



cetb

Bord Oideachais agus
Oiliúna Chorcaí

*Cork Education and
Training Board*

Cork Education and Training Board

**Programme Module for
Growing Vegetables**

leading to

Level 4 FETAC

Growing Vegetables 4N0671

Introduction

This programme module may be delivered as a standalone module leading to certification in a FETAC minor award. It may also be delivered as part of an overall validated programme leading to a Level 4 FETAC Certificate.

The teacher/tutor should familiarise themselves with the information contained in Cork Education and Training Board's programme descriptor for the relevant validated programme prior to delivering this programme module.

The programme module is structured as follows:

1. Title of Programme Module
2. FETAC Component Title and Code
3. Duration in hours
4. Credit Value of FETAC Component
5. Status
6. Special Requirements
7. Aim of the Programme Module
8. Objectives of the Programme Module
9. Learning Outcomes
10. Indicative Content
11. Assessment <ul style="list-style-type: none">a. Assessment Technique(s)b. Mapping of Learning Outcomes to Assessment Technique(s)c. Guidelines for Assessment Activities
12. Grading
13. Learner Marking Sheet(s), including Assessment Criteria

Integrated Delivery and Assessment

The teacher/tutor is encouraged to integrate the delivery of content where an overlap between content of this programme module and one or more other programme modules is identified. This programme module will facilitate the learner to develop language, literacy and numeracy skills relevant to the themes and content of the module.

Likewise the teacher/tutor is encouraged to integrate assessment where there is an opportunity to facilitate a learner to produce one piece of assessment evidence which demonstrates the learning outcomes from more than one programme module. The integration of the delivery and assessment of level 4 Communications and level 4 Mathematics modules with that of other level 4 modules is specifically encouraged.

Structured communication and teamwork is encouraged between the teacher/tutor delivering this programme module and the language, literacy, numeracy and learning support teacher/tutor, as appropriate, to facilitate the learner in completing the programme module and achieving certification in the award.

Indicative Content

The indicative content in Section 10 does not cover all teaching possibilities. The teacher/tutor is encouraged to be creative in devising and implementing other approaches, as appropriate. The use of examples is there to provide suggestions. The teacher/tutor is free to use other examples, as appropriate. The indicative content ensures all learning outcomes are addressed but it may not follow the same sequence as that in which the learning outcomes are listed in Section 9. It is the teacher's/tutor's responsibility to ensure that all learning outcomes are included in the delivery of this programme module.

Cork Education and Training Board

<p>1. Title of Programme Module Growing Vegetables</p>
<p>2. Component Name and Code Growing Vegetables 4N0671</p>
<p>3. Duration in Hours 100 hours (typical learner effort, to include both directed and self directed learning)</p>
<p>4. Credit Value 10 Credits</p>
<p>5. Status This programme module may be compulsory or optional within the context of the validated programme. Please refer to the relevant programme descriptor, Section 9 Programme Structure</p>
<p>6. Special Requirements None</p>
<p>7. Aim of the Programme Module This programme module aims to equip the learner with the relevant knowledge; skill and competence to plant grow and maintain a range of vegetables under supervision.</p>
<p>8. Objectives of the Programme Module</p> <ul style="list-style-type: none"> • To provide the learner with the knowledge of the principles of crop rotation and factors affecting soil suitability for vegetable production • To provide the learner with the skills for preparing, growing, establishing and harvesting vegetables. • To provide the learner with mechanisms to deal with common pests, diseases and weed identification and control. • To enable the learner to observe the correct safety procedures when using relevant equipment/work practices in order to create and maintain a safe working environment. • To assist the learner to develop the language, literacy and numeracy skills related to Growing Vegetables through the medium of the module themes and content • To enable the learner to take responsibility for his/her own learning.

9. Learning Outcomes of Level Growing Vegetables 4N0671

Learners will be able to:

1. State the principles of crop rotation including a rationale and examples
2. State the major factors affecting soil suitability for vegetable production to include soil composition, nutrient availability, water holding capacity, drainage, organic matter content and compaction.
3. Prepare ground for vegetable growing to include digging, breaking up of soil, removal of debris, weeds and large stones to form suitable surface.
4. Apply compost, manure and fertiliser to a stated rate at planting and throughout the growing season
5. Grow a range of vegetables to include brassicas, legumes, root crops and salad crops from seeds, including both station and drill sown, tubers, sets, plugs and transplants
6. Maintain growing vegetable crops to include watering, weather and pest protection, training and supporting.
7. Deal with common pests and diseases of vegetable crops to include identification and control by a range of methods.
8. Deal with weeds to include identification and control by a range of methods.
9. Harvest a range of vegetables to include selection, grading and packing.
10. Operate within appropriate safety procedures to create and maintain a safe working environment including safety standards regarding lifting, carrying and handling plants, tools and equipment.

10. Indicative Content

This section provides suggestions for programme content but is not intended to be prescriptive. The programme module can be delivered through classroom based learning activities, group discussions, one-to-one tutorials, field trips, case studies, role play and other suitable activities, as appropriate.

Section 1 : Principles of Crop Rotation & Soil Suitability

Facilitate the learner to determine the suitability of growing vegetables on a given soil to include:

- Site Assessment including visual analysis of the site and soil, dig a pit to establish the soil type, water holding capacity, drainage, organic matter content and compaction, earthworm count, PH test, percolation test, determine soil type e.g. clay, brown soil etc
- State the principles of crop rotation and the importance of crop rotation in growing vegetables.

Section 2: Ground Preparation

Facilitate the learner to prepare the ground for vegetable production based on results of soil suitability test to include:

- Rotovating/breaking up of soil, removal of debris, weeds and large stones to form suitable surface.
- Apply compost, manure and fertiliser as needed based on soil suitability test results.
- Apply a variety of low energy techniques including mulches, no-dig methods and perennial crops.

Section 3: Growing and Maintaining a range of Vegetable Crops

Facilitate the learner to grow and maintain a range of vegetables including:

- Planning a growing calendar of vegetables linked to seasonal, structural (availability of polytunnel etc) and soil suitability factors.
- Growing and maintaining a range of vegetables to include brassicas, legumes, root crops, salad crops from seeds.
- Growing and maintaining a variety of vegetables to include the following range of techniques and vegetable types- station and drill sown, tubers, sets, plugs and transplants.
- Maintain crops by use of appropriate watering, fertilising, supporting and training techniques.

Section 4: Dealing with Common Pests and Diseases & Weed Identification and Control

Facilitate the learner to prevent/control and/or correctly deal with common pests, diseases and weeds to include:

- Identify the common pests, diseases and weeds related to growing vegetables.
- Outline preventative measures to be taken for pests, diseases and weeds.
- Control pests/diseases/weeds by a range of methods e.g. organic methods, chemical methods, biological methods etc.

Section 5 : Harvesting & Storing of Vegetables

Facilitate the learner to correctly harvest and store vegetables to include :

- Different harvesting techniques – domestic and/or commercial harvesting etc
- The learner will harvest a crop of vegetables grown as part of the programme linked with the planting calendar outlined in section 3.
- The learner will select, grade and pack the produce appropriate to the scale of production and end use of vegetables, e.g. to supply a local market stall.

Section 6: Health & Safety Procedures

Facilitate the learner to operate in a safe environment in growing vegetables to include:

- Correct lifting/carrying techniques
- Correct use of personal protection equipment and clothing.
- Safe and correct engagement with poisonous/hazardous plants.
- Safe use of chemicals
- Safe use of appropriate tools

11. Assessment**11a. Assessment Techniques**

Check your Component Specification, section Assessment Techniques, to identify the technique(s) that must be used to assess the learner's assessment evidence and for the related weighting for each technique. Insert that information here, for example:

Skills Demonstration 80%

Examination 20%

11b. Mapping of Learning Outcomes to Assessment Techniques

In order to ensure that the learner is facilitated to demonstrate the achievement of all learning outcomes from the component specification; each learning outcome is mapped to an assessment technique(s). This mapping should not restrict an assessor from taking an integrated approach to assessment.

Learning Outcome	Assessment Technique
1. State the principles of crop rotation including a rationale and example.	Examination
2. State the major factors affecting soil suitability for vegetable production to include soil composition, nutrient availability, water holding capacity, drainage, organic matter content and compaction.	Skills demonstration and examination
3. Prepare ground for vegetable growing to include digging, breaking up of soil, removal of debris, weeds and large stones to form suitable surface.	Skills demonstration and examination
4. Apply compost, manure and fertiliser to a stated rate at planting and throughout the growing season	Skills demonstration and examination
5. Grow a range of vegetables to include brassicas, legumes, root crops and salad crops from seeds, including both station and drill sown, tubers, sets, plugs and transplants	Skills demonstration and examination
6. Maintain growing vegetable crops to include watering, weather and pest protection, training and supporting.	Skills demonstration and examination
7. Deal with common pests and diseases of vegetable crops to include identification and control by a range of methods.	Skills demonstration and examination
8. Deal with weeds to include identification and control by a range of methods.	Skills demonstration and examination
9. Harvest a range of vegetables to include selection, grading and packing.	Skills demonstration and examination
10. Operate within appropriate safety procedures to create and maintain a safe working environment including safety standards regarding lifting, carrying and handling plants, tools and equipment.	Skills demonstration and examination

11c. Guidelines for Assessment Activities

The assessor is required to devise assessment briefs and marking schemes/examination papers, marking schemes and outline solutions for the Skills Demonstrations and Examination. In devising the assessment briefs/examination paper, care should be taken to ensure that the learner is given the opportunity to show evidence of achievement of ALL the learning outcomes. Assessment briefs may be designed to allow the learner to make use of a wide range of media in presenting assessment evidence, as appropriate. Quality assured procedures must be in place to ensure the reliability of learner evidence.

Skills Demonstration	80%
The learner will complete 4 skills demonstration at appropriate intervals during the course of the programme module taking into consideration seasonal factors.	
Skills Demonstration One	30%
Preparation	
The learner will complete a checklist incorporating the following elements:	
<ul style="list-style-type: none"> ▪ Site Assessment including visual analysis of the site and soil, dig a pit to establish the soil type, water holding capacity, drainage, organic matter content and compaction, organic matter content and compaction, earthworm count, PH test, percolation test, determine soil type e.g. clay, brown soil etc. 	
The learner will prepare the ground to include:	
<ul style="list-style-type: none"> • Digging/rotovating the ground, removing debris, weeds and large stones. Soil improvement if necessary. • The learner will keep an audiovisual and/or written journal of the stages of ground preparation. 	
The learner will adhere to the relevant health and safety procedures.	
Skills Demonstration Two	30%
Planting/Growing	
The learner will keep a planting journal/diary and carry out the following activities.	
<ul style="list-style-type: none"> • Assess the quality of the planting material prior to purchase e.g. check for disease, vitality etc • Use correct care procedures for the planting material in transporting and pre- planting stages. • Determine the size of the planting area. • Soil Amendment where appropriate e.g. drainage, organic content, composting, aeration etc. • Plant a range of vegetables to include dependent on seed, tubers, plugs, station and drill sown etc • Correct training and support if required. • Follow correct Health and Safety Procedures 	
Skills Demonstration Three	10%
Pests, Diseases and Weeds	
The Learner will use a range of methods to prevent and control pests, diseases and weeds and keep a written journal to include:	
<ul style="list-style-type: none"> • Identifying and preventing common pests, diseases and weeds 	

- Control grass and weeds around vegetable plots;
- Protection from range of animals/pests using appropriate guards/fencing for rabbits, rodents, slugs, snails, birds etc
- Correct use of a range of organic, chemical and biological control methods.
- Follow correct Health and Safety Procedures

Skills Demonstration Four

10%

Harvesting

The learner will keep a harvesting record and harvest the produce grown as part of the programme to include;

- Use of a range of harvesting techniques in line with the planting calendar used on the programme.
- Use a variety of methods to select, grade and pack the produce appropriate to the scale of production and end use of vegetables.
- Follow correct Health and Safety Procedures

Examination	20%
The learner will undertake examination as follows: 1 hour duration	
The examination will consist of ten questions (2%) per questions related to the overall programme module.	

12. Grading

Distinction:	80% - 100%
Merit:	65% - 79%
Pass:	50% - 64%
Unsuccessful:	0% - 49%

At levels 4, 5 and 6 major and minor awards will be graded. The grade achieved for the major award will be determined by the grades achieved in the minor awards.

<p>Skills Demonstration Three</p> <p>Pests, Diseases and Weeds The Learner will use a range of methods to prevent and control pests, diseases and weeds and keep a written journal to include:</p> <ul style="list-style-type: none"> • Identifying and preventing common pests, diseases and weeds • Control grass and weeds around vegetable plots; • Protection from range of animals/pests using appropriate guards/fencing for rabbits, rodents, slugs, snails, birds etc • Correct use of a range of organic, or chemical, or biological control methods. • Follow correct Health and Safety Procedures 	<p>10</p>	
<p>Skills Demonstration Four</p> <p>Harvesting The learner will keep a harvesting record and harvest the produce grown as part of the programme to include;</p> <ul style="list-style-type: none"> • Use of a range of harvesting techniques in line with the planting calendar used on the programme. • Use a variety of methods to select, grade and pack the produce appropriate to the scale of production and end use of vegetables. • Follow correct Health and Safety Procedures 	<p>10</p>	
<p>Total Mark</p>	<p>80</p>	

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

Assessor's Signature: _____

Date: _____

External Authenticator's Signature: _____

Date: _____

Growing Vegetables 4N0671	Learner Marking Sheet Examination 20%
--------------------------------------	--

Learner's Name: _____

Learner's PPSN: _____

Assessment Criteria	Maximum Mark	Learner Mark
Examination Questions 10 short answer questions, answer all(2marks each) (Indicate questions answered)		
Question 1	2	
Question 2	2	
Question 3	2	
Question 4	2	
Question 5	2	
Question 6	2	
Question 7	2	
Question 8	2	
Question 9	2	
Question 10	2	
Total Mark	20	

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

Assessor's Signature: _____

Date: _____

External Authenticator's Signature: _____

Date: _____