

## Higher National Graded Unit specification



### General information for centres

This Graded Unit has been validated as part of the HND Applied Sports Science. 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:** Applied Sports Science: Graded Unit 2

**Graded Unit code:** F5GL 35

**Type of Graded Unit:** Project

**Assessment Instrument:** Practical Assignment

**Credit points and level:** 2 HN credits at SCQF level 8: (16 SCQF credit points at SCQF level 8\*)

*\*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 following principal aims of the Applied Sports Science:

- ◆ develop and apply an open minded, critical and evaluative perspective
- ◆ provide more advanced practical and theoretical knowledge which will enable the candidate to work with clients in a range of sports science settings with minimum guidance and support
- ◆ build on previously acquired transferable skills and further develop the transferable competences identified in the HNC Fitness Health and Exercise award
- ◆ meet the demand from industry in which Core Skills are supplemented by more specialist competences identified relating to applied functions within the health and fitness industry
- ◆ offer the opportunity for progression within the SCQF to undergraduate degree level study
- ◆ develop key skills for employability by providing the competences required by many other types of employers across the range of employment situations, including full-time, part-time or freelance work
- ◆ develop study and research skills which will allow candidates to more successfully perform on HE courses
- ◆ prepare candidates for entry to a range of positions in sports clubs, local authority sports facilities or self employment as sport support personnel on the national and international fronts

## 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:

- ◆ Applied Sports Science: Physiological Responses to Exercise
- ◆ Applied Sports Science: Psychological Skills Training
- ◆ Applied Sports Science: Nutrition for Sport
- ◆ Applied Sports Science: Strength and Conditioning
- ◆ Applied Sports Science: Biomechanical Skills Training
- ◆ Applied Sports Science: Measurement of Fitness
- ◆ DW69 34 - Fitness, Health and Exercise: Graded Unit 1

**Core Skills:** There are opportunities to develop the Core Skill of *Problem Solving* 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 Practical Assignment. The developed Practical Assignment 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:** F5GL 35

**Graded Unit title:** Applied Sports Science: Graded Unit 2

**Original date of publication:** August 2008

**Version:** 01

### 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 (cont)**

**Graded Unit title:** Applied Sports Science: Graded Unit 2

### **Conditions of assessment**

The candidate should be given a date for completion of the Practical Assignment. 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 time and involves three distinct stages, where each stage has to be achieved before the next is undertaken. Thus any re-assessment of stages must be undertaken before proceeding to the next stage.

If a candidate fails the project overall or wishes to upgrade, then this must be done using a *substantially different* project, ie all stages are undertaken using a new project, assignment, case study, etc. In this case, a candidate's grade will be based on the achievement in the re-assessment, if this results in a higher grade.

### **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 assessment task must require the candidate to work with a group of clients (a maximum of four individuals in the group) to plan, implement and then evaluate a Sports Science Support Plan. The task must allow the candidate to cover the four key areas of Physiology, Nutrition, Biomechanics and Psychology in the plan.

The group of clients should be exercise performers at either beginner or intermediate level with whom the candidate should meet to discuss requirements in the four key areas.

The task should permit the candidate to produce the Support Plan which includes setting mutually agreed objectives and which address' all of the support requirements for the group in the key areas.

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

The task should require the candidate to select two key areas which are best to implement with the group. This should include meetings with the group of clients to discuss progress and evaluation of the plan, and permit the candidate to address any issues which arise and agree any adjustments to the plan. Log books should be kept for this purpose and revised in line with any changes. This process should be carried out over a period of at least six weeks with a minimum of six meetings over the monitoring period.

It should also require that the candidate revisits the four key areas suggesting where improvements could have been made and where other key areas might have been developed.

### 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
<p>Is a seamless, coherent piece of work which:</p> <ul style="list-style-type: none"> <li>◆ greatly exceeds all minimum Evidence Requirements</li> <li>◆ has sufficient evidence for the three essential phases of the project which are quite clearly inter-related</li> <li>◆ effectively consolidates and integrates required knowledge and skills showing continuity and consistency</li> </ul>	<p>Is a co-ordinated piece of work which:</p> <ul style="list-style-type: none"> <li>◆ meets all minimum Evidence Requirements</li> <li>◆ has sufficient evidence of the three essential phases of the project but not quite clearly interrelated</li> <li>◆ consolidates and integrates knowledge and skills but this may lack some continuity and consistency</li> </ul>
<ul style="list-style-type: none"> <li>◆ meets the initial assignment in arriving at the support plan followed and showing continuous re-evaluation of the support plan</li> </ul>	<ul style="list-style-type: none"> <li>◆ meets the initial assignment in arriving at the support plan followed and showing limited re-evaluation of the support plan.</li> </ul>
<ul style="list-style-type: none"> <li>◆ identifies and evidences two key areas for implementation showing justification for selection and non-selection in the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>◆ identifies and evidences two key areas for implementation with justification for selection in the evaluation process</li> </ul>
<ul style="list-style-type: none"> <li>◆ suggests more than one improvement to the plan following evaluation of key areas not developed and provides rational justification for the improvements</li> </ul>	<ul style="list-style-type: none"> <li>◆ suggests at least one improvement to the plan following evaluation of key areas not developed and provides rational justification for the improvement</li> </ul>
<ul style="list-style-type: none"> <li>◆ demonstrates independence of thought by successfully completing the stages of the project with infrequent and minimal tutor support</li> </ul>	<ul style="list-style-type: none"> <li>◆ requires tutor intervention to keep the investigation on track</li> </ul>
<ul style="list-style-type: none"> <li>◆ provides evidence which uses language which is technically accurate in terms of language used in the Applied Sports Science field</li> </ul>	<ul style="list-style-type: none"> <li>◆ provides evidence which uses acceptable language</li> </ul>

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

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.

Project stage	Minimum Evidence Requirements
Stage 1 — Planning  20%	<p><i>A Sports Science Support Plan</i> that includes:</p> <ul style="list-style-type: none"> <li>◆ the candidate’s interpretation of the brief</li> <li>◆ information gathered to clarify the brief</li> <li>◆ aims of the Sport Science Support Plan</li> <li>◆ identification of information sources to be used including current national governing bodies and current professional publications</li> <li>◆ identification of materials and resources required and how they will be accessed including facilities for performing the activities and equipment to be utilised in the testing processes</li> <li>◆ the requirements of the client group in the key areas of Physiology, Nutrition, Biomechanics and Psychology</li> <li>◆ objectives agreed between the candidate and client group</li> <li>◆ identification of the stages involved and the timescales for completion of each stage</li> </ul> <p><i>The candidate must achieve all of the minimum evidence specified above in order to pass the Planning stage.</i></p>
Stage 2 — Developing  60%	<p>A portfolio of evidence that includes:</p> <ul style="list-style-type: none"> <li>◆ evaluation and identification of the two key areas which are best to implement with the group</li> <li>◆ implementation of the plan to meet the objectives</li> <li>◆ select materials/resources including:               <ul style="list-style-type: none"> <li>— manage materials/resources</li> <li>— records of meetings showing evaluation of any issues and/or changes to objectives or plan</li> <li>— monitoring and measuring the activity or performance</li> </ul> </li> </ul> <p><i>The candidate must achieve all of the minimum evidence specified above in order to pass the Developing stage.</i></p>

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

<p>Stage 3 — Evaluating</p> <p>20%</p>	<p><b>Evaluation Report</b>, which should:</p> <ul style="list-style-type: none"> <li>◆ briefly outline the assignment</li> <li>◆ review and update the implementation stage giving two strengths and weakness?</li> <li>◆ summarise any unforeseen events and how they were handled</li> <li>◆ identify any knowledge and skills which have been gained and/or developed</li> <li>◆ assess the strengths and weaknesses of the output of the practical assignment</li> <li>◆ determine to what extent the assignment met the original brief</li> </ul> <p><i>The candidate must achieve all of the minimum evidence specified above in order to pass the Evaluating stage.</i></p>
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### Support notes

As this is a 2 credit Graded Unit there is the opportunity for the candidate to develop their own style in working with an individual or small group.

To allow as much time as possible for meetings between the candidate and participants it would be useful to deliver the Graded Unit over a longer period of time rather than trying to compress it into a shorter number of weeks.

During the planning stage time will be spent, by the candidate, selecting an individual or group to work with. This group should be selected so that they will be able to benefit and improve from the support that the candidate will be able to provide. Selecting an area that is of interest to the candidate may allow an easier transition to providing support. When the initial meeting has been held with the volunteer/s and their participation has been confirmed the candidate can then go about organising methods of sports science support based around the initial meetings.

All four areas of sports science should be considered during the planning stage (physiology, psychology, nutrition and biomechanics) and so the option of support in all of these areas should be given to the participants. This dialogue would again form part of the initial meetings.

It may be useful for the candidate to prepare ideas on the types of support that they would be able to deliver to the participants before the initial meetings. This way the candidate can explain to the participants exactly what would happen in each area and hopefully what benefit it would be to them. The link between what the participants have expressed an interest in and what the candidate actually delivers during support is vital. The candidate should be able to tailor support to the needs of the participant in order to work towards their objectives.

As mentioned within the Unit specification it is likely that only two areas of sports science are taken through and developed throughout the Graded Unit however all four should be taken into account in planning and evaluation stages.



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

By only having to concentrate, in the developing stage, on two areas of sports science the candidate will be able to focus on areas that they have a particular interest in and that would be useful to the participants. At the same time all areas that have been covered in other Units throughout the course will come into play during the planning stage where the full range of options should be laid out for the participant to choose from.

During the developing stage records of meetings will allow the assessor to monitor progress throughout the sports science support.

The assessor should offer guidance and support but it is the task of the candidate to design the support programme based on the information collected from the participants.

When one of the areas of sports science is covered in some detail within the support it may be the case that a few weeks of delivery/meetings takes place to allow the participant to benefit from the input. It is conceivable that some of the support provided by the candidate would include plans for the participant to work on individually for a few weeks to allow visible progression by the time the next scheduled meeting takes place. This may for example be the case with physical training.

Continual feedback from the participants will allow the candidate to adjust the support programme accordingly.

If the situation arises that a participant is interested in gaining support in all four areas mentioned above then the candidate may feel that their time is best spent (for one or two of the areas) by creating information packs and/or worksheets for the participants to work through in their own time so that it can be reviewed at a later meeting. Dealing with nutrition in this way can be particularly productive as it may take a number of weeks to get a balanced view (through diaries) of what the participant is taking on board. This could then be analysed by the candidate and relevant advice and changes put in place.

By involving the participants in each part of the support programme the candidates will be able to get a clearer view of how to work with people in an industry setting.

This will be just as important during the evaluation stage as not only should quantitative methods for evaluating the success of the support programme be carried out but also qualitative.

Quantitative evaluation may include fitness tests, diet analysis, reanalysing biomechanics of a technique etc but the qualitative feedback from participants regarding all areas of support will be equally as valuable.

This information can then be used by the candidate to critically analyse all aspects of the support programme.

This analysis may allow the candidate to come to conclusions regarding what went positively/negatively and what could have been done differently to allow the participant to benefit more greatly.

## **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](http://www.sqa.org.uk/assessmentarrangements)

## General information for candidates

The Graded Unit requires you to plan, develop and evaluate a sports science support programme with an individual or small group. You should try to select a group that would benefit from the support that you can provide them with in the areas of psychology, biomechanics, nutrition and physiology. Also when considering what sport or activity to provide support for think about where your experience lies and what types of activities you enjoy. If you are delivering support based around a sporting activity that you have experience of then you already have specific knowledge of the area and your participants are more likely to gain real improvements throughout your programme.

During the Graded Unit you should set aside as much time as possible for meetings between yourself and participants. These meetings with your participants should be recorded in some way to allow you to look back and analyse the best way to support your group.

When the initial meeting has been held with the volunteer/s and their participation has been confirmed then you can go about organising methods of sports science support based around the initial meetings. All four areas of sports science should be considered during the planning stage (physiology, psychology, nutrition and biomechanics) and so the option of support in all of these areas should be given to the participants. This dialogue would again form part of the initial meetings.

It may be useful for you to prepare ideas on the types of support that you would be able to deliver to the participants before the initial meetings. This way you can explain to the participants exactly what would happen in each area and hopefully what benefit it would be to them.

The link between what the participants have expressed an interest in and what you actually deliver during support is vital. You should be able to tailor support to the needs of the participant in order to work towards their objectives.

As mentioned within the Unit specification it is likely that only two areas of sports science are taken through and developed throughout the Graded Unit however all four should be taken into account in your planning and evaluation stages.

By only having to concentrate, in the developing stage, on two areas of sports science you will be able to focus on areas that you have a particular interest in and that would be useful to the participants. All areas that have been covered in other Units throughout your course will come into play during the planning stage where the full range of options should be laid out for the participant to choose from.

During the developing stage records of your meetings will allow your assessor to monitor progress that you are making with your participant throughout the sports science support.

Your assessor should offer guidance and support but it is your task to design the support programme based on the information collected from the participants.

When one of the areas of sports science is covered in some detail within your support programme it may be the case that a few weeks of delivery/meetings takes place to allow the participant to benefit from the input.

It is conceivable that some of the support provided by you would include plans for the participant to work individually for a few weeks to allow visible progression by the time the next scheduled meeting takes place. This may for example be the case with physical training.

## **General information for candidates (cont)**

Continual feedback from the participants will allow you to adjust the support programme accordingly. If the situation arises that a participant is interested in gaining support in all four areas mentioned above then you may feel that your time is best spent (for one or two of the areas) by creating information packs and/or worksheets for the participants to work through in their own time so that it can be reviewed at a later meeting. Dealing with nutrition in this way can be particularly productive as it may take a number of weeks to get a balanced view (through diaries) of what the participant is taking on board. This could then be analysed and relevant advice and changes put in place at the next meeting.

By involving the participants in each part of the support programme you will be able to get a clearer view of how to work with people in an industry setting.

This will be just as important during the evaluation stage as not only should quantitative methods for evaluating the success of the support programme be carried out but also qualitative.

Quantitative evaluation may include fitness tests, diet analysis, reanalysing biomechanics of a technique etc but the qualitative feedback from participants regarding all areas of support will be equally as valuable.

You can use this information to critically analyse all aspects of the support programme.

This analysis may allow you to come to conclusions regarding what went positively/negatively and what could have been done differently to allow the participant to benefit more greatly.