Higher National Graded Unit specification

General information for centres

This Graded Unit has been validated as part of the HNC in Agriculture and the HND in Agriculture. Centres are required to develop the assessment instrument in accordance with this validated specification. Centres wishing to use another type of Graded Unit or assessment instrument are required to submit proposals detailing the justification for change for validation.

Graded Unit title: Agriculture: Graded Unit 1

Graded Unit code: F3R3 34

Type of Graded Unit: Project

Assessment Instrument: Investigation

Credit points and level: 1 HN credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*)

*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from National 1 to Doctorates.

Purpose: This Graded Unit is designed to provide evidence that the candidate has achieved the following principal aims of the HNC in Agriculture:

♦ to provide a husbandry-based programme in production agriculture, which, in combination with practical experience and guidance from their manager, would enable candidates to undertake the running of a farm enterprise
♦ to develop in candidates the required skills and knowledge in crop production, animal production and mechanisation in an integrative manner and to develop the ability to complete and maintain appropriate records and documents
♦ to ensure that candidates are aware of relevant health and safety, animal welfare and environmental issues
♦ to provide an appropriate foundation to enable progression to the Higher National Diploma and BSc programmes

General information for centres (cont)

Recommended prior knowledge and skills: It is recommended that the candidate should have completed or be in the process of completing the following Units relating to the above specific aims prior to undertaking this Graded Unit:

F1Y4 34	*Arable Crop Production*
F1Y6 34	*Crop Protection and Harvesting Mechanisation*
F2G8 34	*Environmental Awareness*
F1Y8 34	*Farm Power*
F1Y9 34	*Grass and Fodder Crop Production*
D75X 34	*Information Technology Applications Software 1*
F2E6 34	*Livestock Breeding*
F2E8 34	*Livestock Growth, Health and Welfare*
F2EA34	*Livestock Husbandry and Recording*
F2ED 34	*Livestock Production Systems*
F1YC 34	*Soils and Crop Establishment*

Core Skills: There are opportunities to develop the Core Skills of *Communication*, *Numeracy*, *Problem Solving* and *Working with Others* all at SCQF Level 6 in this Unit, although there is no automatic certification or Core Skills or Core Skills components.

Assessment: This Graded Unit will be assessed by the use of an investigation. The developed investigation should provide the candidate with the opportunity to produce evidence that demonstrates she/he has met the principal aims of the Graded Unit that it covers.

Administrative Information

Graded Unit code: F3R3 34

Graded Unit title: Agriculture: Graded Unit 1

Original date of publication: August 2008

Version: 02

History of changes:

Version	Description of change	Date
02	Update of Conditions of Assessment	Jul 2018

Source: SQA

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates

Graded Unit title: Agriculture: Graded Unit 1

Conditions of assessment

The candidate should be given a date for completion of the investigation. However, the instructions for the assessment task should be distributed to allow the candidate sufficient time to assimilate the details and carry out the assessment task. During the time between the distribution of the assessment task instructions and the completion date, assessors may answer questions, provide clarification, guidance and reasonable assistance

Reasonable assistance is the term used by SQA to describe the difference between providing candidates with some direction to generate the required evidence for assessment and providing too much support which would compromise the integrity of the assessment. Reasonable assistance is part of all learning and teaching processes.

In relation to the assessment of Higher National Examination-based Graded Units, assessors may provide advice and guidance on examination technique and clarification on the meaning of command words which may appear within an examination paper, prior to the formal examination.

Remediation is <u>not</u> allowed in Examination-based Graded Unit assessments.

Any candidate who has failed their Higher National Examination-based Graded Unit or wishes to upgrade their award must be given a re-assessment opportunity, or in exceptional circumstances, two re-assessment opportunities. This must be done by using a substantially different examination.

The final grading given must reflect the quality of the candidate's evidence at the time of the completion of the graded unit. Candidates must be awarded the highest grade achieved, whether through first sitting or through any re-assessment.

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates (cont)

Graded Unit title: Agriculture: Graded Unit 1

Instructions for designing the assessment task

The assessment task is a project. The project undertaken by the candidate must be a complex task which involves:

♦ variables which are complex or unfamiliar
♦ relationships which need to be clarified
♦ a context which may be familiar or unfamiliar to the candidate

The assessment task must require the candidate to:

♦ analyse the task and decide on a course of action for undertaking the project
♦ plan and organise work and carry it through to completion
♦ reflect on what has been done and draw conclusions for the future
♦ produce evidence of meeting the aims which this Graded Unit has been designed to cover

The investigation will comprise a submission which includes evidence of the managerial, operational and mechanisation data for two business enterprises, one of which must be an arable crop and one a livestock enterprises. Topics should be provided on which to base the investigation, but reference should be made to environmental impact of the major business practices. Where candidates choose a live, working business enterprise to investigate, they should be guided to select those that allow them to generate the required evidence, in particular data sources. The submission should require references to benchmarking standards where available, and require the presentation of supporting information may such as financial statements, livestock and crop records and background information on the farm's products and markets.

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates (cont)

Suitable working farms or investigation brief details should have one or more of the following characteristics:

♦   a range of enterprises from which to select the appropriate types
♦   managerial and operational activities which include careful recording of detail which can be made available to candidates
♦   may be participants in accredited quality assurance schemes

The format of the submission of findings should meet the following requirements to reflect the industry standard for reporting back methods.

1   Candidates will be provided with an outline of the key elements of the two enterprises under investigation.
2   The submission should be clearly structured and demonstrate a conventional referencing method.
3   Include a summary.
4   The investigation must cover relevant data, evaluation and conclusions.
5   The submission should be between 2,000–2,500 words or equivalent.

Guidance on grading candidates

Candidates who meet the minimum Evidence Requirements will have their achievement graded as C — competent, or A — highly competent or B somewhere between A and C. The grade related criteria to be used to judge candidate performance for this Graded Unit is specified in the following table.

Grade A	Grade C
Is a seamless, coherent piece of work which:	Is a co-ordinated piece of work which:
♦ demonstrates continuity and clear links across the three stages of the investigation	♦ contains sufficient evidence to demonstrate continuity and links across each of the three stages of the investigation
♦ clearly identifies the key objectives throughout the investigation	♦ meets the objectives of the investigation
♦ clearly presents relevant information, demonstrating numeracy skills and ability to present graphical information	♦ presents relevant information, with evidence of numeracy skills and ability to present graphical information
♦ carefully records information from a variety of sources to provide strong and valid reasons to support conclusions	♦ records information from a range of sources with support reasons given
♦ accurately uses relevant concepts from the HNC in Agriculture and refers to environmental impacts of business practices	♦ makes reference to concepts and topics from HNC Agriculture, and environmental impact
♦ is well-structured and uses language to convey complex accurate and technical content	♦ is structured to conform to standards using language which is adequate in terms of accuracy and technical content at this level
♦ includes a careful and considered reflection on the investigation which informs realistic recommendations	♦ reflects a range of realistic recommendations for the future
♦ is based on well-chosen, appropriate methodology	♦ uses a suitable methodology and conventional data methods of gathering data with consideration of relationships
♦ clearly identifies all elements of good practice on the study farm	♦ identifies some elements of good practice on the study farm
♦ accurately compares information recorded with published benchmark standards	♦ provides a comparison of recorded information with published benchmark standards
♦ provides practicable, relevant suggestions for improvements on the study farm	♦ provides a range of suggestions for improvements on the study farm, which may have practical relevance
♦ provides well thought-out, logical and justified conclusions	♦ provides some justification of points made, with reasons
♦ provides a summary which clearly and concisely summarises the aims and findings of the investigation	♦ provides a summary which is limited in scope of reporting the aims and findings of the investigation

The project will be marked out of 100. Assessors will mark each stage of the project, taking into account the criteria outlined. The marks will then be aggregated to arrive at an overall mark for the project. Assessors will then assign an overall grade to the candidate for this Graded Unit based on the following grade boundaries.

A = 70% — 100%
B = 60% — 69%
C = 50% — 59%

Note: the candidate must achieve all of the minimum evidence specified below for each stage of the project in order to achieve the Graded Unit.

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates (cont)

Evidence Requirements

The project consists of three stages: planning; developing; and evaluating. The following table specifies the minimum evidence required to pass each stage.

Note: The candidate must achieve **all of the minimum evidence** specified below for each stage of the project in order to pass the Graded Unit.

The following percentage marks are allocated to each stage of the project: 15% to the planning stage, 75% to the developing stage and 10% to the evaluation stage.

Project stage	Minimum Evidence Requirements
Stage 1 — Planning 15% of total marks	**Evidence of Planning** *An Action Plan* that includes: ♦ the aims of the assessment task including description of the farm, data to be evaluated eg sources of information, how to record and present the data (which could be livestock type, numbers, crops and treatments, benchmarking data, use of machinery) ♦ planning milestones ♦ the reasons for data collation and interrogation ♦ identification of the main issues that affect the enterprises, including environmental impact assessment ♦ identification of the methods of recording and sources of data to be used *The candidate must achieve all of the minimum evidence specified above in order to pass the Planning stage.*
Stage 2 — Developing 75% of total marks	**Evidence of Developing** *An Investigation Report*, including evidence of: ♦ collection and collation of data ♦ interpretation/analysis of data, including evidence of numeracy and presentation of graphical information ♦ identification of key management decision stages ♦ summary of the findings and conclusions drawn (could be best practice or room for improvement) The submission should also include: ♦ contents ♦ summary and conclusions ♦ acknowledgements of sources and references ♦ an executive summary *The candidate must achieve all of the minimum evidence specified above in order to pass the Developing stage.*

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates (cont)

Project stage	Minimum Evidence Requirements
Stage 3 — Evaluating 10% of total marks	**Evidence of Evaluating** *An Evaluation Report*, which should: ♦ briefly outline the investigation ♦ review and update the Action Plan in light of experience ♦ summarise any unforeseen events and how they were handled ♦ identify any knowledge and skills that have been gained and/or developed ♦ assess the strengths and weaknesses of the main body of the investigation report ♦ reflection on extent the investigation covered the aims and objectives of the investigation *The candidate must achieve all of the minimum evidence specified above in order to pass the Evaluating stage.*

Higher National Graded Unit specification: instructions for designing the assessment task and assessing candidates (cont)

Support notes

Where access to live, agricultural enterprises is possible, it is suggested that this project is run throughout the academic year, to give the candidates the opportunity to follow the progress of relevant enterprises on a farm over a significant proportion of the year. It is suggested that in order to carry out this investigation, candidates visit such an enterprise five times during the course of the academic year. The farm could be selected by the Unit Tutor and the candidate encouraged to plan and organise visits to coincide with key timings during the farming year (eg seedbed preparation, sowing of cereals, fertilising of crops or grass, lambing, calving, autumn housing, spring turnout). These should be included as milestones within the submission details. Where a case study is used to supplement details, centres should ensure that the case study contains sufficient information to enable the candidate to undertake all assessment tasks and generate the required evidence types.

As candidates are required to follow one arable crop and one livestock enterprise on the selected farm, examples of enterprises for the purpose of this Unit could include: dairy cattle, replacement heifers, suckler beef, sheep, cereals or other arable crops, silage grass and grazing. Records could be kept by candidates to reflect those kept by the well-organised, professional farmer, typically in relation to quality assurance schemes, such as stock numbers, weights, fertiliser and chemical treatments, varieties used etc.

Candidates could record the range of routine tasks carried out over the study period, to include the use of mechanisation (machinery tasks). Candidates could identify good practice on the study farm and compare the performance of that farm with published benchmark standards (such as from the SAC Farm Management Handbook) and suggest valid and practicable improvements. Candidates could report on the whole production cycle for the chosen enterprises, utilising retrospective data from the study farm or from the case study used. There should be some environmental impact assessment in the submission.

The project is divided into three distinct stages, and these will form the basis of an Action Plan (including the format of records to be kept), a developing stage (including data interrogation) culminating in a submission which details findings and recommendations and an evaluation stage which is a self-assessment indicating strengths and weaknesses of the Action Plan and management of the investigation.

The submission should be appropriately structured, presented and referenced.

Equality and inclusion

This graded unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. For information on these, please refer to the SQA document *Guidance on Assessment Arrangements for Equality and inclusion*, which is available on SQA's website: **www.sqa.org.uk**.

General information for candidates

The Graded Unit for HNC Agriculture is an investigation. When you undertake this Unit, you will utilise the knowledge and skills gained from the mandatory Units in this HNC Agriculture award. You may have the opportunity to visit study farms and record data for two enterprises, one arable crop and one livestock enterprise. You will collect data and manipulate data that represents the whole production cycle for both of the chosen enterprises; some of this data could be collected 'live', for example cattle weights and cereal growth stages, while other data collected will be retrospective.

The collected data will be consistent with that type of information that is typically recorded by farmers who comply with recognised quality assurance schemes. Findings may be compared with published benchmarks (such as those in the SAC Farm Management Handbook) and you will identify good practice within your selected enterprises. You will suggest improvements that can be made to these enterprises.

The investigation has three distinct phased — planning, developing and evaluating.

You will be required to produce an Action Plan indicating the types of information that you will need to collect, along with timescales for production of the submission that you will produce to describe your findings.

You will produce a submission of 2,000 and 2,500 words or equivalent for the two enterprises, which presents the data that you have collected, your findings, an environmental impact assessment and conclusions. The undertaking of the investigation and the resulting submission will provide opportunities to develop the Core Skills of *Communication*, *Numeracy*, *Problem Solving* and *Working with Others* all at SCQF level 6 although there is no automatic certification of Core Skills and Core Skills components.