



NQ Verification 2017–18

Key Messages Round 1

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Section 1: Verification group information

Verification group name:	Physics
Verification event/visiting information	Event
Date published:	March 2018

National Courses/Units verified:

Unit code	Level	Unit title
H25A	National 3	Waves and Radiation
H256	National 4	Electricity and Energy
H258	National 4	Dynamics and Space
H25A	National 4	Waves and Radiation
H4KY	Higher	Our Dynamic Universe
H7XD	Advanced Higher	Rotational Motion and Astrophysics
H258	SCQF level 5	Dynamics and Space
H25A	SCQF level 5	Waves and Radiation

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Section 2: Comments on assessment

Assessment approaches

Centres should ensure that they are making use of the most recent unit assessment support packs (UASPs) and the appropriate evidence requirements. They should also follow the assessment advice supplied through the *Understanding the next steps for session 2016/17*, available on the subject specific SQA web pages. Where centres are using the new tests for outcome 2 or have adapted the existing UASPs, by adding additional calculation based questions so that marks can be allocated, it is essential that the Physics General Marking Principles are applied (https://www.sqa.org.uk/sqa/files_ccc/Physicsgeneralmarkingprinciples.pdf).

It is important that centres remember that evidence in support of outcome 1 is still required for a unit when complete evidence is submitted to the SQA for verification. Where evidence for outcome 1 is not submitted for verification, the centre must highlight that it is interim evidence for the unit.

Centres are reminded that for outcome 1 the topic selected should have a clear link to a key area of the course and that the structure of the report should be similar to that suggested in the UASP.

Centres should note that assessment standards 2.2 and 2.3 have been removed from National 3 and National 4, as they previously were for National 5, and therefore there is no requirement for candidates to be assessed on these standards.

Assessment judgements

Outcome 1 requires the candidates to demonstrate experimental/practical skills. This is usually completed through the use of a single experiment/practical investigation where candidates can be assessed for all assessment standards. If this does not allow the candidates to gain a pass in achieving five out of the six assessment standards then it is possible to reassess individual assessment standards. However, centres should note that evidence for individual assessment standards cannot be split across more than one activity or piece of evidence.

Some centres are using the evidence from the added value unit (AVU) to evidence the assessment standards in the other National 4 units. Centres should take care in doing so, as while the AVU is now marked holistically with marks and a pass-mark, the other units require the candidate to individually evidence a minimum number of assessment standards.

If centres are attempting to use evidence from the National 5 assignment task to evidence the assessment standards for the SCQF level 5 units, they must not violate the conditions of assessment for the assignment. This means that a centre could not make any assessment decisions on the evidence for outcome 1 until after the assignment report had been submitted. Centres are also reminded that the material generated in the assignment report will not evidence all of the assessment standards in the standalone units. Where centres have chosen to enter candidates for SCQF level 5 units as well as the National 5 course, they would be better assessing outcome 1 separately in order to avoid any possibility of malpractice.

It is important that a clear aim for the experiment/practical investigation is stated at the start to allow an effective conclusion to be made that is clearly connected to the aim.

To demonstrate the results clearly from the experimental stage, candidates should be encouraged to draw a valid graph.

It is also important that assessors record on the candidates' scripts where they decide that an assessment standard is achieved. This would aid with support for

the candidates, internal verification of the candidates' work, and eventually the external verification process.

For outcome 2, candidates can be assessed using the original system requiring 50% of the statements made in support of assessment standard 2.1 to be correct and 50% of the responses to each of the problem solving types to be correct in support of assessment standard 2.2. It can also be assessed holistically by using a single assessment where the candidate is required to gain 50% or more of the marks for the whole assessment instrument. To follow the holistic approach the centre can either use one of the updated assessments available from the SQA secure website or adapt the current assessments in the UASPs by following guidance in the *Understanding next steps for Physics* documents on the subject specific web page. This requires the assessment to be adapted to include further processing questions (standard 3-marker type calculations) and also to follow the Physics General Marking Principles. It is not a valid or acceptable approach to take the old UASPs and simply allocate one mark per question including the calculations.

It is important that centres record clear assessment decisions — both on the candidates' scripts, and on an appropriate recording sheet — that would allow verification to be made. During the internal verification process, it is vital that the verifiers' markings are clearly visible, and any final decision where any difference of opinion is made clear.

A good number of centres made it clear where candidates had achieved each assessment standard and where verification took place.

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Section 3: General comments

In the achievement of outcome 1, it is possible for candidates to have the same set of results as others in the group as they can carry out any practical/experimental work in small groups. When it comes to the write-up, it is important that the rest of the assessment standards are assessed for each individual candidate. A group report is not permitted.

It is also important that centres note that candidates can be asked to redraft the final reports to allow minor issues to be corrected and that all feedback from the assessor should be noted to allow depth of support to be monitored. Assessors must ensure that they do not give inappropriate levels of support in this process, eg by supplying model answers.