

Physics

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Diet 2019

Changes to documents following Diet 2019

National 5 and Higher coursework

Owing to the high volume of malpractice cases across the sciences relating to the assignments, we have updated the course specifications and the coursework assessment task documents for National 5 Physics and Higher Physics, for session 2019–20 onwards, to address the issues raised. This will ensure that the conditions of assessment are clear and applied in all centres.

For the majority of centres, there will be little or no change to previous practice, since most centres were already adhering to the conditions laid down in the coursework assessment task.

There are also minor amends to the mandatory content. We have updated the course specifications and coursework assessment tasks to include the clarification provided below.

Range of assignment topics

The common practice in most centres for physics is to offer a range of different experiments, however, it is acceptable for the same general topic to be investigated in a class and across classes. Teachers and lecturers must ensure that a variety of experiments are carried out, or a variety of independent variables are investigated, or both.

Experiments must be carried out by individual candidates, or by small groups of candidates — the same experiment must not be carried out by a whole class. The greater the variety,

the fewer opportunities for collusion. SQA cannot specify how large the range of topics should be.

While it was clear that most centres were offering candidates a choice of topic to investigate, it was evident that a minority of centres were not following the information in the coursework assessment task and were allowing candidates to choose topics that were not suitable for the level or not offering any candidate choice at all.

In some cases, not only had all candidates investigated the same independent variable within a topic but they also had identical range and interval for the independent variable. In addition, lack of candidate choice was leading to candidates including the same data from an internet/literature source and identical evaluative points in their reports.

We have updated and clarified the assessment guidance in relation to the research and report stage of the assignment. A summary of these updates is provided.

Research stage

Choosing the topic

Teachers and lecturers must minimise the number of candidates investigating the same topic within a class.

Experimental research

If instructions for the experimental procedure are supplied these must only be a basic list of instructions, and must not include details of the range and interval of measurements or the number of repetitions. Candidates must decide on these for themselves. An upper limit can be given where there may be a safety issue.

It was evident that, in some centres, candidates were being provided with instructions that included all of these details.

Internet/literature research

The internet/literature research must be the work of the individual candidate; they cannot work in a group to carry out this research.

In circumstances where there is difficulty in locating secondary data/information, teachers and lecturers may provide candidates with a wide list of URLs and/or a wide range of books and/or journals.

Only where internet access is an issue, can teachers and lecturers provide candidates with a printed copy of the full content of all URLs given in the list.

Report stage

Where a candidate takes a table with raw data into the report stage this must not have additional blank or pre-populated columns for mean and derived values.

At Higher level, scale reading uncertainties can be included as part of the raw experimental data.

Data/information taken from the internet or literature must not include sample calculations.

Extracts chosen to assist with writing about the underlying physics during the report stage must be:

- ◆ chosen by the candidate — they must select what information to extract
- ◆ verbatim — it must be a direct copy, which can be a printout, photocopy or handwritten (and word for word)
- ◆ from an internet/literature source — not from centre-devised course material/class notes. Candidate notes of any description are not permitted
- ◆ checked by the teacher or lecturer to ensure that it is an extract (unannotated), and not notes or a draft

Extracts can include any relationships that a candidate requires as part of their underlying physics but they must not include any sample calculations. There is no size limit on an extract; however, it must be an extract and not the full document.

Applying these updates should create a climate in which candidates can produce original work within the conditions of assessment.

Please see the history of changes tables in the coursework assessment tasks for further details. The documents are available on the relevant subject pages of our website.

National 5 Physics Course Specification

Mandatory knowledge: 'light-years' has been hyphenated.

Higher Physics Course Specification

Mandatory knowledge: The Hubble Law has been renamed as the Hubble-Lemaître Law following a decision taken by the International Astronomical Union in 2018.

Changes to documents following Diet 2020

National 5 and Higher coursework

Important notice: from session 2020–21 onwards, teachers and lecturers **must not** provide candidates with a list of sources for their internet/literature research or printed copies of the content of these sources. Candidates will be required to undertake their own internet/literature research.

Course reports

Please read the annual course reports for Physics. We produce these reports following the exam diet and they provide information on how candidates performed in course assessment for National Qualifications.

Course reports include a summary of areas candidates performed well in and areas candidates found demanding. They also contain advice on preparing candidates for future assessment, and statistical data relating to grade boundaries. Course reports are available from the [subject pages](#) of our website.

Information and guidance

External Verification of units

The purpose of external verification is to verify a centre's assessment approach and assessment judgements. To allow external verifiers to make an informed decision, sufficient evidence to demonstrate a centre's assessment approach and assessment judgements must be provided.

If a unit is not fully completed at the time of external verification, centres may submit whatever assessed candidates' evidence is available, provided that it is sufficient to meet the requirements.

Centres must indicate whether evidence is complete or interim on the candidate evidence flyleaf.

Where candidates have completed a unit and the centre is submitting evidence as complete, the centre must include evidence for **both outcome 1 and outcome 2**.

In 2019, a single qualification verification summary report replaced the verification key messages. The Physics Qualification Verification Summary Report for session 2018–19 is available on the relevant [subject pages](#) of our website.

Freestanding units at SCQF levels 5 and 6

New codes for freestanding units at SCQF levels 5 and 6 have been added to the relevant unit specifications and unit assessment support packs.

Recruitment opportunities for 2020

We would like to thank all appointees who worked with us in session 2018–19.

We are now accepting marker applications from teaching professionals to contribute to the 2020 exam diet. If you are interested in joining us as a marker, please visit the [appointee opportunities section](#) of our website, where you will find a marker advert for all subjects and levels with details of the role.

Becoming a marker helps to increase your awareness of the demands of course assessment and provides excellent professional and personal development. Please check [the appointees section of our website](#) regularly for other appointee opportunities that may be of interest to you.

Advanced Higher

Online resources to help you prepare for Advanced Higher assessment

As part of our Understanding Standards programme, we are providing a range of supportive resources to help you develop your understanding of the standards required in the revised course assessments for Advanced Higher. This may include audio presentations, published candidate evidence and commentary materials, and webinar recordings, which we have tailored to meet the needs of each subject.

You can access Understanding Standards materials via the 'Understanding Standards' tab on [the subject pages](#) of our website.

Advanced Higher Understanding Standards events

We are running five Understanding Standards events for Advanced Higher Physics:

- ◆ 1 November 2019 — Aberdeen
- ◆ 8 November 2019 — Inverness
- ◆ 16 November 2019 — Stirling
- ◆ 30 November 2019 — Glasgow
- ◆ 7 December 2019 — Edinburgh

To view the event schedule and book your place, visit www.sqa.org.uk/ngevents.

The event on Saturday 30 November is fully booked, however, there are spaces available at the other events.

We will publish the materials from these Understanding Standards events on the Advanced Higher Physics section of the Understanding Standards website, after the last event has been completed.

Units that were previously part of the Advanced Higher courses

The units that were previously part of the Advanced Higher courses are now available as freestanding units at SCQF level 7. These units no longer contribute to the Advanced Higher courses. We have removed references to Advanced Higher courses from the freestanding unit specifications, which are available from the freestanding units web page for each subject. There is a link to the freestanding units page from the 'see also' section on the [subject landing page](#).

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