

of Dublin Education and Iraining board

**Programme Module** 

# **Planting and Potting**

leading to

Level 3 QQI Component: Planting and Potting by Hand 3N0891

# Please note the following prior to using this programme module descriptor:

- This programme module can be delivered as a stand alone module or as part of the:
  - 1. Level 3 QQI Certificate in General Learning 3M0874
  - 2. Level 3 QQI Certificate in Employability Skills 3M0935
  - 3. Level 3 QQI Certificate in Information and Communication Technologies 3M0877.
- Upon successful completion of this programme module the learner will achieve 5 credits towards the CDETB Level 3 QQI Certificates in General Learning, Employability Skills or Information and Communication Technologies.
- The learner needs to accumulate a minimum of 60 credits in order to achieve the Level 3 QQI Certificate in General Learning or Employability Skills or Information and Communication Technologies.
- Teachers/tutors should familiarise themselves with the information contained in CDETB's programme descriptor for Everyday Living Skills, Skills for the Workplace or Introduction to Information and Communication Technologies prior to delivering this programme module.
- In delivering this programme module teachers/tutors will deliver class content in line with the Guidelines for Teaching and Learning included in this programme module.
- In assessing the learner, teachers/tutors will assess according to the information included in this programme module. Teachers/tutors are required to devise Assessment Briefs for the Collection of Work and Skills Demonstration.
- Where overlap is identified between the content of this programme module and one or more other programme module(s), teachers/tutors are encouraged to integrate the delivery of this content.
- Where there is an opportunity to facilitate the learner to produce one piece of assessment evidence which demonstrates the learning outcomes from more than one programme module, teachers/tutors are encouraged to integrate assessment.

# **Overview of the Programme Module**

The Programme Module is structured as follows:

**Section 1 to 8:** contains important information for the teacher/tutor about the credit value, title, code, etc. of the programme module.

**Section 9:** details the learning outcomes prescribed for the programme module by QQI. These outcomes are set by QQI and cannot be changed in any way by the CDETB or individual teachers/tutors.

**Section 10:** outlines suggestions and guidelines for teaching the module. It contains useful information and ideas for teachers/tutors and can be helpful in clarifying learning outcomes.

**Section 11:** contains the relevant information in relation to the assessment of the module. As the teacher/tutor is the assessor of the work, this section is essential reading.

Section 11a specifically prescribes the way in which learners are required to present evidence for assessment.

**Learner Marking Sheet:** this is the marking sheet that must be attached to the assessment portfolio and signed by the teacher/tutor and the learner.

Programme Module		Award	
1.	<b>Title of Programme Module</b> Planting and Potting	2.	Code Level 3 Planting and Potting by Hand 3N0891
3.	<b>Duration in Hours of Programme Module</b> 50	4.	<b>Credit Value</b> 5
5.	Assessment Technique Skills Demonstration 80% Collection of Work 20%	6.	<b>Specific Requirements</b> Centres must have access to the range of services, professional products, tools, materials and equipment to ensure the learner has the opportunity to cover all of the practical activities.

## 7. Aims of the Programme Module

This programme module aims to equip the learner with the knowledge, skills and competencies to plant and pot a range of plants.

## 8. Objectives:

- to provide an understanding of the principles of planting and potting
- to provide an understanding of the practices of planting and potting
- to foster core competencies and knowledge applicable to the horticultural sector.

# 9. Learning Outcomes of Level 3 Planting and Potting by Hand 3N0891

The learner will be able to:

- 1. list the tools, materials and equipment required to plant and pot a range of plants and bulbs
- 2. describe the steps involved in potting and planting
- 3. outline the purpose and benefits of repotting
- 4. pot plants by repotting in a rigid pot or potting a pot rooted liner in a polybag
- 5. plant a variety of plants outdoors to include bulbs, bedding plants, a tree, and a hedge using appropriate techniques and materials
- 6. apply appropriate health, safety and personal hygiene procedures when potting and planting
- 7. demonstrate the application of communications, team working and quality awareness in a horticultural environment.

## **Delivery Strategies and Learning Activities**

The programme module could be delivered through classroom-based learning activities, team work, group discussions, one-to-one tutorials, field trips, case studies, role play and other relevant activities. The development of team working skills and effective communications skills should be integrated where possible in the delivery of this module. The application of these skills must be demonstrated in the Collection of Work/Skills Demonstrations. There are practical elements to this module requiring access to a range of materials, resources and equipment and the learner should be allocated adequate time and facilities to complete each task. All practical activities should exemplify safe working practices and reinforce standard health, safety and environmental concerns.

#### **10.** Guidelines for Teaching and Learning

Please note: the following guidelines suggest a sequence for the teaching of this module. In some cases, this may differ from the sequence of learning outcomes outlined in section 9.

#### Tools of the Trade

**Learning Outcome 1:** Explore with the learner a variety of tools, materials and equipment required to plant bulbs and plants.

In order to help the learner achieve *Learning Outcome 1* in particular, consider doing the following:

• identify with the learner the range of tools, materials and equipment necessary for planting and potting plants and bulbs (for example, trowel, spade, potting medium, range of containers, riddle, etc.)

It is essential to identify and demonstrate safe work practices in the use of equipment, tools and other materials. The teacher / tutor must explain the purpose of the tools or equipment and demonstrate the correct way to hold, carry and use them.

• select with the learner the most appropriate tool, materials and equipment for the task and demonstrate the correct usage with due care for self and others.

The learner should also be aware of the importance of maintaining and inspecting tools and equipment for damage and cleaning and storing them properly after use.

#### **Principles of Planting and Potting**

**Learning Outcome 2:** Explore with the learner the steps involved in potting and planting

In order to help the learner achieve *Learning Outcome 2* in particular, consider doing the following:

• identify with the learner how to prepare sites, pots and plants for potting or planting in the open ground

When potting, the learner must understand the importance of selecting and making ready the most appropriate containers, growing medium, labels, etc., for the plant to be potted. When planting outdoors, the learner must understand the important of selecting, making ready and marking out the planting site, providing supports / canes, and adapting the soil condition if necessary before planting. The learner should be aware of the importance of identifying the most appropriate time of year and weather conditions suitable to potting and planting out particular plants as well as identifying the appropriate environmental requirements (e.g., shelter, shade, etc.) In addition, the learner should be aware of the importance of the plant before potting or planting out. This may involve removing dead and damaged tissues and weeds, determining moisture status, teasing out / trimming roots, etc.

identify with the learner the steps involved in potting and planting

The learner should be able to describe the methods involved in potting and planting out a range of plants. When potting, the learner must be aware of the importance of selecting the most suitable type and size of container. The learner should know to plant in the centre of the container and at the appropriate depth and firmness. The learner should know to remove weeds, water in and label the plant. When planting outdoors, the learner must be aware of the importance of planting at the correct depth and firmness, to plant in a line if necessary, to prune plant and stake if necessary, and to water in and label.

• identify with the learner the immediate after care necessary.

The learner should be aware of the importance of watering in and also tying in / supporting the plant when necessary. They should be aware also of the importance of providing protection from pests and mulching to prevent drying out and to suppress weeds.

# Why re-pot?

**Learning Outcome 3:** Explore with the learner the purpose and benefits of re-potting.

In order to help the learner achieve *Learning Outcome 3* in particular, consider doing the following:

• identify with the learner the reasons for re-potting.

The learner should be aware that plants need to be repotted when they have grown too big for their container, or when seedlings and cuttings need to be transplanted or potted on. The learner should be aware of the signs that a plant needs to be repotted (e.g., roots protruding from base or surface of the soil, plant not thriving, etc.) The learner should be able to explain the benefits of re-potting (e.g., need more root space to grow and flourish, prevent plant becoming pot-bound, etc.)

## How to re-pot?

**Learning Outcome 4:** Explore with the learner how to re-pot plants in a rigid pot OR pot a pot rooted liner in a polybag.

In order to help the learner achieve Learning Outcome 4 in particular, consider doing the following:

• building on knowledge gained, recall and exemplify with the learner basic potting and planting guidelines and methods.

The learner should be aware of the importance of pre-soaking the plant to ease removal from the pot if necessary, or of careful handing of seedlings to avoid damage and ensure quick establishment. The learner should know how and when to 'tease out' pot-bound roots and / or loosen the root ball if necessary. They should be aware of the importance of selecting the correct size and type of pot and growing medium. The learner should understand to set the plant in the centre of the pot and at the same depth as previously. The importance of backfilling and firming in the plant needs to be understood as should the most appropriate watering procedure (e.g., misting seedlings, etc.) The learner must have the opportunity to demonstrate their ability to repot in a rigid pot, pot a pot rooted liner in a polybag and have access to the necessary materials, resources and equipment to do so. N.B., the learner can either repot in a rigid pot, or pot a pot rooted liner in a polybag, it is not necessary to demonstrate both.

## How to plant?

Learning Outcome 5: Explore with the learner how to plant a variety of plants outdoors

In order to help the learner achieve *Learning Outcome 5* in particular, consider doing the following:

• identify with the learner the importance of selecting plants that are in a good condition for planting (for example, free from pests/disease and signs of physical damage, moist healthy root ball but not root-bound, etc.)

The learner should be aware that plants should be in optimum condition before planting out.

• identify with the learner the significance of soil conditions and time of year when planting bulbs, bedding plants, trees and hedging

The learner should be aware of the significance of different soil textures (e.g., ability to retain nutrients, moisture, etc.,) and the benefits of improving soil. The learner should be aware of how to protect plantings from adverse weather conditions if necessary.

• recall with the learner the basic techniques involved in planting bulbs, bedding plants, trees and hedging (e.g., appropriate depth when planting bulbs, graft union to finish above ground level in grafted trees, etc.)

The learner should know the correct planting technique for each type of plant (e.g., pit planting, supporting/staking, correct firming in for different plant types, etc.) The learner should be aware of the benefits of each technique, for example, firming in helps to secure plant in the ground and prevent wind rock or plant being disturbed / loosened by birds, planting too shallowly may result in weak and unstable plant prone to drying out, and so on. The learner should know how to apply appropriate fertiliser to aid establishment if required. The learner must have the opportunity to demonstrate their ability to plant bulbs, bedding plants, a tree and a short row of hedging plants and have access to the necessary materials, resources and equipment to do so. All tasks should be carried out at the correct time of year and in appropriate weather conditions.

• identify with the learner how to provide immediate after care for new plantings.

The learner should be able to identify and apply the watering, supporting/staking, mulching, labelling and weed control requirements of bulbs, bedding plants, trees and hedging.

# Health, Safety and Hygiene considerations

**Learning Outcome 6:** Explore with the learner appropriate health, safety and personal hygiene procedures when potting and planting.

In order to help the learner achieve *Learning Outcome 6* in particular, consider doing the following:

• identify with the learner basic health and safety guidelines for working in a horticultural environment; (for example, wear sun protection, have access to first aid equipment, proper storage of tools, etc)

The learner should be able to identify common hazards and causes of accidents and describe strategies to prevent them or minimise the danger. The learner should be able to describe basic first aid and emergency procedures in the event of accidents and be familiar with correct manual handling procedures. The learner should be able to observe relevant safe working practices as outlined in the Safety, Health and Welfare at Work Act, 2005.

• exemplify with the learner how to use tools and equipment safely

The learner should be able to handle and store tool, materials, equipment and machinery in a safe and appropriate manner. The learner should understand the importance of recognising common hazard signs and labels on tools and products and correctly identify and following instructions on containers, materials, equipment, etc. In addition, the learner should be aware of when and why it may be necessary to wear personal protective clothing and equipment (e.g., goggles, face masks, etc.)

• identify with the learner the potential for certain plant material to be poisonous or an irritant, and identify the necessity to follow correct procedure when using and storing garden chemicals and

disposing of them and their containers.

The learner should be aware of common potential physical, chemical and biological hazards to humans, animals and the environment. The learner should understand the importance of washing their hands carefully with soap and following other basic hygienic procedures and practices relevant to a horticultural environment.

Useful resources:

- The Health and Safety Authority (<u>www.hsa.ie</u>) provide a range of publications and a list of resources that might prove useful, including <u>www.hsa.ie/eng/Education/Managing Safety in Schools</u>
- Health & Safety Guide for Garden Centre Workers on the <u>www.worksafebc.com</u> website offers clear, simple and useful information and guidelines.

# **Developing other Core Skills and Competencies**

**Learning Outcome 7:** Explore with the learner the importance of effective communication, team working and quality awareness in a horticultural environment.

In order to help the learner achieve Learning Outcome 7 in particular, consider doing the following:

• clarify with the learner the necessity for effective communication in a horticultural environment (for example, follow instruction, appropriately express ideas, opinions, concerns, etc.)

It is important to facilitate the learner to apply effective communication skills in different contexts throughout the delivery of the module. This could include one to one or group discussions and oral and written presentations, etc. Evidence must be verified by the teacher / tutor and retained in the Collection of Work.

• clarify with the learner the necessity for effective team-working in a horticultural environment (for example, working to agreed deadlines, sharing the workload, etc.)

The learner should be able to identify areas of work or tasks that require co-operation / team work and explain why. They must be able to identify tasks or procedures in which they engaged in on their own and/ or areas of personal responsibility. It is essential to facilitate the learner to participate effectively in group situations and team activities throughout the delivery of the module. Evidence must be verified by the tutor and retained in the Collection of Work.

• clarify with the learner the necessity for quality awareness in a horticultural environment (for example, compliance with legal standards and regulatory requirements, adequate waste disposal facilities, etc.)

It is important to facilitate the learner to identify a range of quality awareness issues relevant to a gardening / horticultural environment and to understand that success is linked to the application of sound quality concepts. Evidence must be verified by the tutor and retained in the Collection of Work.

# 11. (a) Specific Information Relating to the Assessment Techniques

The assessor (teacher/tutor) is required to devise Assessment Briefs for the Collection of Work and Skills Demonstration. In devising the Assessment Briefs, care should be taken to ensure that the learner is given the opportunity to show evidence of achievement of ALL learning outcomes. Each learner is required to work alone in completing the Collection of Work. There is no facility for this Collection of Work to be completed as a group.

Evidence that the learner has achieved the learning outcomes may take a variety of forms including tutor verification of the learner's contribution, learner worksheets, diagrams, cloze tests, multiple choice statements, visual presentations, or other appropriate evidence in the form of written, oral, graphic, audio, visual or any combination of these. Any audio or visual evidence must be provided in a suitable format. All of the evidence must be retained in the learner's assessment portfolio.

Skills Demonstration	80%
Supporting evidence of the Skills Demonstration	s must be included in the portfolio of assessment.
The learner will complete 5 Skills Demonstration	s at appropriate intervals during the programme.
Skills Demonstrati	ion 1 – (30 – 45 minutes)
Repot a plant into a rigid po	ot OR plant a pot rooted plant in a polybag
Skills Demonstrat	ion 2 – (30 – 45 minutes)
Plar	t 5 bulbs outdoors
Skills Demonstrati	ion 3 – (30 – 45 minutes)
Plant 3 b	edding plants outdoors
Skills Demonstrati	ion 4 – (30 – 45 minutes)
Pla	nt a tree outdoors
Skills Demonstrati	ion 5 – (30 – 45 minutes)
Plant a short row (appro	ox. 1 meter) of hedging plants outdoors
When completing the Skills Demonstrations, the	learner must demonstrate:
<ul> <li>correct maintenance and storage of</li> </ul>	tools, materials and equipment
<ul> <li>appropriate health, safety and perso</li> </ul>	nal hygiene procedures
effective communication and team y	vorking skills, and an awareness of quality issues.

Collection of Work	20%
The Collection of Work may be produced be clearly indicated where evidence cove	throughout the duration of this programme module. It must ers more than one learning outcome.
1. A planting and propagation log book/	journal that indicates:
• general observations/reflections,	, to include
$\circ$ an outline of the purpose	e and steps involved in planting in pots e and steps involved in repotting plants e and steps involved in planting in the ground
<ul> <li>significant dates - planting, pest</li> <li>tools, materials, equipment used</li> <li>details of plants used</li> </ul>	
<ul><li> problems encountered</li><li> ideas for improvement.</li></ul>	
2. Evidence of the learner's application horticultural environment.	of communications, team working and quality awareness in a

## 11. (b) Assessment - General Information – Planting and Potting by Hand 3N0891

All instructions for the learner should be clearly outlined in an Assessment Brief

Mapping Each Learning Outcome to an Assessment Technique			
Learning Outcome	Assessment Technique		
1 List the tools, materials and equipment required to plant and pot a range of plants and bulbs	Collection of Work Skills demonstration		
2 Describe the steps involved in potting and planting	Collection of work		
3 Outline the purpose and benefits of re-potting	Collection of Work		
4 Pot plants by re-potting in a rigid pot or potting a pot rooted liner in a polybag	Collection of Work Skills demonstration		
5 Plant a variety of plants outdoors to include bulbs, bedding plants, a tree and a hedge using appropriate techniques and materials	Collection of Work Skills demonstration		
6 Apply appropriate health, safety and personal hygiene procedures when potting and planting	Collection of Work Skills demonstration		
7 Demonstrate the application of communications, team working and quality awareness in a horticultural environment.	Collection of Work Skills demonstration		

#### Grading

At Level 3 a learner is graded as Successful or Referred.

**Successful** means that ALL the learning outcomes from the Component Specification have been demonstrated to an appropriate standard in the learner's portfolio of assessment.

Referred means that the portfolio of assessment needs further work by the learner before s/he can demonstrate the standard and achieve certification from QQI.

Level 3 Planting and Potting by Hand 3N0891

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Learner's Name: \_\_\_\_\_\_

Learner's PPSN: \_\_\_\_\_

Learner Marking Sheet

Lea	arners will be able to:	Evidence of the following is included in the assessment portfolio:		Please indicate where evidence is to be found
1.	List the tools, materials and equipment required to plant and pot a range of plants and bulbs	<ul> <li>Identify a range of tools, materials and equipment required to plant and pot plants</li> <li>Demonstrate the correct usage of the tools, materials and equipment</li> <li>Observe basic safety procedures and practices when using tools, materials and equipment</li> <li>Demonstrate good working practices in the maintenance, cleaning and storage of the tools, materials and equipment</li> </ul>		
2.	Describe the steps involved in potting and planting	<ul> <li>Explain why and how to prepare sites /pots and plants for planting</li> <li>Outline the steps involved in planting out and potting on</li> <li>Outline appropriate aftercare needs</li> </ul>		
3.	Outline the purpose and benefits of re- potting	<ul><li>Identify when to repot</li><li>Explain the benefits of re-potting</li></ul>		
4.	Pot plants by re-potting in a rigid pot or potting a pot rooted liner in a polybag	<ul> <li>Select appropriate containers, growing medium and plants</li> <li>Plant in the appropriate position, depth and firmness</li> <li>Provide appropriate immediate aftercare</li> </ul>		
5.	Plant a variety of plants outdoors to include bulbs, bedding plants, a tree and a hedge using appropriate techniques and materials	<ul> <li>Prepare sites and plants for planting</li> <li>Plant according to the plants need's and requirement's</li> <li>Provide appropriate immediate aftercare</li> <li>Maintain the plant's growth and development</li> </ul>		
6.	Apply appropriate health, safety and personal hygiene procedures when potting and planting	<ul> <li>Apply appropriate health procedures when potting and planting</li> <li>Apply appropriate safety procedures when potting and planting</li> <li>Apply appropriate personal hygiene procedures when potting and planting</li> </ul>		

Demonstrate the application of	Apply effective communication skills when potting and planting	
communications, team working and	<ul> <li>Apply effective team-working skills when potting and planting</li> </ul>	
quality awareness in a horticultural	<ul> <li>Apply quality awareness when potting and planting</li> </ul>	
environment.		

This is to state that the evidence presented in the attached portfolio is complete and is the work of the named learner.

Learner's Signature:	 Date:
Assessor's Signature:	 Date:
External Authenticator's Signature:	 Date: