Higher Physics

Subject-specific guidance on gathering key evidence in session 2020–21

Please read this guidance alongside *National Courses: guidance on gathering evidence and producing estimates* and the SQA Academy resource *Quality assurance of estimates for National Courses*.

Gathering key evidence for Higher Physics

This document and *National Courses: guidance on gathering evidence and producing estimates* will give you additional support and guidance to support your decision making for session 2020–21. Evidence should be gathered later in the course, as a realistic reflection of a candidate's attainment. It is important to note that it is not the **quantity** of evidence, but the **quality** of evidence, in relation to its predictive value, that will support you during this process.

The following types of key evidence are likely to provide a good predictive value and may be helpful to you, although there may be other types of key evidence you would like to use.

Types of key evidence

The closer that the evidence is to the standard, format, and duration of the physics course assessment, and the more closely the marking follows the national standard and the *Physics General Marking Principles*, the more realistic and reliable your provisional results should be.

You **must** base your provisional results on demonstrated attainment.

Component 1: question paper

For physics, the key pieces of evidence are:

- question paper(s), covering as much of the course as possible
- a further, top-up question paper or extended test, which includes those areas not assessed in the first question paper(s)
- end-of-topic tests, including grade A marks, which you may use as supplementary evidence only, as they are not as reliable for making judgements about provisional results

You must gather these pieces of evidence in closed-book conditions under a high degree of supervision and control. The Higher Physics course specification details what is meant by a high degree of supervision and control. It is likely that this evidence will need to be generated once candidates return to their schools or colleges.

Question paper(s)

In most centres, centre-devised question papers are used for informing estimates and making judgements about provisional results. They are usually taken when candidates have covered sufficient course content to make them worthwhile and useful predictors. Centre-devised question papers should replicate, as closely as possible, the SQA question papers in style, level of demand, and conditions of assessment.

You may need to adjust the cut-off scores you use from notional, so that they are appropriate for your instrument(s) of assessment. Where it is necessary to split the question paper(s) over a number of class sessions, you should raise the cut-off scores to reflect this.

Detailed guidance for physics, on exam construction, level of demand, examples of grade A marks, and common marking issues are given in the document listed in the 'Understanding the national standard' section below.

Top-up question paper or extended test

As centre-devised question papers are usually taken before the course is completed, it is important to generate evidence covering the latter part of the course for consideration in making a judgement about provisional results. The best way of doing this is through a top-up question paper or extended test. This assessment should sample the knowledge not covered in the main assessment, as well as skills. It should also sample content from the earlier parts of the course. However, it is important that no questions are repeated between the assessments, as all questions should be unseen.

You should combine the attainment demonstrated in this top-up question paper or extended test with the attainment demonstrated in the main assessment, in deciding provisional results.

You should give greater weight the to the main instrument of assessment. However, your judgement should be holistic rather than focusing only on the piece of evidence that gives the best grade.

End-of-topic tests

End-of-topic tests, which include questions containing grade A marks, can be useful supplementary evidence. Such tests should aim to contain around 30% grade A marks, so that they are of an appropriate level of demand.

End-of-topic tests tend to compartmentalise the subject content and test limited knowledge. They tend to focus on testing knowledge and understanding rather than skills, and seldom require integration of knowledge and skills. To reflect these issues, you may need to adjust the cut-off scores you use from notional, so that they are appropriate for your instrument(s) of assessment.

On their own, end-of-topic tests do not have high predictive value and are therefore **not** suitable as the main or only type of evidence.

You can use high-scoring performance in the holistic SQA outcome 2 unit tests, or in outcome 2 unit tests where the centre has adapted the original unit assessment support

(UAS) packs by adding questions testing physics calculations, as supplementary evidence of a grade C only.

If you use the outcome 2 unit tests in the original UAS packs without adapting them, the lack of questions testing physics calculations means that they are unsuitable as evidence for deciding provisional results.

When considering all the evidence gathered for an individual candidate, you should give greater weight to the evidence that most closely mirrors the SQA question paper, in forming a holistic judgement.

Component 2: assignment

The assignment has been removed from the Higher Physics course assessment for session 2020–21. Therefore, you should not consider any evidence relating to the assignment when deciding provisional results.

Using additional assessment resources for session 2020–21: key information

It is important that you use valid and reliable assessment when gathering evidence in session 2020–21.

In Higher Physics, SQA will provide a question paper for session 2020–21. Please note that the marking instructions have not been standardised based on candidate responses. You may therefore need to agree within your centre how to consistently mark an item if a candidate response is not covered by the marking instructions.

The Higher Physics question paper will only be available on SQA's secure website — you must treat this confidentially, in the same way as other live assessment materials.

You have the option to use the question paper as internal assessment for gathering candidate evidence. The question paper can be split to support assessments you carry out during class time.

If you use the question paper in part or in its entirety, you should remind candidates that they must not discuss the content of the paper with anyone, including friends, family or on social media.

Many centres will have already developed their own assessments, and there is no requirement to use SQA's 2020–21 question paper in place of those. Centres that do not have a suitable top-up question paper or extended test could use a selection of questions from the question paper provided, as well as from SQA past papers, to produce an appropriate question paper or extended test.

Understanding the national standard

Please ensure you read the detailed information and guidance on producing evidence and estimates in physics, provided in the document *Physics: Guidance on gathering evidence and providing estimates*.