

#### **SPECIFIC OUTCOME** 6

Describe the characteristics and growth requirements of herbaceous plants commonly found in the workplace.

l l	D	QUALIFICATION TITLE	LEVEL
Core 6	36589	National Certificate: Horticulture	Level 2



#### **UNIT STANDARD:**

## Apply pest control practices in ornamental plant production and landscaping

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE			
264185	Apply pest control practices in	Apply pest control practices in ornamental plant production and landscaping			
ORIGINATOR	PROVIDER				
SGB Ornamental H	orticulture and Landscape				
FIELD		SUBFIELD			
1 - Agriculture and	Nature Conservation	Horticulture			
ABET BAND UNIT STANDARD TYPE		NQF LEVEL	CREDITS		
Undefined	Regular	Level 2	6		

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

#### SPECIFIC OUTCOME 1

Apply health and safety practices when conducting pest control.

#### SPECIFIC OUTCOME 2

Describe the correct use and maintenance of pest control applicators and equipment.

## **SPECIFIC OUTCOME** 3

Identify and explain the hazards that chemical control substances pose to the environment.

## **SPECIFIC OUTCOME 4**

Demonstrate an understanding of the specific chemical control groups and their modes of combating pests.

	<u>ID</u>	QUALIFICATION TITLE	LEVEL
Core	66589	National Certificate: Horticulture	Level 2



## **UNIT STANDARD:**

## Conduct controlled tree felling in various locations

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE			
264186	Conduct controlled tree felling	Conduct controlled tree felling in various locations			
ORIGINATOR	PROVIDER				
SGB Ornamental H	namental Horticulture and Landscape				
FIELD		SUBFIELD			
1 - Agriculture and I	Nature Conservation	Horticulture			
ABET BAND UNIT STANDARD TYPE		NQF LEVEL	CREDITS		
Undefined	Regular	Level 3	6		

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## **SPECIFIC OUTCOME 1**

Apply chainsaw safety practices for tree felling.

## SPECIFIC OUTCOME 2

Prepare for tree felling.

## **SPECIFIC OUTCOME 3**

Perform controlled hinged tree felling.

## SPECIFIC OUTCOME 4

Perform back cutting techniques for tree felling.

## **SPECIFIC OUTCOME** 5

Utilise felling wedges for controlled felling.

	ID	QUALIFICATION TITLE	LEVEL
Elective	66589	National Certificate: Horticulture	Level 2
Elective	66649	National Certificate: Landscaping	Level 3



## **UNIT STANDARD:**

#### Harvest cut roses

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE		
264187	Harvest cut roses	Harvest cut roses		
ORIGINATOR	PROVIDER			
SGB Ornamental H	orticulture and Landscape			
FIELD		SUBFIELD		
1 - Agriculture and I	Nature Conservation	Horticulture		
ABET BAND UNIT STANDARD TYPE		NQF LEVEL	CREDITS	
Undefined	Regular	Level 2	6	

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

#### **SPECIFIC OUTCOME 1**

Apply Health and Safety practices when harvesting cut roses.

## **SPECIFIC OUTCOME 2**

Demonstrate the correct use of cut rose harvesting tools and equipment.

#### **SPECIFIC OUTCOME 3**

Determine the correct cutting stage for harvesting.

## **SPECIFIC OUTCOME 4**

Explain the principles and practices of manually harvesting cut roses.

	D Q	UALIFICATION TITLE	LEVEL
Elective 6	86589 Na	ational Certificate: Horticulture	Level 2



#### **UNIT STANDARD:**

#### Propagate plants from stem cuttings

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE			
264188	Propagate plants from stem of	Propagate plants from stem cuttings			
ORIGINATOR		PROVIDER			
SGB Ornamental H	orticulture and Landscape				
FIELD	IELD				
1 - Agriculture and I	Nature Conservation	Horticulture			
ABET BAND UNIT STANDARD TYPE		NQF LEVEL	CREDITS		
Undefined	Regular	Level 2	5		

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## **SPECIFIC OUTCOME 1**

Describe the safety practices that must be adhered to when stem cuttings are taken.

#### **SPECIFIC OUTCOME 2**

Describe the necessary hygiene practices that must be followed when taking stem cuttings.

#### **SPECIFIC OUTCOME 3**

Take nodal stem cuttings from selected plant material for use in propagation.

#### SPECIFIC OUTCOME 4

Take stem cuttings from selected softwood plant material for use in propagation.

#### **SPECIFIC OUTCOME** 5

Take stem cuttings from selected semi-hardwood plant material for use in propagation.

## **SPECIFIC OUTCOME** 6

Prepare the propagation containers and place the stem cuttings in the rooting media.

## SPECIFIC OUTCOME 7

Take care of stem cuttings to ensure successful plant production.

#### **SPECIFIC OUTCOME 8**

Harden off the rooted stem cuttings.

#### QUALIFICATIONS UTILISING THIS UNIT STANDARD

ID	QUALIFICATION TITLE	LEVEL
Core 66589	National Certificate: Horticulture	Level 2

Source: National Learners' Records Database

Unit Standard 264188

27/03/2009



#### **UNIT STANDARD:**

## Develop the cut rose frame

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE		
264189	Develop the cut rose frame	Develop the cut rose frame		
ORIGINATOR	PROVIDER			
SGB Ornamental H	Ornamental Horticulture and Landscape			
FIELD		SUBFIELD		
1 - Agriculture and	Nature Conservation	Horticulture		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS	
Undefined	Regular	Level 2	4	

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## **SPECIFIC OUTCOME 1**

Apply health and safety practices while developing cut rose frames.

## **SPECIFIC OUTCOME 2**

Utilise the necessary tools and equipment for cut rose frame development.

#### **SPECIFIC OUTCOME 3**

Indicate the various parts of the cut rose framework and explain the functions that they perform.

#### SPECIFIC OUTCOME 4

Apply the principles and practices for developing water shoots on a cut rose frame.

## **SPECIFIC OUTCOME** 5

Apply the principles and practices of developing laterals on cut rose plants.

	ID	QUALIFICATION TITLE	LEVEL
Elective	66589	National Certificate: Horticulture	Level 2



## **UNIT STANDARD:**

#### Plant and establish herbaceous plants in landscaped areas

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE				
264190	Plant and establish herbaceo	Plant and establish herbaceous plants in landscaped areas				
ORIGINATOR	PROVIDER					
SGB Ornamental Horticulture and Landscape						
FIELD		SUBFIELD	SUBFIELD			
1 - Agriculture and N	1 - Agriculture and Nature Conservation					
ABET BAND UNIT STANDARD TYPE		NQF LEVEL	CREDITS			
Undefined	Regular	Level 2	6			

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## SPECIFIC OUTCOME 1

Apply health and safety practices when working with herbaceous plants.

## SPECIFIC OUTCOME 2

Lift and divide herbaceous plants in the landscape.

#### SPECIFIC OUTCOME 3

Lift, divide and store dormant bulbs and corms.

#### SPECIFIC OUTCOME 4

Prepare the soil for replanting herbaceous.

## SPECIFIC OUTCOME 5

Prepare holes for planting.

#### SPECIFIC OUTCOME 6

Plant, backfill and complete the planting of herbaceous plants and bulbs.

ID_	QUALIFICATION TITLE	LEVEL
Core 66589	National Certificate: Horticulture	Level 2



#### **UNIT STANDARD:**

## Demonstrate an understanding of a flowering plant's reproductive cycle

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE		
264191	Demonstrate an understandir	Demonstrate an understanding of a flowering plant's reproductive cycle		
ORIGINATOR		PROVIDER		
SGB Ornamental H	orticulture and Landscape			
FIELD		SUBFIELD		
1 - Agriculture and I	Nature Conservation	Horticulture		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS	
Undefined	Regular	Level 2	5	

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

#### SPECIFIC OUTCOME 1

Explain the role that pollination plays in the reproductive process of a flowering plant and the functions of the various parts of a flower.

## SPECIFIC OUTCOME 2

Describe the fertilization process in flowering plants.

#### **SPECIFIC OUTCOME 3**

Describe the types of seeds that flowering plants produce.

#### SPECIFIC OUTCOME 4

A plant's need for seed dispersal is describe and the various methods of achieving this explained according to theory.

## **SPECIFIC OUTCOME** 5

Describe the process of seed germination and the environmental factors that are required.

## **SPECIFIC OUTCOME** 6

Describe the requirements that are necessary to initiate plant growth.

	ID	QUALIFICATION TITLE	LEVEL
Core	66589	National Certificate: Horticulture	Level 2



#### **UNIT STANDARD:**

## Provide care for ornamental plants

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE		
264192	Provide care for ornamental	Provide care for ornamental plants		
ORIGINATOR		PROVIDER		
SGB Ornamental Ho	orticulture and Landscape	iculture and Landscape		
FIELD	SUBFIELD			
1 - Agriculture and N	ture and Nature Conservation Horticulture			
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS	
Undefined	Regular	Level 2	8	

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

#### **SPECIFIC OUTCOME 1**

Apply health and safety practices whilst providing care to plants.

#### **SPECIFIC OUTCOME 2**

Identify the influence that environmental factors have on plants commonly found in the workplace.

## **SPECIFIC OUTCOME 3**

Stake and tie select plants and trees.

#### **SPECIFIC OUTCOME 4**

Trim and deadhead various ornamental plants.

#### **SPECIFIC OUTCOME 5**

Prune plants and trees.

## **SPECIFIC OUTCOME** 6

Implement a suitable feeding program.

## **SPECIFIC OUTCOME** 7

Implement a pest control programme to prevent infestations and minimise the effects of common pests.

#### **SPECIFIC OUTCOME 8**

Implement a weed control programme to ensure that plants do not have to compete with unwanted species for space and nutrition.

## **QUALIFICATIONS UTILISING THIS UNIT STANDARD**

ID	QUALIFICATION TITLE	LEVEL
Core 6658	National Certificate: Horticulture	Level 2

Source: National Learners' Records Database

Unit Standard 264192



## **UNIT STANDARD:**

## Manage the cut rose canopy

SAQA US ID	UNIT STANDARD TITLE			
264193	Manage the cut rose canopy	Manage the cut rose canopy		
ORIGINATOR		PROVIDER		
SGB Ornamental He	orticulture and Landscape			
FIELD		SUBFIELD		
1 - Agriculture and I	Nature Conservation	Horticulture		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS	
Undefined	Regular	Level 2	6	

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

#### SPECIFIC OUTCOME 1

Apply health and safety practices when managing the cut rose canopy.

#### **SPECIFIC OUTCOME 2**

Utilise the necessary tools and equipment to manage the cut rose canopy.

#### **SPECIFIC OUTCOME 3**

Describe the role that the cut rose canopy performs in the promotion of flowers.

#### SPECIFIC OUTCOME 4

Apply canopy management practices to cut roses.

## **SPECIFIC OUTCOME** 5

Conduct regular inspection and maintenance of the cut rose canopy.

	ID	QUALIFICATION TITLE	LEVEL
Elective	66589	National Certificate: Horticulture	Level 2



#### **UNIT STANDARD:**

## Operate specialised walk-behind mowers

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE		
264194	Operate specialised walk-bel	Operate specialised walk-behind mowers		
ORIGINATOR		PROVIDER		
SGB Ornamental H	orticulture and Landscape			
FIELD		SUBFIELD		
1 - Agriculture and	Nature Conservation	Horticulture	'	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS	
Undefined	Regular	Level 2	5	

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## **SPECIFIC OUTCOME 1**

Apply the safety precautions and practices when operating and maintaining walk-behind mowers.

## **SPECIFIC OUTCOME 2**

Conduct the set-up tests on a walk-behind mower.

## **SPECIFIC OUTCOME** 3

Operate specialised walk behind mowers to achieve the required quality of cut.

## **SPECIFIC OUTCOME 4**

Perform routine maintenance on completion of mowing.

	ID	QUALIFICATION TITLE	LEVEL
Elective	66589	National Certificate: Horticulture	Level 2



#### **UNIT STANDARD:**

## Operate chainsaws for limbing and logging at ground level

SAQA US ID	UNIT STANDARD TITLE	UNIT STANDARD TITLE		
264195	Operate chainsaws for limbin	Operate chainsaws for limbing and logging at ground level		
ORIGINATOR		PROVIDER		
SGB Ornamental H	orticulture and Landscape			
FIELD	SUBFIELD			
1 - Agriculture and	Nature Conservation	Horticulture		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS	
Undefined	Regular	Level 2	6	

This unit standard does not replace any other unit standard and is not replaced by another unit standard.

## **SPECIFIC OUTCOME 1**

Apply chainsaw safety practices for limbing and logging at ground level.

## **SPECIFIC OUTCOME 2**

Identify and describe the components of a chainsaw.

#### **SPECIFIC OUTCOME 3**

Conduct the pre-operational checks on a chainsaw.

#### **SPECIFIC OUTCOME 4**

Perform limbing and logging operations at ground level.

## **SPECIFIC OUTCOME** 5

Conduct basic chainsaw maintenance tasks.

	D	QUALIFICATION TITLE	LEVEL
Elective	66589	National Certificate: Horticulture	Level 2
Elective	66649	National Certificate: Landscaping	Level 3