|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| C:\Users\amaher\Desktop\QQI-RGB-eng-72.jpg**This document contains standards specifications which have either changed or are new i.e. items in red. All others remain as before and are available through the code hyperlink.** |  |  |  |  |  |  |  |
| **Award under review Agriculture 5M2373**  | **120** |   |   | **Proposed revised award** |  |  |  |  |  |  |  |  |  |  |
| **Code** | **Title** | **Level** | **Credit Value** | **Indicate mapping reference to proposed award** | **Indicate if no change has been made** | **Code Ref** | **Title** | **Level** | **Credit Value** |  |  |  |  |  |  |  |
|  |  |  |  |  | **Major Award: Agriculture** | **5** | **120** |  |  |  |  |  |  |  |
| **All of the following component(s)** | **All of the following component(s)** |  |  |  |  |  |  |  |
| [5N1730](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1730) | Crop Production Science | 5 | 10 | 1,3, 14, 20 |   | 1 | Principles of Agriculture | 5 | 15 |  |  |  |  |  |  |  |
| [5N2351](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N2351) | Animal Production Science | 5 | 10 | 1, 2 + (6,7,8,9) |   | 2 | Farm Safety and Farm Assurance | 5 | 15 |  |  |  |  |  |  |  |
| [5N2352](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N2352) | Farm Business Organisation | 5 | 10 | 2,4 |   | 3 | Soils and the Environment | 5 | 10 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 5N1433 | Work Practice | 5 | 15 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 4 | Farm Business & Technology | 5 | 10 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 5 | Safe Use of Pesticide Products | 5 | 5 |  |  |  |  |  |  |  |
|   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |
| **A minimum credit value of 15 from the following component(s)** |   |   | **A minimum of 15 Credits from the following component(s)** |   |   |  |  |  |  |  |  |  |
| [5N0690](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N0690) | Communications | 5 | 15 |   | No change | 5N0690 | Communications | 5 | 15 |  |  |  |  |  |  |  |
| [5N1833](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1833) | Mathematics | 5 | 15 |   | No change | 5N1833 | Mathematics | 5 | 15 |  |  |  |  |  |  |  |
| [6N2191](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=6N2191) | Leadership | 6 | 15 | Removed |   | 5N2985 | Personal And Professional Development | 5 | 15 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 5N1390 | Personal Effectiveness | 5 | 15 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 5N1367 | Team Working | 5 | 15 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 5N0693 | Constructive Thinking | 5 | 15 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 5N1418 | Start Your Own Business | 5 | 15 |  |  |  |  |  |  |  |
| **A minimum credit value of 60 from the following component(s)** |   |   | **A minimum of 20 Credits from the following components** |   |   |  |  |  |  |  |  |  |
| [5N1735](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1735) | Sheep Production | 5 | 30 | 1, 6 & 5N1433 |   | 6 | Sheep Husbandry | 5 | 10 |  |  |  |  |  |  |  |
| [5N1737](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1737) | Beef Production | 5 | 30 | 1, 7 & 5N1433 |   | 7 | Beef Husbandry | 5 | 10 |  |  |  |  |  |  |  |
| [5N1738](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1738) | Pig Production | 5 | 30 | 1, 8 & 5N1433 |   | 8 | Pig Husbandry | 5 | 10 |  |  |  |  |  |  |  |
| [5N1739](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1739) | Dairy Production | 5 | 30 | 1, 9 & 5N1433 |   | 9 | Dairy Husbandry | 5 | 10 |  |  |  |  |  |  |  |
| [5N1741](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1741) | Combinable Crop Production | 5 | 30 | 1, 10 & 5N1433 |   | 10 | Tillage Crop Husbandry | 5 | 10 |  |  |  |  |  |  |  |
| [5N1742](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1742) | Tractor Operations | 5 | 30 | 2, & 5N1433 |   |   |   | 5 | 10 |  |  |  |  |  |  |  |
| [5N2275](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N2275) | Pig Nutrition, Housing and Welfare | 5 | 30 | 11 & 5N1433 |   | 11 | Nutrition, Housing and Welfare of Pigs | 5 | 10 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 12 | Equipment for Crop Establishment | 5 | 10 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 13 | Potato Production | 5 | 10 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 14 | Grass Production | 5 | 10 |  |  |  |  |  |  |  |
|   |   |   |   |   | \*\*\* | 25 | Poultry Husbandry | 5 | 10 |  |  |  |  |  |  |  |
|   |   |   |   |   | \*\*\* | 26 | Poultry Nutrition Housing and Welfare | 5 | 10 |  |  |  |  |  |  |  |
| **A minimum credit value of 15 from the following component(s)** |   |   | **A minimum of 5 credits from the following components** |   |   |  |  |  |  |  |  |  |
| [5N0731](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N0731) | Hand Held Pesticide Application | 5 | 5 | 5, 15 |   | 15 | Manual Pesticide Application | 5 | 5 |  |  |  |  |  |  |  |
| [5N1743](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1743) | Potato Production and Storage | 5 | 10 | 13 |  |   |   |   |   |  |  |  |  |  |  |  |
| [5N1744](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1744) | Crop Establishment Equipment | 5 | 10 | 12 |  |   |   |   |   |  |  |  |  |  |  |  |
| [5N1745](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1745) | Agricultural Mechanics | 5 | 10 | 16, 19 |   | 16 | Tractor Maintenance | 5 | 5 |  |  |  |  |  |  |  |
| [5N1746](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1746) | Maintenance of Farm Structures | 5 | 10 | 6, 14, 17,  |   | 17 | Farm Structures | 5 | 5 |  |  |  |  |  |  |  |
| [5N1747](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1747) | Organic Production Principles | 5 | 5 |   |  |  | Organic Farming Principles | 5 | 5 |  |  |  |  |  |  |  |
| [5N1748](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1748) | Mechanical Hedge Trimming | 5 | 5 |   | No Change | 5N1748 | Mechanical Hedge Trimming | 5 | 5 |  |  |  |  |  |  |  |
| [5N1750](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1750) | Chemical Fertiliser Application | 5 | 5 |   | No Change | 5N1750 | Chemical Fertiliser Application | 5 | 5 |  |  |  |  |  |  |  |
| **Code** | **Title** | **Level** | **Credit Value** | **Indicate mapping reference to proposed award** | **Indicate if no change has been made** | **Code Ref** | **Title** | **Level** | **Credit Value** |  |  |  |  |  |  |  |
| [5N1751](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1751) | Organic Manure Application | 5 | 5 |  25 |   | 25 | Organic Manure Spreading | 5 | 5 |  |  |  |  |  |  |  |
| [5N1752](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1752) | All-Terrain Vehicle Operations | 5 | 5 |   | No Change | 5N1752 | All Terrain Vehicle Operations |  |  |  |  |  |  |  |  |  |
| [5N1797](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N1797) | Boom Sprayer Pesticide Application | 5 | 5 | 5, 18 |   | 18 | Mechanical Pesticide Application | 5 | 5 |  |  |  |  |  |  |  |
| [5N2433](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N2433) | Safe Use of Pesticides | 5 | 5 | 5 |  |   |   |   |   |  |  |  |  |  |  |  |
| [5N2406](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N2406) | Herd Recording in Pig Production | 5 | 5 |   |  |  | Herd Recording in Pig Production | 5 | 5 |  |  |  |  |  |  |  |
| [5N2278](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N2278) | Pig Manure Management | 5 | 5 |   |  |  | Pig Manure Management | 5 | 5 |  |  |  |  |  |  |  |
| [5N2258](http://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=5N2258) | Pig Industry Structure | 5 | 5 |   |  |  | Structure of the Pig Industry | 5 | 5 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 19 | Workshop Skills | 5 | 5 |  |  |  |  |  |  |  |
|   |   |   |   |   |   | 20 | Grassland Machinery | 5 | 5 |  |  |  |  |  |  |  |
|   |   |   |   |   | \*\*\* | 21 | Farm Forestry | 5 | 5 |  |  |  |  |  |  |  |
|  |  |  |  |  | \*\*\* | 22 | Poultry Industry Structure | 5 | 5 |  |  |  |  |  |  |  |
|  |  |  |  |  | \*\*\* | 23 | Flock Recording in Poultry Production | 5 | 5 |  |  |  |  |  |  |  |
|  |  |  |  |  | \*\*\* | 24 | Poultry Manure Management | 5 | 5 |  |  |  |  |  |  |  |

 **The remaining credit value of 10 can be obtained by using relevant component(s) from level 5. A maximum of 10 credits may be used from either level 4 or level 6.**



QQI is currently developing its corporate brands and policies for awards and standards.  Until this process is completed an interim format will be used for new QQI certificate/component specifications for the Common Awards System.

|  |
| --- |
| **Certificate Details** **Title:**   **Agriculture****Irish Title: Talmhaíocht****Award Class: Major****Level: 5****Credit Value: 120****Code:  *To be confirmed by QQI*** |
| **Purpose:**  **The purpose of this award is to enable the learner to work independently under management in commercial farming.** |

|  |  |
| --- | --- |
| The learner should be able to: | NFQ level Indicators |
| Demonstrate a broad range of knowledge related to the field of agriculture | **Knowledge - Breadth** Broad range of knowledge. |
| Demonstrate knowledge of some theoretical concepts and abstract thinking pertaining to plant and animal growth processes including the effect and control of pests, diseases and disorders on plant and animal production | **Knowledge - Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas. |
| Demonstrate a broad range of skills and use tools in carrying out farming operations independently and safely in accordance with recommended good practice, and interpreting physical and financial farm records which accurately represent the farm business  | **Know-how and skill - Range**Demonstrate broad range of specialised skills and tools. |
| Comply with obligations and responsibilities under Irish and EU laws and regulations in relation to the treatment of soils and the environment, food traceability, in compliance with government requirements, health, welfare and safety  | **Know-how and skill - Selectivity**Evaluate and use information to plan and develop investigative strategies and to determine solutions to varied unfamiliar problems. |
| Demonstrate defined knowledge and skills within a range of varied and specific farming contexts  | **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 variety of contexts. |
| Interpret physical and financial farm records which accurately represent the farm business. Work independently in a commercial farm taking direction from management | **Competence - Role**Exercise some initiative and independence in carrying out defined activities; join and function within multiple, complex and heterogeneous groups. |
| Take responsibility for own learning in a structured context  | **Competence - Learning to learn**Learn to take responsibility for own learning within a managed environment |
| Reflect on personal practice to inform self-understanding and professional development  | **Competence - Insight**Assume full responsibility for consistency of self-understanding and behaviour. |

|  |
| --- |
| **Certificate Requirements 120 credits** |
|  | **Code** | **Title** | **Level** | **Credit Value** |
| **All of the following component(s)** |
|  | TBC | Principles of Agriculture | 5 | 15 |
|  | TBC | Farm Safety and Farm Assurance | 5 | 15 |
|  | TBC | Soils and the Environment | 5 | 10 |
|  | 5N1433 | Work Practice  | 5 | 15 |
|  | TBC | Farm Business & Technology | 5 | 10 |
|  | TBC | Safe Use of Pesticide Products | 5 | 5 |
| **A minimum credit value of 15 from the following component(s)** |
|  | 5N0690 | Communications | 5 | 15 |
|  | 5N1833 | Mathematics | 5 | 15 |
|  | 5N2985  | Personal and Professional Development  | 5 | 15 |
|  | 5N1390 | Personal Effectiveness  | 5 | 15 |
|  | 5N1367 | Team-working  | 5 | 15 |
|  | 5N0693 | Constructive Thinking  | 5 | 15 |
|  | 5N1418 | Start Your Own Business | 5 | 15 |
| **A minimum credit value of 20 credits from the following component(s)** |
|  | TBC | Sheep Husbandry  | 5 | 10 |
|  | TBC | Beef Husbandry | 5 | 10 |
|  | TBC | Pig Husbandry | 5 | 10 |
|  | TBC | Dairy Husbandry | 5 | 10 |
|  | TBC | Tillage Crop Husbandry | 5 | 10 |
|  | TBC | Nutrition, Housing and Welfare of Pigs | 5 | 10 |
|  | TBC | Equipment for Crop Establishment | 5 | 10 |
|  | TBC | Potato Production | 5 | 10 |
|  | TBC | Grass Production | 5 | 10 |
|  | TBC | Poultry Husbandry | 5 | 10 |
|  | TBC | Poultry Nutrition, Housing and Welfare | 5 | 10 |
| **A minimum credit value of 5 credits from the following component(s)** |
|  | TBC | Manual Pesticide Application | 5 | 5 |
|  | TBC | Tractor Maintenance | 5 | 5 |
|  | TBC | Farm Structures | 5 | 5 |
|  | TBC | Organic Farming Principles | 5 | 5 |
|  | 5N1748 | Mechanical Hedge Trimming | 5 | 5 |
|  | 5N1750 | Chemical Fertiliser Application | 5 | 5 |
|  | TBC | Organic Manure Spreading | 5 | 5 |
|  | 5N1752 | All-Terrain Vehicle Operations | 5 | 5 |
|  | TBC | Mechanical Pesticide Application | 5 | 5 |
|  | 5N2406 | Herd Recording in Pig Production | 5 | 5 |
|  | 5N2278 | Pig Manure Management | 5 | 5 |
|  | TBC | Structure of the Pig Industry  | 5 | 5 |
|  | TBC | Workshop Skills | 5 | 5 |
|  | TBC | Grassland Machinery | 5 | 5 |
|  | TBC | Farm Forestry | 5 | 5 |
|  | TBC | Poultry Industry Structure | 5 | 5 |
|  | TBC | Flock recording in Poultry Production | 5 | 5 |
|  | TBC | Poultry Manure Management | 5 | 5 |
| **The remaining credit value of 10 can be obtained by using relevant component(s) from level 5. A maximum of 10 credits may be used from either level 4 or level 6.** |

|  |
| --- |
| **Grading** |
| PassMeritDistinctionThe grade (where an award is classified) is calculated from the weighted average of the grades of components which are listed in the certificate requirements |
| **Specific Validation Requirements** |
| The Provider must have the following in place to offer this award:1. Access to a farm of appropriate scale and size to the group, with appropriate group skills demonstration and assessment space in compliance with health and safety requirements 2. Stated policies and procedures to deal with potential bio-security risks 3. Facilities outlined in the specific validation requirements in component specifications  |
| **Supporting Documentation** |
| None |
| **Access Statement** |
| 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** |
| Achievement of this award will enable the learner to transfer to other appropriate programmes leading to awards at the same level of the National Framework of Qualifications.  |
| **Progression**  |
| Achievement of this award will enable the learner to progress to other appropriate programmes leading to awards at the next or higher levels of the National Framework of Qualifications.  |
| **Progression Awards** |
| Learners who successfully complete this award may progress to a range of different awards.  |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Principles of Agriculture Minor515To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to apply principles of agriculture to agriculture in society and to common agriculture practices. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Discuss agriculture in a national and global context and the consequent responsibility at farm level including the basic human right to food, food security, quality production, sustainability and environmental responsibilities |
| 2 | Describe plant and animal cells, their organelles, function and division. |
| 3 | Describe plant anatomy and its function in monocotyledonous and dicotyledonous plants |
| 4 | Describe the anatomy physiology and function of the animal body of common agriculture animals including reproductive systems and various digestive systems. |
| 5 | Discuss the basic living processes and life cycles of animals and plants |
| 6 | Investigate Irish agriculture by sector, enterprise, product and market to include **d**airying, dry stock and tillage production |
| 7 | Discuss the production operations for the following agriculture production systems: calf to beef production, spring calving dairy herd, mid-season lamb production and spring barley production |
| 8 | Discuss a range of other relevant systems to agriculture, horticulture and land use production such as forestry, pigs, poultry, nursery stock production, fruit, apiculture and others as appropriate |
| 9 | Discuss behaviour principles of handling livestock |
| 10 | Discuss animal and crop traceability systems in Ireland |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 11 | Identify a range of plants commonly found on Irish farms to include native weeds, grasses, tillage, food and forage crops |
| 12 | Practice common agriculture skills and tasks |
| 13 | Implement best practice in controlling illness and disorders in livestock  |
|  |  |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation.  |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 50%**The assessor will devise a theory examination based on learning outcomes 1 – 10. **Skills Demonstration 50%**The assessor will devise skills demonstrations to assess learning outcomes 11 to 13. A skills demonstration will require the learner to complete a task or series of tasks appropriate to the learning outcomes. The learner must attempt a minimum of six of the *Indicative Common Agriculture Skills* listed below. Skills 1 to 4 must be attempted. The assessor will devise a skills demonstration based on learning outcomes 10 to 12 inclusive to assess the indicative common agriculture skills listed below. **Indicative Common Agriculture Skills****Mandatory Skills (a maximum of 8% can be awarded for each of the following skills)**1) Identify a range of plants commonly found on Irish farms to include native trees, weeds and grasses2) Identify a range of tillage food and forage crops3) Comply with appropriate given traceability regulations - Tag and register an animal, taking into account best industry practice, safety, animal welfare and regulations- Complete appropriate records relevant to a quality assurance scheme4) Assess stock conditions both indoor and outdoor**Elective skills – a maximum of 3% can be awarded for each skill listed below**5) Control the movement and handling of cattle 6) Control the movement and handling of sheep7) Assess cattle for breed, weight and value8) Assess sheep for breed, weight and value9) Recognise symptoms of illness in livestock, diagnose cause and take appropriate preventative and curative measures10) Recognise symptoms of disorders in livestock, diagnose cause and take appropriate preventative and curative measures |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.Examination Theory 50%Skills Demonstration 50% |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: 1. Access to farm(s) with a sufficient number and range of livestock to carry out all skills demonstration tasks2. Access to appropriate facilities and equipment to ensure compliance with health and safety for skills demonstration. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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. |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Farm Safety and Farm AssuranceMinor515To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to recognise and control farm hazards and to practice farm assurance  |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Discuss the main causes of accidents, injuries and health related issues on Irish farms |
| 2 | Examine the duties of farmers and farm workers under current safety, cross compliance regulations and environmental legislation |
| 3 | Describe safe methods of work in agriculture, farm building and farm yard design considerations in relation to safe farming operations  |
| 4 | Describe farm related health problems and their prevention  |
| 5 | Examine on-farm ethics and obligations under current EU and Irish legislation regarding ethical animal welfare principles |
| 6 | Analyse the role of farming in the food chain, food assurance and traceability requirements in agriculture |
| 7 | Discuss best practice in animal medications, remedies and plant protection products at farm level |
| 8 | Discuss behaviour of agricultural vehicles when in use in a range of common situations and current regulations pertaining to agricultural vehicles |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 9 | Safely execute common farm safety and farm assurance operations  |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 10 | Practice the steps in identifying and managing safety risks in the work place  |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Theory Examination 50%**The assessor will devise a theory examination to assess learning outcomes 1 to 8 inclusive.**Skills Demonstration 30%**The assessor will devise skills demonstrations to assess learning outcome 9. A skills demonstration will require the learner to complete a task or series of tasks appropriate to the learning outcomes. The learner must attempt a minimum of 5 of the farm safety and farm assurance skills listed below. Skills 1 – 3 inclusive must be attempted. All skills carry equal marks.The learner must achieve 15 of the 30 available marks to pass this assessment.**Farm Safety and Farm Assurance Skills**1) Develop a farmer health plan for a given farming sector2) Complete producer relevant documentation required for food chain information3) Carry out the key steps in manual handling4) Judge cattle cleanliness 5) Carry out the daily checks on a tractor6) Assess a tractor for roadworthiness7) Assess a trailer for roadworthiness8) Safely attach and manoeuvre a tractor and trailer9) Safely attach and set up a tractor mounted PTO driven machine10) Safely operate a loader**Assignment 20%**The assessor will devise a farm safety and compliance project to assess learning outcome 10. |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Theory Examination 50%****Skills Demonstration 30%****Assignment 20%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: 1. Access to appropriate facilities and equipment to ensure compliance with health and safety for project work and skills demonstration. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| None |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Soils and the EnvironmentMinor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to implement best practice in soil nutrition under management  |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Describe soils in terms of classification, type, distribution in Ireland, formation and properties of productive and non-productive soils |
| 2 | Describe the physical and chemical composition and features of soils and their relevance for modern farming practices  |
| 3 | Describe agriculture practices affecting soil structure their implications for soils and key soil improvement practices  |
| 4 | Describe the biological fraction of soil |
| 5 | Discuss soil nutrition and related environmental legislation, sources and roles of nutrients, maximising nutrient value of fertilisers and farm bi-products, storage and practical implications at farm level |
| 6 | Investigate the practical implications for agriculture of current Irish and European Union environmental protection legislation and schemes |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 7 | Take a soil sample and investigate the soil texture  |
| 8 | Interpret a soil analysis report |
| 9 | Recommend a fertiliser plan for the economic production of a given crop using best practice |
| 10 | Analyse an environmental audit at farm level |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 11 | Interpret codes of good agricultural practice for the application of fertilisers and organic manures |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation.  |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 60%**The tutor will devise a theory examination to assess learning outcomes 1 to 6 inclusive and Learning outcome 11**Skills Demonstration 10%**The tutor will devise a skills demonstration to assess learning outcome 7, where the candidate takes a soil sample in accordance with good practice and investigates the texture of a soil.**Assignment 30%**The tutor will devise an assignment to assess learning outcomes 8 to 10 inclusive. |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.Examination Theory 60%Skills Demonstration 10%Assignment 30% |
| **Specific Validation Requirements** |
| There are no specific validation requirements  |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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. |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  |  Farm Business and TechnologyMinor 510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to effectively use technology, recognise and communicate key drivers of farm business profit. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Analyse the agribusiness sector in Ireland including a range of enterprises, and the role of government, non- governmental and co-operative agencies. |
| 2 | Examine the range of documents and information needed for compiling physical and financial records for a farm including various methods of safely storing and retrieving them  |
| 3 | Use correct terminology to effectively communicate a farm business  |
| 4 | Examine on the role of information technology in farm management |
| 5 | Discuss key indicators commonly used in the measurement of physical and financial performance and recognise key drivers of profit |
| 6 | Discuss different types of farm credit and its associated terms and conditions  |
| 7 | Discuss current government and other schemes, their benefits, terms and conditions for the main agriculture sectors |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 8 | Use common software packages and externally linked devices taking account of best practice and correct protocol in computer workstation ergonomics |
| 9 | Apply a range of agriculture appropriate smart technology apps and IT to solve or answer agriculture industry related queries including recording appropriate agriculture related data |
| 10 | Analyse a range of reports produced by a computerised cash flow program with respect to key agriculture performance indicators  |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 11 | Use government and commercial agricultural websites to gather and submit physical and financial information  |
| 12 | Practice the completion of a range of relevant current agriculture scheme documentation  |
| 13 | Calculate and relate agriculture data to performance  |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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 |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 50%**The assessor will devise a theory examination to assess learning outcomes 1 to 7 and 13.**Skills Demonstration 50%**The assessor will devise skills demonstrations to assess learning outcomes 8 to 12 inclusive |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Theory 50%****Skills Demonstration 50%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: 1. Access to appropriate facilities and Information technology equipment  |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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. |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Safe Use of Pesticide ProductsMinor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence in the safe use of pesticides in accordance with requirements of current national and EU legislation and directives |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Outline risks and benefits associated with plant pesticide product use |
| 2 | Outline current national and EU legal requirements of the Sustainable Use Directive in regard to the safe use of pesticide products at professional user level  |
| 3 | Explain tank mixing  |
| 4 | Describe the principles of safe storage, transport and handling of pesticides. |
| 5 | Outline the current principles and implementation of “Good Plant Protection Practice” (GPPP) |
| 6 | Maintain records in accordance with current national and EU requirements  |
| 7 | Demonstrate knowledge required by the professional user for dealing with accidents / incidents involving spillages, contamination and poisoning at a personal, environmental and public level.  |
| 8 | Outline the storage of plant protection products at professional user level including disposal of empty containers, and safe disposal of obsolete plant protection products and its packaging. |
| 9 | Demonstrate knowledge of routes of contamination and the implementation appropriate procedures for personal hygiene to prevent personal contamination. |
| 10 | Demonstrate knowledge of current practices to reduce pesticide impact on the environment  |
| 11 | Outline a system of work at professional user level to comply with current national and EU regulations around the safe use of pesticides from the time the pesticide product is purchased to its final disposal off farm. |
| 12 | Outline the correct use of Personal protective equipment required in the safe use of pesticide products  |
| 13 | Outline the continuous professional development training required for the safe use of pesticide products and resources available to ensure best practice  |
| 14 | Outline the key current legislative compliance, quality assurance, environmental issues and key practical steps relevant to the use of substances hazardous to the environment including biocides at producer level. |
|  |  |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 15 | Interpret the information on a pesticide label and MSDS sheets.  |
| 16 | Carry out risk assessment and identify appropriate control measures in the safe use of pesticide products  |
|  |  |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation.  |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Examination Theory 100%**The assessor will devise a theory examination based on learning outcomes 1 – 16. Learning outcomes 1 to 14 will account for 70% of the available marks.Learning Outcomes 15 and 16 account for 30% of the available marks and will be assessed using a case study exercise as part of the theory examination. The learner must achieve 15 of the available 30 marks to pass this award. |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.Examination Theory 100% |
| **Specific Validation Requirements** |
| The provider will have the following in place to offer this award:1) Access to first aid kit, chemical store, range of chemicals |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| None |
| **Particular Transfer and Progression Expectations** |
| 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.The learner must achieve this award before progressing to the following awardsManual Pesticide ApplicationMechanical Pesticide Application |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Sheep HusbandryMinor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to carry out commercial sheep farming under management |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Describe the principles and role of flock production including importance in Irish agriculture, lamb production systems, and flock performance |
| 2 | Review management and biological factors affecting efficiency in sheep production in terms of health and feed and feed mixes |
| 3 | Describe a range of lamb production systems including breeding calendar and physical and economic performance  |
| 4 | Investigate a system of lamb production, appropriate to a specific farm situation  |
| 5 | Investigate diseases, disorders and parasites of ewes and lambs including bio-security measures, causal agents, symptoms, prevention and control measures |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 6 | Analyse housing for sheep production to include human and animal health, welfare, safety and efficiency and cost of construction |
| 7 | Perform peri-natal tasks with ewes and lambs using recognised techniques and performance standards  |
| 8 | Assess a range of ewes and lambs for economic characteristics, by applying recognised criteria |
| 9 | Prevent and control common diseases and disorders affecting the health of ewes and lambs using recognised techniques and performance standards |
| 10 | Perform sheep breeding tasks using recognised techniques and performance standards  |
| 11 | Perform sheep husbandry skills taking into account human and animal safety animal welfare, traceability requirements and best practice |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 12 | Investigate drivers of profit of sheep production and explore practices to attain industry recognised targets |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 50%**The assessor will devise a theory based examination to assess learning outcomes 1 to 5 inclusive, and learning outcome 12. Learning outcome 6 will be assessed using case studies in an examination situation**Skills Demonstration 50%**The assessor will devise skills demonstrations to assess learning outcomes 7 to 11. A skills demonstration will require the learner to complete a task or series of tasks appropriate to the learning outcomes. The learner must attempt a minimum of 20 of the indicative sheep husbandry skills listed below.**Indicative Sheep Husbandry Skills:**1 Setting up temporary fence/penning2 Preparing lambing facilities and equipment for lambing3 Assisting at lambing4 Tube feeding lambs5 Docking tails6 Castrating male lambs7 Tagging ewes and lambs8 Identifying breeds and crosses9 Using teeth to estimate age10. Drafting lambs for a given market and estimating weight and value of ewes and lambs to within +/- 10% of weight and value11. Estimating value of ewes and lambs12. Scoring ewes and lambs for body condition13. Trimming feet and foot bathing14. Dosing sheep or administering pour-ons15. Administering subcutaneous injections and completing Animal Remedies Record16. Administering intramuscular injections and completing Animal Remedies Record17. Completing Animal Remedies Record18. Vaccinating by scarifying19. Fitting a simple prolapse retainer in pregnant ewes20. Selecting ewes and dagging for tupping21. Selecting rams and fitting raddle harness22. Sponging ewes23. Mixing a ration formulation24. Selecting ewes for culling25. Assessing grass availability |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 50%****Skills Demonstration 50%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award:1 Access to farm(s) that have a sheep flock size adequate for practical skills training and individual skills assessment2 Suitable equipment and facilities to safely demonstrate and assess indicative sheep husbandry skills |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| The learner must have successfully passed the skill of “controlling and handling of sheep” contained in Principles of Agriculture to access this award. |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Beef HusbandryMinor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to carry out commercial beef farming under management  |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Discuss beef production in the context of importance in Irish agriculture, distribution of production, and market requirements. |
| 2 | Discuss factors affecting efficiency in beef production including management and biological efficiency factors  |
| 3 | Analyse the effectiveness of Irish beef production systems by assessing husbandry practices required to achieve optimal economic and animal performance for different systems of Irish beef production |
| 4 | Describe component systems of beef production and their respective key physical and economic efficiency indicators  |
| 5 | Describe diseases, disorders and parasites of cattle and their control  |
| 6 | Suggest best practice in cattle husbandry tasks required for beef production |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 7 | Analyse housing for cattle production  |
| 8 | Assess a range of beef animals for economic characteristics using recognised criteria  |
| 9 | Control common diseases affecting the health of cattle, by planning and implementing prevention strategies and by correctly identifying and treating their symptoms in accordance with and using recommended good practices  |
| 10 | Execute husbandry tasks required for the beef production cycle in accordance with human and animal safety animal welfare, traceability requirements and best practice |
| 11 | Perform breeding tasks required for efficient beef production |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 12 | Analyse drivers of profit of beef production and explore practices to attain industry recognised targets  |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 50%**The assessor will devise a theory based examination to assess learning outcomes 1 to 6 inclusive and learning outcomes 7 and 12. **Skills Demonstration 50%**The assessor will devise skills demonstrations to assess learning outcomes 8 to 11. A skills demonstration will require the learner to complete a task or series of tasks appropriate to the learning outcomes. The learner must attempt a minimum of 20 of the indicative beef husbandry skills listed below.**Indicative Beef Husbandry Skills**1) Demonstrate knowledge of calving skills2) Controlling, handling and assessing the health of a calf3) Identifying breeds and crosses4) Judging weights of different categories of cattle and cows5) Judging cattle conformation6) Judging fat score7) Judging cattle cleanliness score8) Condition scoring suckler cows9) Grouping animals for sale through a mart10) Judging values of different categories of cattle11) Judging values of different categories of cows12) Checking animal temperature13) Dosing animals14) Administering subcutaneous injections and completing animals’ remedies record15) Administering pour-on and completing animal remedies record16) Administering intramuscular injections and competing animal remedies record17) Identify signs of heat18) Tail painting19) Castrating20) Dehorning Calves21) Selecting bulls for suckler herd22) Selecting stock for beef breeding 23) Selecting cows for culling24) Assessing animals for health25) Assessing grass availability26) Mixing ration formulation   |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 50%****Skills Demonstration 50%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award:1 Access to farm(s) that have a beef herd of adequate size for practical skills training and individual skills assessment2 Suitable equipment and facilities to safely demonstrate and assess indicative beef husbandry skills |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| The learner must have successfully passed the skill of “controlling and handling of cattle” contained in Principles of Agriculture to access this award. |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Pig HusbandryMinor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to carry out commercial pig farming under management  |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Describe husbandry factors for optimum gilt, boar and dry sow performance  |
| 2 | Describe husbandry factors for optimum lactating sow and litter performance  |
| 3 | Describe husbandry factors for optimum weaner and finisher performance  |
| 4 | Outline diseases, disorders and parasites of pigs and their respective curative and preventative measures |
| 5 | Discuss traceability requirements in pig husbandry |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 6 | Perform day to day skills associated with the production cycle of gilts, boars and dry sows  |
| 7 | Perform husbandry skills associated with the production cycle of farrowing and lactating sows and piglets  |
| 8 | Perform husbandry skills associated with the production cycle of weaners and finishers  |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 50%**The assessor will devise a theory based examination to assess learning outcomes 1 to 5**Skills Demonstration 50%**The assessor will devise a skills demonstration for tasks listed below, based on learning outcomes 6 to 8. A skills demonstration will require the learner to complete a task or series of tasks appropriate to the learning outcomes. The learner must attempt a minimum of 20 of the indicative pig husbandry skills listed below.**Indicative Pig Husbandry Skills**1. Selecting replacement gilts2. Ear tagging pigs3. Vaccinating adult stock4. Oestrus detection in sows and gilts5. Artificial insemination6. Mange and worm control7. Sow condition assessment8. Washing sow for farrowing and moving to farrowing pen9. Supervising the farrowing sow10. Teeth clipping11. Tail docking12. Iron injection13. Creep feeding14. Weaning the sow and litter15. Taking pig temperature16. Vaccinating piglets17. Setting environmental controllers18. Pregnancy testing19. Selecting pigs for sale20. Handling and moving pigs21. Slap marking22. Record keeping |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 50%****Skills Demonstration 50%** |
| **Specific Validation Requirements** |
| The provider must have all of the following in place to offer this award:1. Stated policies and procedures by the provider to deal with potential bio‐security risks |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| To access programmes leading to this award the learner should have reached the standards ofknowledge, skill and competence associated with the preceding level of the National Framework ofQualifications. This may have been achieved through a formal qualification or through relevant lifeand work experience.The learner must have access to1) a pig farm or pig production unit with appropriate housing and handling facilities in compliance  with health and safety requirements2) a farm or pig unit with appropriate skills demonstration space in compliance with health and safety requirements3) a pig farm or pig unit of sufficient scale to ensure that all learners have access to animals and  equipment required to practice and achieve learning outcomes to include:* Suitable sized pig herd
* Complete pig unit with modern herd recording equipment

4) a pig farm or pig unit with stated policies and procedures by the provider to deal with potential  bio‐security risks5) a pig farm or pig unit in compliance with current hygiene regulations |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Dairy HusbandryMinor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to carry out commercial dairy farming under management  |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Examine the Irish dairy farming industry to include its importance in Irish agriculture, and the main milk production systems |
| 2 | Discuss management and biological factors affecting efficiency in dairy production in terms of cow health and feeding and feed mixes |
| 3 | Explain milk production in the cow’s udder and the factors affecting milk composition and quality |
| 4 | Discuss the feeding and management for different categories of dairy stock. |
| 5 | Discuss the diseases, disorders and parasites of cows and calves to include causal agents, symptoms, prevention control and biosecurity measures |
| 6 | Describe the milking process, and the operation of milking facilities and systems for the production of quality milk in compliance with relevant legislation. |
| 7 | Describe milk quality in terms of Total Bacterial Count, Somatic Cell Count, fat and protein |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 8 | Analyse housing for the dairy herd to include human and animal health, welfare safety, efficiency and the cost of construction |
| 9 | Practice husbandry tasks required in dairy production by applying industry recognised techniques and performance standards.  |
| 10 | Assess a range of dairy stock for economic characteristics by applying recognised criteria  |
| 11 | Practice a comprehensive range of breeding tasks, competently and safely using recognised techniques and performance standards  |
| 12 | Execute best practice in milking routine.  |
| 13 | Control common diseases affecting the health of the dairy herd, by planning and implementing prevention and or curative strategies and by correctly identifying and treating their symptoms in accordance with recommended good practice |
| 14 | Execute a comprehensive range of dairy husbandry skills with respect to breeding, calving, animal husbandry, milking and culling, taking into account human and animal safety, animal welfare, traceability regulations and best practice |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 15 | Analyse drivers of profit in dairy production and explore practices to attain industry recognised targets to include financial, physical and biological targets |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 50%**The assessor will devise a theory based examination to assess learning outcomes 1 to 7 and 15.Learning outcome 8 will be assessed using case studies in an examination situation**Skills Demonstration 50%**The assessor will devise skills demonstrations to assess learning outcomes 9 to 14. A skills demonstration will require the learner to complete a task or series of tasks appropriate to the learning outcomes. The learner must attempt a minimum of 20 of the indicative dairy husbandry skills listed below.**Indicative Dairy Husbandry Skills**1. Controlling, handling and assessing the health of a calf
2. Training calves to drink from bucket or nipple
3. Preparing milk or milk substitute for calves and follow a feeding routine
4. Identifying signs of calving
5. Dehorning calves
6. Stomach tubing calves
7. Judging weights of heifers and cows
8. Judging cow conformation and condition score
9. Identifying lameness
10. Selecting replacement heifers and cows for breeding
11. Selecting cows for culling
12. Carrying out dry cow and mastitis therapy
13. Identifying signs of heat
14. Tail painting cows
15. Administering subcutaneous and intramuscular injections and completing animals’ remedies record
16. Administering pour-on and completing animal remedies record
17. Assisting at calving
18. Assessing grass availability
19. Carrying out maintenance checks on milking equipment
20. Preparing milking equipment for milking
21. Carrying out correct milking procedures
22. Carrying out cleaning procedures on milking equipment
23. Taking milk samples
24. Spraying teats
25. Mixing ration formulation
 |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 50%****Skills Demonstration 50%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award:1 Access to farm(s) that have a dairy herd of adequate size for practical skills training and individual skills assessment2 Suitable equipment and facilities to safely demonstrate and assess indicative dairy husbandry skills |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| The learner must have successfully passed the skill of “controlling and handling of cattle” contained in Principles of Agriculture to access this award. |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Tillage Crop HusbandryMinor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to carry out operations on a range of combinable crops under guidance |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Explore combinable crop production in Ireland including value, types of combinable crops produced, areas sown, legislative requirements, market outlets and end use |
| 2 | Discuss key indicators for measuring physical and financial performance for a range of combinable crops |
| 3 | Describe the production and harvesting of common winter and spring cereals  |
| 4 | Describe the production and harvesting of oil seed rape |
| 5 | Describe the production and harvesting of protein crops  |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 9 | Explore practices to attain industry recognised targets to include financial, physical and biological targets |
| 10 | Analyse key indicators for measuring physical and financial performance for a range of combinable crops |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 50%**The assessor will devise a theory based examination to assess learning outcomes 1 to 5 inclusive and learning outcomes 9 & 10.**Skills Demonstration 50%**The assessor will devise a skills demonstration to assess learning outcomes 6 to 8, based on indicative tillage husbandry skills. **Indicative Tillage Husbandry Skills**a) Identify the range of combinable crops grown on arable farms and their usesb) Identify the growth stages for a range of combinable crops with the aid of a keyc) Identify weeds of importance in combinable crops at their different growth stages including selecting appropriate herbicides with the aid of herbicide chartsd) Identify pests of importance in combinable crops at their different growth stages where appropriate including selecting appropriate pesticides with the aid of pesticide chartse) Identify diseases and disorders of combinable crops at their different stages including appropriate control measures with the aid of fungicide charts |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 50%****Examination Practical 50%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: Access to farm(s) with sufficient tillage crops, facilities and equipment to safely carry out all skills demonstration tasks.  |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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. |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Nutrition Housing and Welfare of PigsMinor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the relevant knowledge skill and competence to implement best practice in pig nutrition housing and welfare under management |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Detail the functioning of the pig digestive system. |
| 2 | Describe the nutritional requirements and the nutritional risks of the various categories of pigs. |
| 3 | Discuss the economic considerations of pig nutrition  |
| 4 | Illustrate the main housing requirements for the various groups of pigs taking account of production operations and their implications. |
| 5 | Analyse factors that will affect the food conversion efficiency of various categories of pigs. |
| 6 | Discuss key pig diseases, symptoms, causes, implications and appropriate treatments, taking into account legislative requirements. |
| 7 | Discuss pig herd health planning, herd biosecurity best practice and zoonoses. |
| 8 | Examine current legislation relating to the benefits of pig welfare, transportation of pigs, the assessment tools available to identify issues, and the effects of husbandry and management practices on pig welfare. |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 9 | Perform tasks associated with pig nutrition, housing and welfare. |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 60%**The assessor will devise a theory based examination to assess learning outcomes 1 to 8 **Skills Demonstration 40%**The assessor will devise a skills demonstration for tasks listed below, based on learning outcomes 9 & 10. The learner must attempt the 5 tasks set out in the list below.1. Classification of pig feed ingredients2. Identify the components of the pig digestive system3. Complete a detailed description of appropriate housing facilities for a 500 sow unit including:a) drawingsb) equipmentc) stocking densitiesd) environmental parameters4. Set and monitor climate controls in pig housing5. Identify common diseases and disorders of pigs and best practice in their control |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 50%****Skills Demonstration 50%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: Access to farm(s) with1) Stated policies and procedures by the provider to deal with potential bio-security risks. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| The learner must have access to a pig herd and housing facilities of sufficient size to practice skills |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Equipment for Crop EstablishmentMinor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to select and use equipment for crop establishment in accordance with manufacturer’s instructions |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Examine ploughing, and sub soiling equipment for type, purpose, individual components, and power requirements |
| 2 | Examine cultivation equipment  |
| 3 | Examine minimum tillage equipment  |
| 4 | Outline the effects of soil type, soil conditions, crop requirements, power availability, and time of year on selection of crop establishment machine |
| 5 | Describe the advantages and disadvantages of each type of crop establishment machine on soil structure |
| 6 | Explain economic considerations associated with the purchase, operation and maintenance of crop establishment equipment |
|  |  |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 7 | Operate a plough in appropriate conditions and according to manufacturer’s instructions |
| 8 | Operate a cultivator in appropriate conditions and according to manufacturer’s instructions |
| 9 | Operate a sower in appropriate conditions and according to manufacturer’s instructions |
| 10 | Operate crop establishment equipment effectively and in accordance with safety requirements |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 40%**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.The assessor will devise a theory based examination to assess learning outcomes 1 to 6.**Skills Demonstration 60%**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 practical examination assesses specified practical skills demonstrated in a set period of time under restricted conditions.The assessor will devise a skills demonstration based on learningoutcomes 7 -10. The learner must complete the 20 tasks set out in the list below.Weighting Factor:Where a critical fault occurs the entire skills demonstration must be terminated.0 marks for termination of skill demonstration due to a critical fault or failure to complete the task.1 mark for completing the task with 3 or more minor faults2 marks for completing the task with less than 3 minor faults3 marks for exceeding the criteria for the task with no minor faultsExamples of critical faults: compromises safety, animal welfare, the environmentExamples of minor faults: Incorrect sequence, too slow, requires guidanceList of tasks:**Operating a plough**1 Assesses compatibility of tractor with plough2 Identifies plough parts3 Sets plough4 Carries out safety assessment for ploughing5 Ploughs safely to a minimum depth of 18 cm, ensuring complete inversion of sods and burial of trash while maintaining reasonable straightness and correctness for ins and outs6 Demonstrates knowledge of cleaning, servicing and storage**Operating cultivation equipment**7 Assesses compatibility of tractor with cultivator8 Checks attachment of machine to tractor9 Checks machine for wear/broken parts10 Carries out safety assessment for cultivating11 Checks gearbox/chain case oil12 Sets machine and cultivates a stated area including a headland to a given depth, producing a coarse tilth at optimum work rate13 Cultivates a second area to produce a fine tilth14 Demonstrates knowledge of cleaning, servicing and storage**Operating a sower**15 Assesses compatibility of tractor with sower16 Checks attachment of sower to tractor17 Checks coulter assembly, delivery tubes, distance between coulters or row widths, track eradicators, seed and fertiliser metering mechanism18 Carries out safety assessment for sowing19 Drills an area sufficient to carry out a field check of the application rate at a given depth with seed, or seed and fertiliser20 Demonstrates knowledge of cleaning, servicing and storage |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 40%****Skills Demonstration 60%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award:1 Access to farm(s) of adequate size for practical skills training and individual skills assessment2 Suitable equipment range and facilities to safely demonstrate and assess the use of equipment used for crop establishment |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| None |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Potato ProductionMinor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to commercially produce potatoes under management |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Outline the structure of the potato production industry in Ireland including registration, systems of production, areas sown, and market outlets |
| 2 | Discuss key indicators for measuring physical and financial performance for potato crops |
| 3 | Examine the production of seed potatoes |
| 4 | Examine the production of potatoes under film. |
| 5 | Examine the production of early potatoes  |
| 6 | Examine the production of main crop potatoes  |
| 7 | Examine potato harvesting, grading, storage, and marketing techniques |
| 8 | Evaluate specialised potato planting and harvesting machinery with respect to cost and function |
|  |  |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 9 | Identify varieties of potato on the basis of appearance, yield potential, grade and market value |
| 10 | Identify common weeds, pests, disorders, diseases and deficiencies of potatoes |
| 11 | Employ appropriate crop inspection procedures including the detection of pests and diseases in potatoes |
| 12 | Estimate the dry matter percentage of a potato sample |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 13 | Devise an integrated production program for a potato crop including integrated pest management. |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 60%**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.The assessor will devise a theory based examination to assess learning outcomes 1 to 8.**Skills Demonstration 20%**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 practical examination assesses specified practical skills demonstrated in a set period of time under restricted conditions.The assessor will devise a practical examination to assess learning outcomes 9 - 12.Demonstrate correct crop inspection proceduresIdentify 2 potato specimens by variety, grade, and yield potentialIdentify 2 common post emergence weeds found in potato cropsIdentify 2 common pests found in Irish potato cropsIdentify 2 common diseases or disorders found in Irish potatoEstimate the dry matter percentage of a potato sample**Assignment 20%***An assignment is an exercise carried out in response to a brief with specific guidelines as to what should be included. An assignment is usually of short duration and may be carried out over a specified period of time.*The assessor will devise an assignment brief to assess learning outcome 13.Each assignment is based on a brief provided by the assessor. The brief includes specific guidelines for learners. The assignment is carried out over a period of time specified by the assessor. Assignments may be specified as an oral presentation, case study, observations, or have a detailed title such as audition piece, health fitness plan or vocational area profile. |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 60%****Skills Demonstration 20%****Assignment 20%** |
| **Specific Validation Requirements** |
| There are no specific validation requirements for this award  |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| None |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Grass Production Minor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge skills and competence to produce, utilise and conserve grass and forage crops under management |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Discuss the importance of grass and clover to agriculture production in Ireland. |
| 2 | Describe the factors which influence sward growth, quality and the annual production pattern of a grass sward taking account of plant anatomy, seed mixtures, and the effect of farming operations on soil and grass growth. |
| 3 | Describe the management practices and infrastructure required which influence sward growth, quality and utilisation. |
| 4 | Examine the principles and benefits of grass budgeting and grass measurement. |
| 5 | Examine reseeding and the various methods of reseeding including the establishment of a grass sward, and the use of clover. |
| 6 | Describe the production, conservation principles and management factors involved in making quality grass silage, hay and forage crops. |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 7 | Examine productive and non-productive grass swards, including assessing the composition of a sward to determine need for reseeding. |
| 8 | Calculate a winter forage budget including assessing the quality and quantity of forage in storage.  |
| 9 | Practice grass measurement. |
| 10 | Practice fencing skills in accordance with recommended good practice. |
| 11 | Execute maintenance tasks on a water supply. |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation.  |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 50%**The assessor will devise a theory based examination to assess learning outcomes 1 to 6.**Skills Demonstration 50%**The assessor will devise skills demonstrations to assess learning outcomes 7 to 11. A skills demonstration will require the learner to complete a task or series of tasks appropriate to the learning outcomes. The learner must attempt the indicative grass production skills listed below and achieve skills 1 to 3 inclusive.**Indicative Grass Production Skills**1) Analyse productive and non-productive swards (Mandatory)2) Identify common grassland weeds (Mandatory)3) Examine the presence of spoilage and estimate the quality and quantity of silage and hay in storage (Mandatory)4) Assess a grass sward to determine grazing heights and the need for reseeding5) Measure grass6) Examine pre and post grazing sward and determine appropriate operations7) Interpret laboratory forage analysis and plan the use of forage over a given winter period8) Set up a temporary electric fence taking account of daily grazing requirement9) Erect a stock-proof permanent fence in accordance with recommended good practice10) Carry out maintenance tasks on a water supply, in accordance with safety and construction specifications and regulations including connecting water supply piping, fitting and setting a ballcock  |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.Examination Theory 50%Skills Demonstration 50% |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award1) Access to suitable paddocks and grass swards2) Access to suitable stored forage products3) Access to suitable equipment to demonstrate and assess indicative grass production skills. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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. |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Poultry HusbandryMinor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge skill and competence to carry out poultry husbandry tasks under management |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Discuss poultry anatomical and physiological systems and their functioning |
| 2 | Examine poultry production systems to include egg, meat and breeding stock production |
| 3 | Discuss husbandry tasks associated with poultry production systems |
| 4 | Discuss symptoms, causes, prevention and treatment measures for commonly occurring pests, disease and disorders of poultry |
| 5 | Discuss poultry husbandry recording legislative requirements |
| 6 | Examine the market requirements for poultry meat, egg and breeding |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 7 | Execute routine husbandry poultry practices |
| 8 | Execute routine hygiene poultry practices  |
| 9 | Safely perform routine skills associate d with various poultry production systems in accordance with best practice and welfare requirements |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 10 | Analyse drivers of profit of poultry production and explore practices to attain industry recognised targets to include financial, physical and biological targets |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 50%**The assessor will devise a theory based examination to assess learning outcomes 1 to 6, and learning outcome 10.**Skills Demonstration 50%**The assessor will devise a skills demonstration for tasks listed below, based on learning outcomes 7 - 9The learner must attempt10 of the indicative poultry skills listed below.**Indicative poultry skills**1) Flock and bird observation2) Routine bird health checks3) Pen management4) Litter management (Assessment of quality, handling, spreading, monitoring and disposal)5) Feed system monitoring6) Water system monitoring7) Environment Control (temperature and lighting)8) Bio-security and hygiene control9) Catching and weighing for sale10) Preparation of chicks for sale11) Egg collection, grading and packing12) Record keeping in accordance with legislative requirements |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 50%****Skills Demonstration 50%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: Access to farm(s) with 1) Stated policies and procedures by the provider to deal with potential bio-security risks. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| The learner must have access to a poultry enterprise of sufficient size and with sufficient facilities to practice skills |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Poultry Nutrition Housing and WelfareMinor510To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the relevant knowledge skill and competence to implement best practice in poultry nutrition housing and welfare under management. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Detail the functioning of the poultry digestive system. |
| 2 | Discuss the nutritional requirements and the nutritional risks of the various categories of poultry. |
| 3 | Examine the economic considerations of poultry nutrition including feed specifications, least cost formulations, feed conversion efficiency and factors affecting poultry feed price. |
| 4 | Discuss the main housing requirements for the various groups of poultry including house design, climate control and production operations and their implications. |
| 5 | Examine factors that will affect the food conversion efficiency of various categories of poultry. |
| 6 | Examine key poultry diseases including identification, symptoms, causes, implications and appropriate treatments, taking into account legislative requirements. |
| 7 | Examine poultry flock health planning, herd biosecurity best practice and zoonoses. |
| 8 | Discuss the current legislation relating to the benefits of poultry welfare, including the assessment tools available to identify issues, the effects of husbandry and management practices on poultry welfare and the protection of animals during transport and related operations. |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 9 | Perform tasks associated with poultry nutrition, housing and welfare. |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 50%**The assessor will devise a theory based examination to assess learning outcomes 1 to 8 **Skills Demonstration 50%**The assessor will devise a skills demonstration for tasks listed below, based on learning outcomes 9 & 10. The learner must successfully carry out the 6 tasks set out in the list below.1. Classification of poultry feed ingredients2. Identify the components of the poultry digestive system3. Complete a detailed description of appropriate housing facilities for a commercial poultry production for one relevant to the learner. The description should includea) drawingsb) equipmentc) stocking densitiesd) environmental parameters4. Identify key poultry diseases and disorders and state relevant controls5. Configure a poultry house (layout, lighting, temperature, ancillary equipment) for a given production stage taking account welfare requirements |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 50%****Skills Demonstration 50%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: Access to farm(s) with1) Stated policies and procedures by the provider to deal with potential bio-security risks. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| The learner must have access to a poultry unit1) With sufficient livestock, facilities and equipment to safely carry out all skills demonstration tasks. 2) With stated policies and procedures by the provider to deal with potential bio-security risks.3) In compliance with current hygiene regulations |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Manual Pesticide ApplicationMinor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to work independently applying pesticides by different methods using hand operated equipment |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Describe the range of handheld and pedestrian propelled equipment for the application of plant protection products |
| 2 | Discuss the principles of application technology necessary for the proper application of pesticides in respect of applicator components, calibration, maintenance, field operating procedures, precautions and environmental considerations |
| 3 | Describe the working principles of a knapsack sprayer |
| 4 | Describe the working principles of a hand operated slug pellet applicator |
| 5 | Describe the working principles of a hand operated weedlick |
| 6 | Discuss legislative requirements pertaining to pesticide applicators |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 7 | Interpret pesticide label information in respect of precautionary symbols, product name, class designation, registration number, purpose, precautions, first aid instruction, toxicology information, disposal, notice to user, material safety data sheets (MSDS) and directions for use |
| 8 | Prepare a knapsack sprayer for work, including calibration, in accordance with safe recommended good practice and manufacturer's instructions |
| 9 | Make up a pesticide spray mix in accordance with good practice including the pesticide product label dosage recommendations and the application area |
| 10 | Store a knapsack sprayer and personal protective equipment in a safe and efficient manner according to manufacturer's instructions |
| 11 | Apply a pesticide mix with a knapsack sprayer in a safe and efficient manner in accordance with recommended good practice. |
| 12 | Set up, calibrate and efficiently operate a hand held weed-licker according to the operators manual using recommended good practice |
| 13 | Set up, calibrate and efficiently operate a pedestrian propelled full width broadcast or placement pesticide pellet applicator according to the operators manual using recommended good practice |
| 14 | Store manual pesticide applicators and personal protective equipment in a safe and efficient manner according to manufacturer’s instructions |
|  |  |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation.  |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be achieved****Examination Theory 20%**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.The assessor will devise a theory-based examination to assess learning outcomes 1 - 6.**Skills Demonstration 80%**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.The assessor will devise an individual skills demonstration based on learning outcomes 7 -14. The learner must individually attempt the 20 tasks set out in the list below.Learning outcome 7 will be assessed by a written exercise as part of the skills demonstration.Weighting Factor:Where a critical fault occurs the entire skills demonstration must be terminated.Examples of critical faults: compromises safety, animal welfare, the environmentExamples of minor faults: Incorrect sequence, too slow, requires guidanceThe learner must achieve at least half of the available marks in each task 1 to 20 listed below to pass this assessment with no more than two minor faults and no critical fault in any task. **Knapsack 50%**List of tasks:Preparing a Knapsack applicator for work1. Risk Assessment* Carries out risk assessment for spraying
* Selects and wears appropriate personal protective equipment

2 Applicator checks* Selects applicator
* Identifies components and their functions
* Identifies damaged components and states appropriate action

3 Setting up applicator* Selects nozzles appropriate to spraying task and sets pressure valve;
* Calibrates knapsack sprayer (with access to worksheet)

4 Making up a pesticide spray mix* Interprets pesticide label information for approved uses, risk and safety information and directions for use

5 Determining quantities* Calculates area to be treated and volume of mix required
* Determines product dose rate and volume to add to the tank

6 Mixing* Measures and adds correct dose to the tank
* Mixes chemical in accordance with good practice

7 Pesticide Storage* Returns pesticide to store and completes Chemical Store Stock Record Chart
* Disposes of empty pesticide containers in a safe manner

8 Applying pesticide with a handheld applicator* Checks wind speed and direction
* Fits sprayer as high as possible on the back with the aid of a high stand
* Applies pesticide mix by working downwind, at right angles in parallel matched swaths walking at the same pace used during calibration keeping lance steady at the correct height

9 Preparing handheld applicator and personal protective equipment for storage* Decontaminates sprayer and prepares for storage
* Removes personal protective equipment in correct order
* Prepares personal protective equipment for storage and stores in a clean, dry ventilated locker
* Washes hands & exposed skin

10 Record keeping* Completes Sprayer Operators Log.

**Operating a slug pellet applicator 15%**11 Prepares slug applicator for work* Carries out safety assessment using a handheld /pedestrian slug applicator
* Interprets pesticide label information for approved uses, risk and safety information and directions for use
* Selects and wears appropriate personal protective equipment
* Checks slug applicator for soundness
* Locates and greases all nipples/ lubricates moving parts

12 Calibration* Calibrates the slug applicator
* Checks balance of spread
* Calibrates spreader for output

13 Applies Slug pellets safely and accurately* Carries out safety assessment for application
* Loads spreader with pellets
* Sets out bout markers
* Spreads pellets using parallel adjacent accurate bouts

14 Prepares slug applicator for storage* Washes spreader hopper, shutter mechanism and internal of slug applicator
* Greases all nipples
* Coats metal parts of spreader with anti-corrosion product
* Checks all moving parts for damage
* Carries out safety assessment for preparation of spreader for storage
* Completes storage and operator log

**Operating a Weed licker 15%**15 Carries out safety assessment for using a hand held weedlicker* Interprets pesticide label information for approved uses, risk and safety information and directions for use
* Selects and wears appropriate personal protective equipment
* Checks weed licker for soundness

16 Mixes chemical* Mixes chemical in accordance with good practice (Half fills reservoir with clean water Measures pesticide accurately, adds correct dose and rinses containers; Tops up reservoir and washes off traces of chemical on the measuring vessel, following the recommended mixing rate on the label

17 Pesticide Storage* Returns pesticide to store
* Completes Chemical Store Stock Record Chart
* Disposes of empty pesticide containers in a safe manner

18 Using the weedlick* Operates weedlick as per manufacturer’s instructions in accordance with recommended good practice
* Ensures no excessive dripping from the wick
* Treats only targets plants

19 Cleans weed licker* Cleans weedlick in accordance with user manual

20 Storage* Prepares personal protective equipment for storage and stores in a clean, dry ventilated locker;
* Washes hands & exposed skin
* Completes Operators Log
 |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.Examination Theory 20%Skills Demonstration 80% |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: 1. Access to appropriate facilities and equipment to ensure compliance with health and safety for skills demonstration. |
| **Supporting Documentation** |
| Pesticide Registration and Control Division Publications. <http://www.pcs.agriculture.gov.ie/>  |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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.In order to access this award the learner must successfully complete a component award in Safe Use of Pesticide Products |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Tractor MaintenanceMinor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to carry out tractor maintenance tasks under management. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Explain mechanical principles applying to engines, machines, hand and power tools using technical terminology |
| 2 | Make physical and technical comparisons between diesel and petrol engines and relate to respective suitable applications  |
| 3 | Describe component tractor engine systems and ancillary tractor features  |
| 4 | Discuss common agriculture fuels and lubricants with regard to handling precautions, selection and on-farm storage |
| 5 | Discuss recent legislation and developments in emissions control on agricultural vehicles |
| 6 | Discuss the use, advantages and disadvantages of telemetrics on agricultural machines |
| 7 | Discuss tyre selection, inflation and use in agriculture |
| 8 | Discuss technological developments in agriculture tractors |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 9 | Carry out basic electrical maintenance tasks  |
| 10 | Perform routine tractor services in accordance with manufacturers recommendations |
| 11 | Check coolant for level and concentration |
| 12 | Execute correct battery charging procedure |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 13 | Carry out tractor and workshop tasks effectively and in accordance with safety requirements. |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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 |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Theory 40%**The assessor will devise a theory examination to assess learning outcomes 1 to 8The learner must achieve at least 16 of the 40 marks available.**Skills Demonstration 60%**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.The assessor will devise a skills demonstration based on learning outcomes 9-13. The learner must complete the tasks set out in the list below. The skills demonstration will be terminated if learner commits a critical fault during the task.Examples of critical faults: compromises safety, animal welfare, the environmentExamples of minor faults: Incorrect sequence, too slow, requires guidanceList of skills:1 Remove machine component and refit with fasteners correctly torqued2 Service electrical systems (checking fuses, bulbs, battery charging and jumpstarting procedures)3 Wire 16 amp 220V plug (IP44)4 Wire a vehicle lighting plug 5 Perform 4 tasks from a typical 50-hour service tasks (nominated by tutor)6 Perform 4 tasks from a typical 500-hour service tasks (nominated by tutor) |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Theory 40%****Skills Demonstration 60%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: 1. Access to appropriate facilities and equipment to ensure compliance with health and safety for skills demonstration and assessment. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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. |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Farm StructuresMinor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to carry out construction tasks to farm structures under management. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Outline grants, siting requirements, design specifications, planning regulations and construction safety regulations relating to farm structures. |
| 2 | Appraise the selection and use of constituent materials used in farm structures  |
| 3 | Describe minimum standard specifications for common components of farm structures. |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 4 | Execute construction tasks associated with concrete and blocks in accordance with safety and construction specifications and regulations  |
| 5 | Interpret plans and specifications for agricultural structures |
| 6 | Calculate quantities of materials required for a given construction project |
| 7 | Work independently with hand and power tools and equipment for measuring and marking, cutting and punching, drilling, grinding, welding and adjusting nuts and bolts. |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 8 | Execute construction and repair tasks effectively and in accordance with safety requirements. |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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 |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Theory 40%**The assessor will devise a theory examination to assess learning outcomes 1 to 3**Skills Demonstration 30%**The assessor will devise skills demonstrations to assess learning outcomes 4,7 and 8 as outlined in the tasks below. List of tasks: (A maximum of 6 marks can be awarded to task 1. A maximum of 4 marks can be awarded to all other tasks).1) Carry out workshop skills to include using hand and power tools for nuts and bolts, measuring marking cutting punching drilling grinding, and welding 2) Square out a building3) Transfer levels4) Peg out a floor or foundation trench5) Build concrete block quoin6) Assemble screeds for concrete to a specified fall7) Mix concrete or mortar**Examination Practical 30%**The assessor will devise a practical examination based on farm building plans and specifications to assess learning outcomes 5 and 6. All tasks carry equal marks.**Practical examination tasks to assess learning outcomes 5 and 6**1) Interpreting plans 2) Interpreting specifications 3) Calculating quantities of blocks required for specified projects correct to within +/- 5%4) Calculating quantities of concrete required for specified projects correct to within +/- 5%5) Calculating quantities of hardcore required for specified projects correct to within +/- 5% 6) Calculating quantities of timber required for specified projects correct to within +/- 5%  |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Theory 40%****Skills Demonstration 30%****Examination Practical 30%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: 1. Access to appropriate facilities and equipment to ensure compliance with health and safety for skills demonstration and assessment. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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. |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Organic Farming PrinciplesMinor55 To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to apply organic farming principles to the production of organic produce, to meet market requirements and approved organic standards in compliance with European Union (EU) and Irish legislation.  |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Outline the origin and development of the organic movement including the diversity or organic approaches and the range of certifying bodies |
| 2 | Explain the principles of organic production  |
| 3 | Outline the procedures involved in converting from a non-organic to an organic production system  |
| 4 | Describe organic soil fertility practices  |
| 5 | Outline general standard s for organic production |
| 6 | Describe weed, pest and disease control in organic crops |
| 7 | Plan a production programme to organic standards in accordance with conversion principles |
| 8 | Complete the documentation required for conversion to an organic production system |
| 9 | Describe soil amelioration techniques with organic production |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 10 | Manage a crop using organic principles |
| 11 | Outline the key aspects of an organic production plan |
| 12 | Assess the economic viability and market opportunities for organic production including EU and national supports |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation.  |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed.****Examination theory 40%**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 conditionsA theory-based examination assesses the ability to recall apply and understand specific theory and knowledge.The assessor will devise a theory-based examination to assess learning outcomes 1 – 9.**Examination Practical 20%**A practical examination assesses specified practical skills demonstrated in a set period of time under restricted conditions.The assessor will devise a practical examination based on 4 practical tasks to assess learning outcome 10.List of tasks:1. Assessing weed infestation levels2. Assessing crop performance3. Identifying suitable management measures4. Apply suitable management measures**Assignment 40%**An assignment is an exercise carried out in response to a brief with specific guidelines as to what should be included. An assignment is usually of short duration and can be carried out over a specified period of time.The assessor will devise an assignment to assess learning outcomes 11 and 12. |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.Examination Theory 40%Examination Practical 20%Assignment 40% |
| **Specific Validation Requirements** |
| There are no specific validation requirements  |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| None |
| **Particular Transfer and Progression Expectations** |
| No particular transfer or progression expectations noted |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Organic Manure SpreadingMinor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the relevant knowledge, skill and competence to spread organic manure in accordance with crop requirements and environmental regulation. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Outline the pollution potential for the range of farm manures and farm wastes for biochemical oxygen demand (BOD), soil type and underlying geology, weather and spreading interactions |
| 2 | Interpret nitrates directive, cross compliance requirements as they relate to application of organic manure and slurry |
| 3 | Review factors in maximizing the nutrient value of farm manure  |
| 4 | State the farmers legal and regulatory obligations, restrictions and responsibilities for manure and slurry application |
| 5 | State safety precautions to be followed when handling farm manure and slurry while storing, agitating, stacking and spreading |
| 6 | Outline manure and slurry collection, storage and spreading systems and equipment |
|  |  |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 7 | Prepare a tractor and manure and slurry equipment for work |
| 8 | Spread manure and slurry safely and accurately in accordancewith current legislation and best practice |
| 9 | Prepare manure and slurry equipment for storage |
| 10 | Spread manure and slurry safely and accurately under limitedsupervision in a farm or horticultural setting. |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation.  |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Examination Theory 40%**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.The assessor will devise a theory-based examination to assess learning outcomes 1 - 6.**Skills Demonstration 60%**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.Learning outcomes 7 - 10. The learner must complete the 20 tasks set out in the list below.The learner must pass this assessment.**Weighting Factor:**Where a critical fault occurs the entire skills demonstration must be terminated.0 marks for termination of skill demonstration due to a critical fault or failure to complete the task.1 mark for completing the task with 3 or more minor faults2 marks for completing the task with less than 3 minor faults3 marks for exceeding the criteria for the task with no minor faultsExamples of critical faults: compromises safety, animal welfare, the environmentExamples of minor faults: Incorrect sequence, too slow, requires guidancePrepares tractor and equipment for work1. Carries out safety assessment for preparing tractor and spreader2. Assesses compatibility of tractor with spreader and agitator3. Checks, cleans and greases spreader for work4. Checks, cleans and greases agitator or loader for workPrepares manure or slurry for spreading5. Carries out safety assessment for preparing manure or slurry for spreading6. Ensures that all humans and livestock are excluded from the vicinity of the stacking or agitation area7. Lowers agitator into tank and prepares for agitation or selects best location for loading operation8. Commences agitation by gradually increasing PTO (power take off) speed after engaging PTO or stacks manure to enable rapid loading of manure on to spreaderSpreads manure or slurry9. Carries out safety assessment for spreading manure or slurry10. Fills slurry tanker with slurry or loads spreader with manure11. Measures the discharge rate of the spreader12. Determines forward speed to achieve target application rate13. Calibrates tractor forward speed14. Spreads slurry or manure with accurate bout matchingPrepares spreader for storage15. Carries out safety assessment for preparing equipment for storage16. Cleans all residues from the outside of the spreader and the tractor making sure that washings run to a soiled water or slurry tank 17. Greases all nipples18. Checks for undue wear or damage19. Coats all metal parts with rust inhibitor20. Maintains record of all applicationsOverall Marks 60 |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.Examination Theory 40%Skills Demonstration 60% |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: 1. Access to appropriate facilities and equipment to ensure compliance with health and safety for skills demonstration and assessment. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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. |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Mechanical Pesticide ApplicationMinor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to work independently applying pesticides by different methods, in accordance with best practice, using mechanically propelled equipment |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Describe the range of mechanically propelled equipment for the application of plant protection products |
| 2 | Discuss the principles of application technology necessary for the proper application of pesticides in respect of the environment, applicator components, calibration, maintenance, field operating procedures, precautions and environmental considerations |
| 3 | Describe the working principles of a boom sprayer |
| 4 | Describe the working principles of a machine mounted slug pellet applicator |
| 5 | Describe the working principles of a trailed weedlick |
| 6 | Discuss legislative requirements pertaining to pesticide applicators |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 7 | Interpret pesticide label information in respect of precautionary symbols, product name, class designation, registration number, purpose, precautions, first aid instruction, toxicology information, disposal, notice to user, material safety data sheets (MSDS) and directions for use |
| 8 | Prepare boom sprayer for work, including calibration, in accordance with safe recommended good practice and manufacturer's instructions |
| 9 | Make up a pesticide spray mix in accordance with good practice including the pesticide product label dosage recommendations and the application area |
| 10 | Apply a pesticide mix with a boom sprayer in a safe and efficient manner in accordance with recommended good practice. |
| 11 | Apply pesticide with a hand lance attached to a boom sprayer in accordance with recommended good practice |
| 12 | Set up, calibrate and operate a mechanically propelled weed-licker according to the operators manual using recommended good practice |
| 13 | Set up, calibrate and operate a mechanically propelled full width broadcast or placement pesticide pellet applicator according to the operators manual using recommended good practice |
| 14 | Store a boom sprayer and personal protective equipment in a safe and efficient manner according to manufacturer's instructions |
| 15 | Store a mechanically propelled weed-licker and slug pellet applicators and personal protective equipment in a safe and efficient manner according to manufacturer's instructions |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation.  |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 20%**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.The assessor will devise a theory-based examination to assess learning outcomes 1 - 6.**Skills Demonstration 80%**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.The assessor will devise an individual skills demonstration based on learning outcomes 7 -15. The learner must individually attempt the 20 tasks set out in the list below.Learning outcome 7 will be assessed by a written exercise as part of the skills demonstration.Weighting Factor:Where a critical fault occurs the entire skills demonstration must be terminated.Examples of critical faults: compromises safety, animal welfare, the environmentExamples of minor faults: Incorrect sequence, too slow, requires guidanceThe learner must achieve at least half of the available marks in each task 1 to 20 listed below to pass this assessment with no more than two minor faults and no critical fault in any task. **Boom Sprayer Applicator (50%)**List of tasks:Preparing boom sprayer for work1 Carries out risk assessment for spraying* Checks environmental conditions
* Assesses condition of primary vehicle (for non-self-propelled equipment)
* Selects and wears appropriate personal protective equipment

2 Selecting Applicator* Selects appropriate applicator
* Identifies components, their functions
* Checks sprayer before and after attaching to tractor (with access to checklists)
* Assesses compatibility of sprayer and tractor

3 Nozzles and Calibration* Selects nozzles from nozzle chart;
* Calibrates static boom sprayer (with access to worksheet)
* calculates tractor forward speed (with access to worksheet)

4. Making up a pesticide spray mix* Selects appropriate pesticide following Integrated Pest Management Principles
* Interprets pesticide label information for approved uses, risk and safety information and directions for use

5 Mixing* Mixes chemical in accordance with good practice (Half fills tanks with clean water & sets agitator running, Measures pesticide accurately, adds correct dose and rinses containers; Tops up tank and washes off traces of chemical

6 Storing unused pesticide* Returns pesticide to store (or temporary store) and completes Chemical Store Stock Record Chart and disposes of empty pesticide containers in a safe manner

7 Applying pesticide with a boom sprayer* Marks out bouts/or uses tramlines
* Rolling starts
* Correct boom height
* Correct pressure and forward speed setting
* Checking wind speed and direction and starting spraying from downwind end
* Spraying 2 bouts, square turns, around perimeter leaving first headland unsprayed

8 Cleaning* Rinses sprayer and sprays out first rinsing on unsprayed headland
* Washes through the lines and nozzles
* Disposal of rinsing in designated area
* Demonstrates the triple rinse method for rinsing used pesticide containers

9 Preparing boom sprayer and personal protective equipment for storage* Cleans down external parts of sprayer in designated area
* Removes personal protective clothing in correct order
* Washes personal protective clothing
* Stores personal protective clothing
* Washes hands and exposed skin

10 Record keeping* Completes sprayer operators Log
* Completes store log

**Operating a slug pellet applicator with a primary vehicle (15%)**Prepares tractor and slug applicator for work11 Carries out safety assessment for preparing tractor and spreader* Assesses primary vehicle
* Interprets pesticide label information for approved uses, risk and safety information and directions for use
* Checks environmental conditions
* Selects and wears appropriate personal protective equipment
* Assesses compatibility of tractor with spreader
* Checks spreader for soundness
* Locates and greases all nipples

12 Calibrates the slug applicator* Checks balance of spread
* Calibrates spreader for output
* Calibrates forward speed of tractor

13 Applies Slug pellets safely and accurately* Carries out safety assessment for application of fertiliser
* Loads spreader with fertiliser
* Sets out bout markers
* Sets applicator height
* Applies bout around headland using boundary deflector
* Spreads fertiliser using parallel adjacent accurate bouts

14 Decontamination and prepares slug applicator for storage * Washes spreader hopper, shutter mechanism and internal of spreader
* Washes tractor to remove traces of pellets
* Greases all nipples
* Coats metal parts of spreader with anti-corrosion product
* Checks all moving parts for damage
* Carries out safety assessment for preparation of spreader for storage
* Removes personal protective clothing in correct order
* Washes personal protective clothing
* Stores personal protective clothing
* Washes hands and exposed skin

**Operating a Weed lick (15%)**15 Carries out safety assessment for preparing primary vehicle and weedlick* Assesses condition of primary vehicle
* Assesses condition of weedlick
* Selects appropriate pesticide according to integrated pest management principles
* Interprets pesticide label information for approved uses, risk and safety information and directions for use
* Selects and wears appropriate personal protective equipment
* Assesses compatibility of all-terrain vehicle with spreader
* Checks weedlick for soundness

16 Mixing* Calculates required volume to treat the area
* Mixes chemical in accordance with good practice (Half fills tanks with clean water Measures pesticide accurately, adds correct dose and rinses containers
* Tops up tank and washes off traces of chemical following the recommended mixing rate on the label

17 Pesticide Container Management* Returns unused pesticide to chemical store / temporary store
* Completes Chemical Store Stock Record Chart
* Demonstrates triple rinsing used containers
* Disposes of empty pesticide containers in a safe manner

18 Weedlicker Operation* Operates weedlicker as per manufacturer’s instructions in accordance with recommended good practice
* Shuts off weedlicker before the end of treatment to ensure no excessive dripping from the wick
* Ensures that the wick is fully wet but not dripping during application

19 Preparing for storage* Allows wick to dry off before storage
* Empties residual mix and disposes in an appropriate manner
* Rinses pesticide tank
* Cleans outside of licker

20 Decontamination * Removes personal protective clothing in correct order
* Washes personal protective clothing
* Stores personal protective clothing
* Washes hands and exposed skin
* Prepares personal protective equipment for storage and stores in a clean, dry ventilated locker; Washes hands & exposed skin Completes Sprayer Operators Log
 |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.Examination Theory 20%Skills Demonstration 80% |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: 1. Access to appropriate facilities and equipment to ensure compliance with health and safety for skills demonstration. |
| **Supporting Documentation** |
| Pesticide Registration and Control Division Publications. <http://www.pcs.agriculture.gov.ie/> |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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.In order to access this award the learner must successfully complete a component award in Safe Use of Pesticide Products |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Herd Recording in Pig ProductionMinor555N2046 |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to maintain accurate farm production and financial records for a pig farm enterprise, interpret records and to keep records in accordance with current legislation. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Describe the benefits of accurate herd records. |
| 2 | Describe the principles of on‐farm herd recording including records required for management and legislative requirements. |
| 3 | Outline current pig herd recording tools available. |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 4 | Benchmark and interpret individual herd performance figures and financial data to current national and European key performance indicators and outlining appropriate corrective action. |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 5 | Perform tasks associated with herd recording including inputting data on herd performance and financial records. |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 60%**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.**Skills Demonstration 40%**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. The assessor will devise a skills assessment to include:Using pig management software to record all aspects of production. |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 60%****Skills Demonstration 40%** |
| **Specific Validation Requirements** |
| The provider must have all of the following in place to offer this award:1. Stated policies and procedures by the provider to deal with potential bio-security risks. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| The learner must have access to 1) a herd and facilities of sufficient size to practice skills2) appropriate pig recording software |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Pig Manure ManagementMinor555N2278 |
| Purpose: The purpose of this award is to equip the learner with the relevant knowledge skill and competence to understand pig slurry in respect of its nutrient value, storage, handling and application in accordance with crop nutrient requirements and environmental legislation, the ability to accurately record slurry in storage and to complete required records to comply with current legislation. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Describe the nutrient content and value of pig slurry. |
| 2 | Describe pig manure and slurry collection, storage, handling and spreading systems. |
| 3 | Describe the safety precautions to be followed when handling farm manures. |
| 4 | Describe the implications of the European Union Nitrates Directive and Water Framework Directive and related legislation in relation to manure production storage and spreading. |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 5 | Estimate the quantity of manure produced on a farm, and calculate the storage requirement and actual on‐farm capacity, and determine the maximum customer import capacity. |
| 6 | Perform tasks associated with manure management. |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 80%**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 andknowledge.**Skills Demonstration 20%**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.The assessor will devise skills demonstration based on learning outcome number 6 by demonstratingthe tasks set out below:1. 1**.** Calculation of slurry storage and import capacity**2** 2. Completion of a risk assessment for handling pig slurry |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 80%****Skills Demonstration 20%** |
| **Specific Validation Requirements** |
| The provider must have all of the following in place to offer this award:1) Stated policies and procedures by the provider to deal with potential bio-security risks. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| To access programmes leading to this award the learner should have reached the standards ofknowledge, skill and competence associated with the preceding level of the National Framework ofQualifications. This may have been achieved through a formal qualification or through relevant lifeand work experience.The learner must have access to a herd and facilities of sufficient size to practice skills |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Structure of the Pig IndustryMinor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the relevant knowledge of the structure, targets and main influencing factors for the Irish pig industry. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Outline the current pig industry population figures and trends in Ireland, and the top European pig producing countries. |
| 2 | Describe the average national performance and key performance indicators including economic indicators. |
| 3 | Detail pig slaughtering, processing and marketing in Ireland  |
| 4 | Describe the current main developments in the Irish pig industry and likely future trends. |
|  |  |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 5 | Perform tasks associated with estimating the impact of production fluctuations on the value to the economy. |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Examination Theory 80%**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 andknowledge.**Assignment 20%**An assignment is an exercise carried out in response to a brief with specific guidelines as to what should be included. An assignment is usually of short duration and may be carried out over a specified period of time. |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 80%****Assignment 20%** |
| **Specific Validation Requirements** |
| None |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| To access programmes leading to this award the learner should have reached the standards ofknowledge, skill and competence associated with the preceding level of the National Framework ofQualifications. This may have been achieved through a formal qualification or through relevant lifeand work experience. |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Workshop SkillsMinor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to recognise and safely use common tools in metal fabrication workshops. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Analyse the risks associated with workshops and state control measures to include the correct use of personal protective equipment, workshop safety devices and safety for others in the workshop |
| 2 | Discuss the function, correct use, risks and controls measures for a range of hand and power tools commonly found in a workshop  |
| 3 | Examine the use of common materials used in a workshop  |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 4 | Measure accurately using common workshop equipment  |
| 5 | Safely operate hand and power tools and equipment for nuts and bolts,measuring and marking, cutting and punching, drilling, grindingand welding |
| 6 | Fabricate an artefact of metal to given specifications |
| 7 | Wire a range of plugs  |
| 8 | Use a range of fixing and retaining methods such as nuts, bolts, pins and rivets |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 9 | Work effectively to ensure a safe work environment |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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 |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Theory 40%**The assessor will devise a theory examination to assess learning outcomes 1 to 3**Skills Demonstration 60%**The assessor will devise skills demonstrations to assess learning outcomes 4 to 9. A skills demonstration will require the learner to complete a task or series of tasks appropriate to the learning outcomes. The learner must attempt all of the indicative workshop skills listed below.**Indicative workshop Skills:**1. Accurately use a range of workshop measuring equipment2 Safely use hand and power tools for nuts and bolts, measuring marking cutting punching drilling grinding, and welding3 Fabricate an artefact to given specifications4 Wire a range of plugs to include a 16 amp (IP44) plug and a vehicle lighting plug5 Use a range of fixing and retaining methods such as nuts, bolts, pins and rivets6 Work effectively to ensure a safe work environment including, safety for self and others, tidying and reporting any defects in materials or equipment |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Theory 40%****Skills Demonstration 60%** |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: 1. Access to appropriate facilities and equipment to ensure compliance with health and safety for skills demonstration and assessment. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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. |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Grassland Machinery Minor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge skill and competence to assess and operate a range of grassland machinery |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Discuss the range and purpose of machinery for grassland establishment,  |
| 2 | Discuss the range and purpose of machinery for grass management  |
| 3 | Discuss the range and purpose of grass harvesting machinery  |
| 4 | Discuss the range of machinery used for extracting and loading silage and feeding forage to livestock |
| 5 | Analyse a range of silage harvesting equipment including equipment used for baling, wrapping and transporting bales |
| 6 | Analyse a range of grassland de-compaction and aeration machinery |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 7 | Work independently, machinery used for extracting and loading and feeding forage to livestock |
| 8 | Work independently grassland machinery to include mowers and toppers in appropriate conditions and according to manufacturer’s instructions |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation.  |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 70%**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.The assessor will devise a theory based examination to assess learning outcomes 1 - 6**Skills Demonstration 30%**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.The assessor will devise a skills demonstration to assess learning outcomes 7 & 8.  |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.Examination Theory 70%Skills Demonstration 30% |
| **Specific Validation Requirements** |
| The provider must have the following in place to offer this award: 1. Access to appropriate facilities and equipment to ensure compliance with health and safety for skills demonstration. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| 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. |
| **Particular Transfer and Progression Expectations** |
| 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. |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Farm ForestryMinor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the knowledge, skill and competence to appraise establishment and maintenance of a forestry enterprise and review the impact of forestry on farm income. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Discuss current farm forestry schemes and their financial returns |
| 2 | Explore forestry production, markets and associated non-financial benefits in Ireland  |  |
| 3 | Examine key physical and financial performance indicators in forestry  |  |
| 4 | Discuss the cultural and husbandry requirements and associated costs for successful forestry establishment and management |  |
| 5 | Comment on the impact of farm forestry on the environment, biodiversity, landscape and its impact on global warming  |  |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 6 | Identify common forestry trees, their uses, site requirements and environmental benefits  |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 7 | Test the viability for the establishment of a forestry enterprise for a given site using cost benefit analysis |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation.  |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 80%**The assessor will devise theory examination(s) to assess learning outcomes 1 to 5 and 7**Examination practical 20%**The assessor will devise practical examination(s) to assess learning outcome 6 |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.Examination Theory 80%Examination practical 20% |
| **Specific Validation Requirements** |
| There are no specific validation requirements  |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| None |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Poultry Industry StructureMinor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the relevant knowledge of the structure, targets and main influencing factors for the Irish poultry industry. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Examine the current poultry industry population figures and trends in Ireland, and the top European poultry producing countries. |
| 2 | Discuss the average national performance and key performance indicators including economic indicators. |
| 3 | Discuss marketing of poultry products in Ireland.  |
| 4 | Examine the main developments in the Irish poultry industry including current legislation and national and European initiatives and likely future trends. |
|  |  |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 5 | Examine the economic value and trends of the Irish poultry industry. |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 80%**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 andknowledge.**Assignment 20%**An assignment is an exercise carried out in response to a brief with specific guidelines as to what should be included. An assignment is usually of short duration and may be carried out over a specified period of time. |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 80%****Assignment 20%** |
| **Specific Validation Requirements** |
| None |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| To access programmes leading to this award the learner should have reached the standards ofknowledge, skill and competence associated with the preceding level of the National Framework ofQualifications. This may have been achieved through a formal qualification or through relevant lifeand work experience. |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Flock Recording in Poultry ProductionMinor55 To be assigned by QQI |
| Purpose: The purpose of this award equip the learner with the knowledge, skill and competence to record and interpret key poultry performance data and recommend appropriate actions. |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Discuss the benefits of accurate flock records. |
| 2 | Discuss the principles of on‐farm flock recording. |
| 3 | Discuss current poultry flock recording tools available. |
| 4 | Discuss developments current to flock recording and data collection. |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 5 | Benchmark and interpret individual flock performance figures and financial data, to current national and European key performance indicators. |
| 6 | Recommend appropriate corrective action based on benchmarking key performance indicators. |

 | **Know-how and 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 |
|

|  |  |
| --- | --- |
| 7 | Perform tasks associated with flock recording including inputting data on flock performance and financial records. |
|  |  |

 | **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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation.  |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 60%**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.The assessor will devise theory examination(s) to assess learning outcomes 1 - 4**Skills Demonstration 40%**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. The assessor will devise a skills assessment to assess learning outcomes 5 - 7 1) Record and input data on poultry 2) Produce and interpret key performance indicator reports3) Benchmark performance against national and other producers4) Recommend appropriate actions |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 60%****Skills Demonstration 40%** |
| **Specific Validation Requirements** |
| The provider must have all of the following in place to offer this award:1. Stated policies and procedures by the provider to deal with potential bio-security risks. |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| The learner must have access to a poultry flock of sufficient size and modern facilities including appropriate information technology to practice skills |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |

|  |
| --- |
| Component Specification |
| Title: Award Class: NFQ Level: Credit Value: Code:  | Poultry Manure ManagementMinor55To be assigned by QQI |
| Purpose: The purpose of this award is to equip the learner with the relevant knowledge skill and competence to sustainably manage poultry manure in compliance with environmental legislation under guidance |
| Expected Learning Outcomes | **Strand** | **NFQ level Indicators** |
| The learner should be able to: |  |  |
|

|  |  |
| --- | --- |
| 1 | Discuss the nutrient content and value of poultry manure. |
| 2 | Examine poultry manure and slurry, management, collection, storage, handling and spreading systems. |
| 3 | Discuss the safety precautions to be followed when handling farm manures. |
| 4 | Discuss the implications of the European Union Nitrates Directive and Water Framework Directive and related legislation in relation to manure production storage and spreading. |

 | **Knowledge** | **Breadth** Broad range of knowledge**Kind** Some theoretical concepts and abstract thinking, with significant depth in some areas |
|

|  |  |
| --- | --- |
| 5 | Estimate the quantity of manure produced on a farm, and calculate the storage requirement and actual on-farm storage capacity. |
| 6 | Calculate the maximum customer poultry manure import capacity |
| 7 | Perform tasks associated with manure management. |

 | **Know-how and 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 |

|  |
| --- |
| **Assessment** |
| Details of QQI's assessment requirements are set out in QQI’s current Assessment Guidelines and Validation Policy and Criteria. Assessment is criterion referenced. Successful achievement of the award is based on learners attaining the expected (determined) standards of knowledge, skill or competence.The techniques set out for the assessment for QQI awards are considered optimal. In exceptional circumstances a further education and training provider may seek approval of alternative assessment techniques through its application for programme validation. 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. |
| **Award classification [NFQ level 4 and higher]**  |
| Pass 50% thresholdMerit 65% thresholdDistinction 80% thresholdA percentage grading system shall be used with a pass mark of 50%.A pass classification or passing percentage grade shall indicate that all the expected learning outcomes have been achieved and any classification or percentage grade in excess of these respectively indicate achievement in excess of this.The award class (where the award is classified) is based on a credit weighted mean of percentage grades awarded for the elements of a programme of education and training validated for this award. A QQI award or a QQI award with pass classification shall only be awarded where all of the award’s expected learning outcomes have been achieved. |
| **Particular Guidelines on Assessment for the Minor Award** |
| **Each assessment type must be passed****Examination Theory 80%**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 andknowledge.The assessor will devise a theory examination(s) to assess learning outcomes 1 to 4**Skills Demonstration 20%**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.The assessor will devise skills demonstration based on learning outcomes 5 to 7 by demonstratingthe tasks set out below:1**.** Calculation of organic manure production and storage 2. Calculate the import capacity of a customer for a given situation3. Completion of a risk assessment for handling poultry manure4. Maintain manure movement records |
| **Prescribed Assessment Techniques for the Minor Award** |
| Candidates are required to be assessed using the following techniques. The available percentage marks for this award are to be apportioned over the assessment techniques as follows.**Examination Theory 80%****Skills Demonstration 20%** |
| **Specific Validation Requirements** |
| The provider must have all of the following in place to offer this award:1 Stated policies and procedures by the provider to deal with potential bio‐security risks |
| **Supporting Documentation** |
| None |
| **General Access Expectations** |
| Generally, to access programmes leading to major awards 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. Some awards may specify additional requirements for access. |
| **Particular Access Expectations** |
| To access programmes leading to this award the learner should have reached the standards ofknowledge, skill and competence associated with the preceding level of the National Framework ofQualifications. This may have been achieved through a formal qualification or through relevant lifeand work experience.The learner must also have access to a poultry unit or farm:1. with appropriate animal housing and handling facilities in compliance with health and safety requirements
2. with appropriate skills demonstration space in compliance with health and safety requirements
3. with sufficient scale to ensure that all learners have access to animals and equipment required to practice and achieve learning outcomes to include:
* Suitable sized poultry flock
* Complete poultry unit with modern flock recording equipment
1. with stated policies and procedures by the provider to deal with potential bio‐security risks
2. in compliance with current hygiene regulations
 |
| **Particular Transfer and Progression Expectations** |
| 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 |
| **QQI Policy** |
| This standard shall be interpreted consistently with QQI’s *Policy for Determining Awards**Standards* and its *Policy and Criteria for Making Awards*. |