



Higher National Graded Unit Specification

General information for centres

This Graded Unit has been validated as part of the Allied Health Professions HNC. 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: Allied Health Professions: Diagnostic Imaging: Graded Unit 1

Graded Unit Code: FA29 34

Type of Graded Unit: Research Project

Assessment Instrument: Project Based

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 Access 1 to Doctorates.*

Purpose: This Graded Unit is designed to provide evidence that the candidate has achieved the principal aims of the Allied Health Professions HNC. The Practical Assignment should be relevant and contextualised to the particular Allied Health Profession which the candidate is working in. The principal aims are as follows:

- ◆ To improve the quality of patient care and patient experience
- ◆ To provide a basis for future career and personal development
- ◆ To build on previously acquired transferable skills
- ◆ To support employment as an Assistant Practitioner in a radiology department
- ◆ To understand the specific legislation that impacts on Allied Health Professions
- ◆ To provide a qualification which supplies and accredits the knowledge and skills required for the role of Allied Health Support Worker/Assistant Practitioner
- ◆ To understand the role, responsibilities and values expected of an Allied Health Support Worker/Assistant Practitioner
- ◆ To obtain the underpinning knowledge and skills to pursue a career as an Allied Health Assistant Practitioner in Radiography

Diagnostic Imaging and Radiotherapy

- ◆ Provide a recognised qualification to support future registration of 'Assistant Practitioners' by the Society and College of Radiographers.

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:

- ◆ DR3T 34: *Psychology and Sociology in Health Care*
- ◆ DR3N 34: *Health Care Policy*
- ◆ DR3P 34: *Physiology for Health Care Professionals*
- ◆ DR3R 34: *Positive Health Care for Individuals*
- ◆ DP5A 34: *Communication: Writing Skills*
- ◆ DW99 34: *Patient Care in Radiography*
- ◆ DW96 34: *General Radiographic Anatomy*

Core Skills: There are opportunities to develop the Core Skills of *Problem Solving* (SCQF level 5), *Working with Others* (SCQF level 5), *Numeracy* (SCQF level 5), *Information and Communication Technology* (SCQF level 4) and *Communication* (SCQF level 6) in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

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

Administrative Information

Graded Unit Code: FA29 34

Graded Unit Title: Allied Health Professions: Diagnostic Imaging:
Graded Unit 1

Original date of publication: June 2010

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History of Changes:

Version	Description of change	Date

Source: SQA

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

Graded Unit Title: Allied Health Professions: Diagnostic Imaging: Graded Unit 1

Conditions of Assessment

The candidate should be given a date for completion of the Project. 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. The assessment task should be marked as soon as possible after the completion date. The final grading given should reflect the quality of the candidate's evidence at the time of the completion date. The evidence for the project is generated over a defined period of time and involves three distinct stages, where each stage has to be achieved before the next is undertaken. Thus any reassessment of stages must be undertaken before proceeding to the next stage.

If a candidate fails the project overall or wishes to upgrade, then this should be based on a significantly different assessment task ie all stages are undertaken using a new topic. In this case, a candidate's grade will be based on the achievement in the re-assessment, if this results in a higher grade.

At this level, candidates should work independently. It is up to Centres to take reasonable steps to ensure that the project is the work of the candidate. For example, Centres may wish to informally question candidates at various stages on their knowledge and understanding of the project on which they have embarked. Centres should ensure that where research etc, is carried out in other establishments or under the supervision of others that the candidate does not receive undue assistance.

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
- ◆ if necessary or appropriate to the project obtain patient's permission prior to undertaking the project
- ◆ plan and organise work and carry it through to completion
- ◆ carry out research in terms of patients health with clear reference to human anatomy and physiology research
- ◆ 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

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

Candidates must:

- ◆ Interpret the brief
- ◆ Gather information to clarify the brief
- ◆ Decide on the topic to research
- ◆ Carry out the project
- ◆ Evaluate the project

The project brief samples across the following Outcomes:

Unit title	Outcomes
DR3R 34: Positive Health Care for Individuals	<ul style="list-style-type: none"> ◆ Explain how health care values and principles influence practice. ◆ Understand and apply the care planning process. ◆ Investigate and explain how to establish and maintain a positive health care environment for the individual.
DR3T 34: Psychology and Sociology in Health Care	<ul style="list-style-type: none"> ◆ Explain psychological theories of individual development and discuss how these can be used to understand the health of an individual today. ◆ Explain sociological theories and demonstrate the relationship between social factors and health.
DR3N 34: Health Care Policy	<ul style="list-style-type: none"> ◆ Identify the role of health care professions in providing opportunities for individuals to achieve optimum health and recognise the importance of collaboration between care professions. ◆ Describe the ways in which government policies and legislation can influence an individual's care needs.
DR3P 34: Physiology for Health Care Professionals	<ul style="list-style-type: none"> ◆ Explain the central role of water and its related system in the normal functioning of the body. ◆ Describe the mechanisms involved in regulating, controlling and protecting the normal healthy body. ◆ Identify how selected body systems provide the energy required to maintain a healthy body. ◆ Examine the principles of muscle and skeletal physiology applied to body movement.

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

Unit title	Outcomes
DP5A 34: Communication: Writing Skills	<ul style="list-style-type: none"> ◆ Select and evaluate complex information from a range of sources. ◆ Produce written information on a complex vocational issue.
DW99 34: Patient care in Radiography	<ul style="list-style-type: none"> ◆ Describe the clinical quality assurances procedures used within a Radiology department ◆ Describe the common patient care requirements of a Radiology department
DW96: 34 General Radiographic Anatomy	<ul style="list-style-type: none"> ◆ Describe the gross anatomy of the human body ◆ Describe common pathologies of the main body systems ◆ Identify normal and abnormal radiographic appearances of human anatomy

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

Project Brief: Practical Assignment

This assignment relates to working within an Allied Health Profession providing care for individuals/patients/clients and any significant others. The candidate must select an appropriate topic in discussion with their course tutor and supervisor, which might include:

- ◆ a research activity on a condition/disease of a patient/client group within their scope of practice eg osteoporosis, rheumatoid arthritis, MRSA, cerebral palsy, Parkinson's disease, autism, stroke/Cerebral Vascular Accident (CVA), etc.
- ◆ a health promoting activity with a patient/client group/community/population
- ◆ the relationship between the patient and society.

Candidates should demonstrate their interpersonal, creative, organisational and management skills to help assess their overall insight and understanding of the activity.

Stage 1 — planning

Select a topic which is relevant to your working role.

1 Analyse current developmental and physical needs.

With reference to:

- ◆ influences on the psychological development of the patient/client group
- ◆ key life experiences that may have affected development and behaviour
- ◆ the relationship between the patient and society
- ◆ use of relevant psychological theory
- ◆ the relationship between the patient/client's physical needs and current diagnosis and/or treatment

2 Apply the planning process to a research activity.

With reference to:

- ◆ health care methods promoting a positive care environment
- ◆ the legislative framework designed to protect the patient/client
- ◆ the legislation and policies that promote the rights and responsibilities of patients/clients
- ◆ quality assurance and radiation management.

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

Stage 2 — developing

1 Produce a written report on the selected topic.

With reference to:

- ◆ the Allied Health Support Worker/Assistant Practitioner's role in relation to the protection of patients/clients
- ◆ respect for the beliefs and preferences of the patient receiving care
- ◆ promoting independence taking into consideration the patients health needs
- ◆ patient involvement in own care and role of appropriate Allied Health Support Worker/Assistant Practitioners

Stage 3 — evaluating

1 Evaluate and Review the activity.

With reference to:

- ◆ reflection on own practice
- ◆ effectiveness of the original plan
- ◆ Extent to which aims and objectives have been met
- ◆ Own strengths and weaknesses

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.

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

Grade A	Grade C
<p>Is a seamless, coherent piece of work which:</p> <ul style="list-style-type: none"> ◆ produces evidence for the three essential phases of the project that is produced to a high standard, and clearly interrelated ◆ demonstrates an accurate and insightful interpretation of the project brief ◆ is highly focused and relevant to the tasks associated with the project brief ◆ provides the initial project timetable containing a comprehensive list of project activities and timings ◆ is clear and well structured throughout with language of a high standard in terms of level, accuracy and technical content used ◆ effectively consolidates and integrates required knowledge and skills ◆ identifies clear and full details of the new knowledge and skills she/he has developed as a result of doing the project such as keeping deadlines, researching expert sources ◆ the candidate undertakes the project with the minimum of supervision ◆ the candidate demonstrates a high level of self motivation throughout the project ◆ the candidate undertakes additional research well beyond that demanded by the project 	<p>Is a co-ordinated piece of work which:</p> <ul style="list-style-type: none"> ◆ has sufficient evidence of the three essential phases of the project that, is produced to an adequate standard ◆ demonstrates an acceptable interpretation of the project brief ◆ is focussed and relevant to the tasks associated with the project brief ◆ provides the initial project timetable containing all essential project activities and timings ◆ is satisfactorily structured with adequate language in terms of level, accuracy and technical content used ◆ consolidates and integrates and skills but this may lack some continuity and consistency ◆ provides at least three examples of new knowledge and skills she/he has developed as a result of doing the project ◆ the candidate undertakes the project with necessary interventions from the project supervisor to ensure the project remains on track ◆ the candidate demonstrates an acceptable level of motivation ◆ none

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%

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

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.

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.

Candidates failing to achieve any of the minimum Evidence Requirements for all three sections should be offered one chance to re-submit the outstanding evidence. Re-submitted work should be awarded marks using a scale based on 50% of the original marks available.

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

Project Stage	Minimum Evidence Requirements
Stage 1 — Planning 20% of total marks	Produce an action plan which includes: <ul style="list-style-type: none"> ◆ the aims and objectives of the project ◆ timescales for achieving these aims and objectives ◆ the rationale for selecting the topic to be researched if choice has been allowed ◆ identification of the main issues for research ◆ identification of the methods of research and sources to be used <p><i>The candidate must achieve all of the minimum evidence specified above in order to pass the Planning stage.</i></p>

Support Notes

It is also recommended that candidates fulfil the following criteria:

- ◆ First interview with tutor/facilitator close to commencement of project. Candidates should, where appropriate, have permission from any patients or significant others at this stage.
- ◆ Second interview with tutor/facilitator to discuss assessment of needs and examine first draft of the plan including evidence of materials and methods. Further interviews at the discretion of the tutor/facilitator.
- ◆ Submission and presentation completion date is established and adhered to.

It is suggested that the plan should be approximately 1,000 words or equivalent; the report 2,000–3,000 words or equivalent and the evaluation 750–1,000 words or equivalent.

Additional Guidance on Grading

Below is a suggested marking scheme for each stage of this project which has been provided for guidance only and is not mandatory; centres may prefer to devise their own schemes. The guidance on the grading table should also be consulted when identifying an overall grade for candidates.

Grading checklist

Stage 1: Planning — the action plan

A candidate may be awarded less than the mark allocation for a grade C in appropriate circumstances

Evidence Requirements	Maximum mark	Mark Grade C	Mark awarded
1.1 The aims and objectives of the Project (a) Research (b) Development (c) Evaluation	2 2 2	1 1 1	
1.2 Timescales for achieving these aims and objectives	2	1	
1.3 The evidence is a concise structured plan (maximum 1000 words)	2	1	
1.4 Identification of the main issues for research	5	3	
1.5 Identify and describe the methods of research and sources to be used	5	2	
Total:	20	10	

Comments

Assessor's Signature Date

Note: In the event that the assessor forms the view that the work finally submitted by you for the planning stage is so weak as to prevent you progressing to the next stage, you may receive additional assistance (over and above the norm). In this event, the assessor will record this fact and you may receive *no more than half (10 of the available marks for this stage)*.

Centres may provide additional comments in support of their grading decisions.

Evidence Requirements	Maximum mark	Mark Grade C	Mark awarded
(a) Collection and collation of information/data	22	11	
(i) Uses different resource types (1 mark per type)	3		
(ii) Uses at least six different resources (½ mark per resource)	3		
(iii) Applies course knowledge and skills from any four course Units (at least one professional Unit)	4		
(iv) Gathers appropriate evidence — text contains 10 relevant pieces of information/data (1 mark per piece)	10		
(v) Develops a coherent line of thought	2		
(b) Patient experience	14	7	
(i) Contains accurate details of patient pathway through from presentation, diagnosis, treatment, radiation protection and quality assurance	6		
(ii) Psychological and sociological implications of the condition/disease	4		
(iii) Anatomy and physiology of the condition/disease	4		
(c) Analysis and conclusions drawn from the findings of the research	10	5	
(i) Interpretation/analysis of relevant pieces of information/data (1 mark per piece)	4		
(ii) Summary of conclusions drawn from the findings of the research	4		
(iii) Applies problem solving techniques	2		
2.4 A contents page	1	1	
2.5 A list of acknowledgements of sources and references within the report	4	2	
1.6 Clear, well structured with high levels of language in terms of level, accuracy and technical content	4	2	
1.7 Knowledge and skills effectively integrated and consolidated	2	1	
1.8 Works with little supervision and high level of motivation	2	1	
1.9 Additional research well above that required by the project	1		
Total:	60	30	

Comments

Assessor's Signature **Date**

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

Stage 3: Evaluation — The Evaluation Report

A candidate may be awarded less than the mark allocation for a grade C in appropriate circumstances

Evidence Requirements	Maximum mark	Mark grade C	Mark awarded
1.1 Brief summary of the investigation (investigation remit, research methods and resources used)	3	1	
1.2 The extent to which the investigation covers the topic and is evaluated and justified	3	2	
1.3 Evaluation and justification of the extent to which the aims and objectives of the action plan have been covered	3	1	
1.4 Assessment of the effectiveness of the research methods	4	2	
1.5 Assessment of the strengths and weaknesses of the investigation report	2	1	
1.6 Summary of any difficulties encountered and how they have been overcome	2	1	
1.7 Identification of knowledge and skills which have been gained and/or developed	3	2	
Total:	20	10	

Support Notes

It is also recommended that candidates fulfil the following criteria:

- ◆ First interview with tutor/facilitator close to commencement of project. Candidates should, where appropriate, have permission from the patient or significant others at this stage.
- ◆ Second interview with tutor/facilitator to discuss assessment of needs and examine first draft of plan including evidence of materials and methods. Further interviews at the discretion of the tutor/facilitator.
- ◆ Submission and presentation completion date is established and adhered to.

It is suggested that the plan should be approximately 1,000 words or equivalent; the report 2,000 to 3,000 words or equivalent and the evaluation 750–1,000 words or equivalent.

Additional Guidance on Grading

Below is a suggested marking scheme for each stage of this project which has been provided for guidance only and is not mandatory; centres may prefer to devise their own schemes. The guidance on the grading table should also be consulted when identifying an overall grade for candidates.

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

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website

www.sqa.org.uk/assessmentarrangements

General information for candidates

Graded Unit Title: Allied Health Professions: Diagnostic Imaging: Graded Unit 1

This guide is designed to provide you with information on the assessment of the HN Allied Health Professions: Diagnostic Imaging: Graded Unit 1

This Unit is project based and is assessed by an investigation that you will carry out using a variety of research methods, and tools, and your report of that investigation. The research topic will be your choice with advice from your tutor. This will enable you to find out more about an area of radiography or a disease or disorder that particularly interests you and may reflect some developing fields in radiography or an interest in your employment.

The project will be marked out of 100. To pass the Graded Unit you must achieve 50% of the total marks and all minimum Evidence Requirements for each of the three sections.

- ◆ If you achieve an overall percentage of between 50–59 for the Unit you will be awarded a C grade
- ◆ If you achieve an overall percentage of between 60–69 for the Unit you will be awarded a B grade
- ◆ If you achieve an overall percentage of between 70 % and over for the Unit you will be awarded a A grade

Choosing your topic of investigation

- (a) It is important that your investigation should cover a topic that is related to the units that you are studying in your HNC and in particular to:
- ◆ DR3R 34: *Positive Health Care for Individuals*
 - ◆ DR3T 34: *Psychology and Sociology in Health Care*
 - ◆ DR3N 34: *Health Care Policy*
 - ◆ DR3P 34: *Physiology for Health Care Professionals*
 - ◆ DP5A 34: *Communication: Writing Skills*
 - ◆ DW99 34: *Patient care in Radiography*
 - ◆ DW96 34: *General Radiographic Anatomy*
- (b) Group work and joint investigations are not permitted
- (c) You must have regular discussions with your tutor throughout all three stages of the Graded Unit
- (d) It is essential that you maintain patient confidentiality at all times
- (e) Your investigation will involve
- (f) Planning to produce an action plan
- (g) The collection and analysis of information from a variety of sources using a variety of research methods to produce an investigation report
- (h) Reviewing how effective the investigation and the Outcomes were and writing an evaluation
- (i) You can select any topic provided the content is at an appropriate level of demand
- (j) In consultation with your tutor, try to select a topic in which you are genuinely interested
- (k) Do not be over ambitious. Simple investigations completed in the time available are likely to be the most successful

General information for candidates (cont)

- (l) Consider the limitations that might confront you with regard to access to research tools and patient information
- (m) While projects may sometimes argue a case or promote a particular opinion, they are more often likely to be reviews of situations, descriptive accounts, pieces of research, drawing together material from different sources to present a coherent and well supported over-view

Maintaining a record of your investigation in Diagnostic Imaging

You should maintain a record of work on your investigation. This record should include

- ◆ Regular entries during the investigation
- ◆ Notes and comments on ideas that are rejected
- ◆ Notes and comments on planning and design of your investigation
- ◆ Notes/comments on selection of research methods
- ◆ Sources of all information used so that you or anyone else could easily check on their accuracy
- ◆ Contributions made by other individuals — for example: information gained from a mentor, superintendent radiographer, radiologist or other specialist doctor at your hospital

Clear Note taking is vital

During the time between you receiving the assessment task instructions and the completion date, you may ask your tutor questions, to provide clarity, guidance and some assistance.

Remediation

Any section which does not reach the minimum requirements will require remediation and then only half marks can be awarded

Submission dates

It is vital that the agreed submission dates are met and the plan, report and evaluation is marked in the condition it is at the agreed submission date.

It is essential that you maintain a professional level of patient/client confidentiality at all times.

You will find useful information to help you with this Unit at the following websites/professional journals:

www.sor.org (Society and College of Radiographers)
www.BIR.ac.uk (British Institute of Radiology)

Synergy
Radiography
Journal of Radiotherapy in Practice
Clinical Oncology
Clinical Radiology