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Component Specification NFQ Level 5

Seaweed Ongrowing 5N5287

1. Component Details

Title	Seaweed Ongrowing
Teideal as Gaeilge	Fás Feamainne
Award Type	Minor
Code	5N5287
Level	5
Credit Value	15
Purpose	The purpose of this award is to equip the learner with the knowledge, skill and competence to identify, utilise, grow, harvest and dry seaweeds.
Learning Outcomes	Learners will be able to:

1. Discuss the common species of red, green and brown seaweed native to Ireland, to including morphology and lifecycle

2. Examine photosynthesis, nutrients, reproduction and growth rates in relation to seaweeds

3. Outline the history of Sea-vegetable usage in Ireland and current world production and economic values of seaweeds and sea vegetables

4. Comment on differences between cultivation and gathering

5. Discuss species currently farmed in Ireland and world wide

6   Comment on the genetics of seaweed culture

7   Discuss the correct environment for growing seaweed

8   Illustrate five different culture methods

9   Outline the main provisions of the Health, Safety and Welfare at Work Act

10   Explore the features of a good ongrowing site and the use of seaweeds

11   Recommend a suitable harvesting technique

12   Review the relevant monitoring regulations and their enforcement bodies

13   Examine the affect of handling techniques during harvesting

14   Plan a license licence application for cultivating or harvesting seaweeds

15   Interpret tide timetables and charts

16   Record weather conditions

17   Perform a sample for the oxygen, water temperature, salinity, water depth and visibility

18   Maintain breeding strains

19   Produce gametes of a selected species

20   Spray spores onto collectors and maintain collectors until ready for output

21   Deploy collectors

22   Employ techniques to set up a seaweed growing longline

23   Record accurately sea-vegetable growth

24   Comment on the procedures including quality and hygiene involved in handling, packing and transporting sea-vegetables

25   Complete a list of safety working practices for a model farm and a risk assessment using the standard form.

Assessment

General Information

All assessment should be planned in accordance with the programme assessment strategy developed as part of the programme submission for validation. See **Policies and Criteria for Validation of Programmes.** Assessment should be undertaken consistently and reflect current assessment guidelines. See www.qqi.ie.

All FET assessment is criterion referenced. Successful achievement of the award is based on learners attaining the required standards of knowledge, skill or competence consistent with the **minimum intended programme learning outcomes**.

The techniques set out below are considered the optimum approach to assessment for this component. In exceptional circumstances providers may identify alternative assessment techniques through the provider's application for programme validation which are reliable and valid but which are more appropriate to their context.

Assessment of a number of components may be integrated across programmes for delivery, provided that the learning outcomes of each minor award are assessed.

Group or team work may form part of the assessment, provided each learner's achievement is separately assessed.

All providers are required to submit an assessment plan as part of their application for programme validation. Assessment Plans will include information relating to scheduling and integration of assessment. See current FET validation guidelines at www.qqi.ie.

Assessment Techniques

In order to demonstrate that they have reached the standards of knowledge, skill and competence identified in all the learning outcomes, learners are required to complete the assessment(s) below.

The assessor is responsible for devising assessment instruments (e.g. project and assignment briefs, examination papers), assessment criteria and mark sheets, consistent with the techniques identified below and QQI's assessment requirements.

Programme validation will require providers to map each learning outcome to its associated assessment technique. All learning outcomes **must** be assessed and achieved in accordance with the **minimum intended module learning outcomes** set out in the validated programme.

Skills Demonstration	70%
Examination - Theory	30%

Description

Skills Demonstration

A skills demonstration is used to assess a wide range of practical based learning outcomes including practical skills and knowledge. A skills demonstration will require the learner to complete a task or series of tasks that demonstrate a range of skills.

Examination - Theory

An examination provides a means of assessing a learner's ability to recall and apply knowledge, skills and understanding within a set period of time and under clearly specified conditions.

A theory-based examination assesses the ability to recall, apply and understand specific theory and knowledge.

Recognition of Prior Learning (RPL)

To support the development and implementation of RPL with regard to access, granting credit/exemptions and achievement of awards/parts of awards, providers should refer to **QQI's Statutory Guidelines for Quality Assurance,** the **Policies and Criteria for Validation of Programmes** and the **Principles and Operational Guidelines for the Recognition of Prior Learning in Further and Higher Education and Training** available at www.qqi.ie

Grading

Pass	50% - 64%
Merit	65% - 79%
Distinction	80% - 100%

Specific Validation Requirements

The provider must have all of the following in place to offer this award:
Access to a variety of shorelines
1. Microscopes, graticules, Sedwick rafter counting slides
2. Dissection kits, disposable gloves, dissection boards and kits
3. Glassware
4. Meters for oxygen, temperature, pH and salinity. Thermometers, hydrometers and secchi discs
5. Test kits for pH, ammonia, nitrate and nitrite
6. Weighing scales, measuring boards and vernier callipers
7. Access to an algal hatchery
8. Access to a seaweed farm

9. A space suitably equipped for the construction, repair and maintenance of seaweed ongrowing equipment
10. Classroom teaching facilities
11. Disinfectants
12. P.P.E. (Safety boots, waders, wet gear and lifejackets)
13. Laboratory coats
14. Safety glasses

Supporting Documentation

1. Current Safety and Health at Work legislation
2. BIM specific - manuals relating to seaweed production
3. Notes relating to each of the skills to be undertaken
4. Relevant legislation
5. Examples of existing licences
6. Aquaculture reference materials (books, journals etc.)
7. Current Safety and Health at Work legislation

Access

To access programmes leading to this award the learner should have reached the standards of knowledge, skill and competence associated with the preceding level of the National Framework of Qualifications. This may have been achieved through a formal qualification or through relevant life and work experience.

Transfer

Successful completion of this component award enables the learner to transfer to programmes leading to other certificates where this component is a mandatory or an elective requirement.

2. FET Award Standards

QQI award standards are determined within the National Framework of Qualifications (NFQ), http://www.nfq-qqi.com. QQI determines standards for the education and training awards that it makes itself and that are made by providers to whom it has delegated authority to make an award. Providers offering programmes leading to QQI awards **must** have their programme(s) validated in accordance with current validation policy (see www.qqi.ie).

Award standards are designed to be consistent with the NFQ's award classes i.e. major, special purpose, supplemental and minor awards. They are expressed in terms of **learning outcomes** i.e. concise statements of what the learner is expected to know or be able to do in order to achieve a particular award. Learning outcomes for FET awards are contained within the associated specifications:

AWARD CLASS	STANDARDS	AWARDS
Major Award	Certificate Specification	Certificate (Levels 1 to 5) Advanced Certificate (Level 6)
Supplemental Award	Supplemental Specification	Supplemental Certificate (Level 3 to 6)
Special Purpose	Specific Purpose Specification	Specific Purpose Certificate (Levels 3 to 6)
Minor Award	Component Specification	Component Certificate (Levels 1 to 6)

Award standards are thresholds, they describe standards of knowledge, skill or competence to be acquired, and where appropriate, demonstrated, by a learner before an award may be made.

Award standards will be reviewed from time to time as necessary. Minor changes may be made by the QQI executive outside the review cycle where necessary. Changes to standards are published on QQI's website. Providers with validated programmes and providers with delegated authority to make awards are responsible for monitoring relevant standards and making necessary responses to changes.

3. FET Credit

Every FET certificate and component specification includes an FET credit value (Table 1). FET credit is quantified in multiples of 5 FET credits (up to 50 hours of learner effort). Learner effort is based on the time taken by typical learners at the level of the award to achieve the learning outcomes for the award. It includes all learning time involved including: guided learning hours, self-directed learning and assessment.

Table 1: FET Credit Values

NFQ Level	Major Awards Credit Values	Default Credit Values Minor Awards	Other Permitted Minor Award Credit Values	Special Purpose and Supplemental Award Credit Value Ranges
1	20	5	10	
2	30	5	10	
3	60	10	5,20	>5 and<60
4	90	10	5,15,20	>5 and<90
5	120	15	5,10,30	>5 and <120
6	120	15	5,10,30	>5 and <120

Guide to Level

Learning outcomes at this level include a broad range of skills that require some theoretical understanding. The outcomes may relate to engaging in a specific activity, with the capacity to use the instruments and techniques relating to an occupation. They are associated with work being undertaken independently, subject to general direction.

Strand	Sub-strand	Nature of learning
Knowledge	Breadth	Broad range of knowledge
	Kind	Some theoretical concepts and abstract thinking, with significant depth in some areas.
		Some underpinning theory
Know How & Skill	Range	Demonstrate a broad range of specialised skills and tools
	Selectivity	Evaluate and use information to plan and develop investigative strategies and to determine solutions to varied unfamiliar problems
Competence	Context	Act in a range of varied and specific contexts, taking responsibility for the nature and quality of outputs; identify and apply skill and knowledge to a wide variety of contexts

Role	Exercise some initiative and independence in carrying out defined activities; join and function within multiple, complex and heterogeneous groups
Learning to Learn	Learn to take responsibility for own learning within a managed environment
Insight	Assume full responsibility for consistency of self- understanding and behaviour

Extract from 'Determinations for the Outline National Framework of Qualifications': NQAI