

2021 March Moderation - Report



Which meeting is this report for?

Physics Level 4

Moderation Details for Calibration - Sample 1

Sample 1 - Please identify each criterion being moderated and IF SELECTED the elements within that criterion

Criterion 5 = Overall

Sample 1 - What rating (or ratings) has the group assigned this sample?

t+ / C-

Sample 1 - What evidence supports the rating (or ratings) the group has given?

Student has been very sloppy with the calculations and made calculation errors throughout. They have also demonstrated some significant misconceptions about circular motion.

However, they have been able to select relevant equations, although they have struggled to apply them correctly.

The repetitive nature of the test, the repetition of the same errors, and the limited sample of C5 content made it difficult to judge the breadth of the student's understanding.

As a result, the group struggled to reach consensus on this sample and a rich discussion was had.

Sample 1 - What evidence would you need to see in order to assign a higher rating (or ratings)?

Student needs to be more careful with calculations - if they had successfully applied their equations and substituted in values correctly, they would have achieved a clear C.

Sample 1 - Summary of group consensus with comments to element level if applicable.

There was significant debate about whether this was a t or a C- standard. Student has selected formulas but not applied them correctly; whether this meant they had shown sufficient understanding for a C was contentious.

The group agreed that context would be needed to help make this decision; whilst this student definitely needs further work and practice, it may depend on the timing and nature of the test (i.e. when it was given during the year) to determine the final rating. Additionally, as this test was only on a small sample of C5, the students' performance on the rest of C5 content would ultimately help determine their final rating.

Sample 1 - What actions would you recommend for teachers to help the student attain a higher rating (or ratings)?

The teacher should help the student complete practice questions, checking their working and answers consistently.

The student would benefit from some revision of basic algebra, including substituting in values and manipulating equations.

Moderation Details for Calibration - Sample 2

Sample 2 - Please identify each criterion being moderated and IF SELECTED the elements within that criterion

Criterion 5 = Overall

Sample 2 - What rating (or ratings) has the group assigned this sample?

C/C+

Sample 2 - What evidence supports the rating (or ratings) the group has given?

Able to solve routine numerical problems.

Had some understanding of the forces involved in circular motion.

Provided directions for vector quantities.

Sample 2 - What evidence would you need to see in order to assign a higher rating (or ratings)?

Numerous small errors in calculations; would need to be more consistent with calculations.

Had difficulty in longer multi-step questions; they would need to be able to solve these questions consistently for a B.

Sample 2 - Summary of group consensus with comments to element level if applicable.

Good consensus was achieved.

However, on later discussion the group noted some inconsistency between our marking of this sample and Sample 1. For Sample 1 we were looking for marks to get them over the line to a C; however, we did not do the same for this sample to get them to a B.

Sample 2 - What actions would you recommend for teachers to help the student attain a higher rating (or ratings)?

Review the different types of orbits - geostationary / geosynchronous are in the course, other orbits are not and the polar orbit questions should have been scaffolded more to support this.

Provide additional practice on multi-step calculation questions.

Would be good to have ratio form of Kepler's law on info sheet - given it's not the teacher needs to discuss this with students.

Moderation Details for Calibration - Sample 3

Sample 3 - Please identify each criterion being moderated and IF SELECTED the elements within that criterion

Criterion 5 = Overall

Sample 3 - What rating (or ratings) has the group assigned this sample?

A-

Sample 3 - What evidence supports the rating (or ratings) the group has given?

The student has been able to correctly select and apply equations to a range of situations.

Some of the questions where the student lost marks were ones which the group thought were flawed or beyond the course, and thus did not necessarily show a lack of understanding.

Sample 3 - What evidence would you need to see in order to assign a higher rating (or ratings)?

Poor communication in places. The student needs to take care in their communication, including rounding, directions and sig fig.

The inclusion of more challenging questions (A standard) would have allowed this student to truly show their ability.

Sample 3 - Summary of group consensus with comments to element level if applicable.

Good consensus was achieved.

Sample 3 - What actions would you recommend for teachers to help the student attain a higher rating (or ratings)?

Work on explanation answers; get students to work on the key words in the questions (such as compare and describe) and reading the question thoroughly.

Work on communication skills.

Demonstrate an A standard explanation question to show the students what good communication looks like.

Planning for September Moderation 2021 - Statewide Samples

For all courses please nominate the criteria and elements (if desired) for moderation.

C3 and C4

State the name of the person who will be providing the samples for moderation

Julie Fryer

Sharing Resources

Please record any links to or details of resources that were shared, or describe any assessment strategies that were discussed.

The group discussed how we are sharing resources through Dropbox and Teams. We agreed to primarily use the Teams folder for sharing resources, since this is maintained by Pete Wright and new teachers of the subject are added to it; this also has more file space. From now on resources should be uploaded to Teams - if uploaded to Dropbox please also upload to Teams.

Course Support

Please provide details of any future focus and ways forward you would like Years 9 to 12 Learning to consider in relation to this course:

None.