

NCEA Physics Remote Learning and Assessment

NZQA has considered the impacts of the Covid-19 virus on teaching, learning and assessment programmes for NCEA Physics. This document includes guidance for both internal and external Physics Achievement Standards.

General Guidance

Where teaching, learning and assessment is done via distance learning, this means students may need access to digital devices and the internet. The requirements for distance learning may well pose access and equity issues for some students which you will need to consider in your programme planning.

Students may need access to specific equipment to collect primary data for the practical investigation standards. This may pose issues around availability, and health and safety.

Physics Matrix

KEY: A colour-coding system to categorise standards according to the advice in this document.

Green	These standards are suitable for remote teaching, learning and assessment.
Blue	Teachers can facilitate assessment against these standards by remote learning with guidance (refer to General Guidance above).
Red	These standards require a collaborative process or interaction with others, and are not suitable for remote teaching, learning and assessment.

Domain	Level 1	Level 2	Level 3
Physics	<p>AS90935 1.1 Carry out a practical physics investigation that leads to a linear mathematical relationship, with direction</p> <p>As this standard requires the collection, processing and interpreting of data, it is suggested that it could be assessed when students, or groups of students, can return to school.</p> <p>4 credits Internal</p>	<p>AS91168 2.1 Carry out a practical physics investigation that leads to a non-linear mathematical relationship</p> <p>As this standard requires the collection, processing and interpreting of data, it is suggested that it could be assessed when students, or groups of students, can return to school.</p> <p>4 credits Internal</p>	<p>AS91521 3.1 Carry out a practical investigation to test a physics theory relating two variables in a non-linear relationship</p> <p>As this standard requires the collection, processing and interpreting of data, it is suggested that it could be assessed when students, or groups of students, can return to school.</p> <p>4 credits Internal</p>

Domain	Level 1	Level 2	Level 3
Physics	<p data-bbox="280 193 882 295">AS90936 1.2 Demonstrate understanding of the physics of an application</p> <p data-bbox="280 331 882 531">Teaching, learning and assessment, both formative and summative, could take place digitally. Teachers will need to be confident that each candidate has had an opportunity to produce a submission which meets the authenticity requirements for assessment.</p> <p data-bbox="280 647 882 679">2 credits Internal</p>	<p data-bbox="900 193 1503 295">AS91169 2.2 Demonstrate understanding of physics relevant to a selected context</p> <p data-bbox="900 331 1503 531">Teaching, learning and assessment, both formative and summative, could take place digitally. Teachers will need to be confident that each candidate has had an opportunity to produce a submission which meets the authenticity requirements for assessment.</p> <p data-bbox="900 647 1503 679">3 credits Internal</p>	<p data-bbox="1520 193 2123 327">AS91522 3.2 Demonstrate understanding of the application of physics to a selected context</p> <p data-bbox="1520 363 2123 563">Teaching, learning and assessment, both formative and summative, could take place digitally. Teachers will need to be confident that each candidate has had an opportunity to produce a submission which meets the authenticity requirements for assessment.</p> <p data-bbox="1520 647 2123 679">3 credits Internal</p>

Domain	Level 1	Level 2	Level 3
Physics	<p>AS90937 1.3 Demonstrate understanding of aspects of electricity and magnetism</p> <p>This standard is suitable for remote teaching, learning and assessment. The 2019 assessment specifications still apply.</p> <p style="text-align: right;">4 credits External</p>	<p>AS91170 2.3 Demonstrate understanding of waves</p> <p>This standard is suitable for remote teaching, learning and assessment. The 2019 assessment specifications still apply.</p> <p style="text-align: right;">4 credits External</p>	<p>AS91523 3.3 Demonstrate understanding of wave systems</p> <p>This standard is suitable for remote teaching, learning and assessment. The 2019 assessment specifications still apply.</p> <p style="text-align: right;">4 credits External</p>
Physics	<p>AS90938 1.4 Demonstrate understanding of aspects of wave behaviour</p> <p>This standard is suitable for remote teaching, learning and assessment. The 2019 assessment specifications still apply.</p> <p style="text-align: right;">4 credits External</p>	<p>AS91171 2.4 Demonstrate understanding of mechanics</p> <p>This standard is suitable for remote teaching, learning and assessment. The 2019 assessment specifications still apply.</p> <p style="text-align: right;">6 credits External</p>	<p>AS91524 3.4 Demonstrate understanding of mechanical systems</p> <p>This standard is suitable for remote teaching, learning and assessment. The 2019 assessment specifications still apply.</p> <p style="text-align: right;">4 credits External</p>

Domain	Level 1	Level 2	Level 3
Physics	<p>AS90939 1.5 Demonstrate understanding of aspects of heat</p> <p>This standard is suitable for remote teaching, learning and assessment. The 2019 assessment specifications still apply.</p> <p style="text-align: right;">4 credits External</p>	<p>AS91172 2.5 Demonstrate understanding of atomic and nuclear physics</p> <p>Teaching, learning and assessment, both formative and summative, could take place digitally. Teachers will need to be confident that each candidate has had an opportunity to produce a submission which meets the authenticity requirements for assessment.</p> <p style="text-align: right;">3 credits Internal</p>	<p>AS91525 3.5 Demonstrate understanding of Modern Physics</p> <p>Teaching, learning and assessment, both formative and summative, could take place digitally. Teachers will need to be confident that each candidate has had an opportunity to produce a submission which meets the authenticity requirements for assessment.</p> <p style="text-align: right;">3 credits Internal</p>
Physics		<p>AS91173 2.6 Demonstrate understanding of electricity and electromagnetism</p> <p>This standard is suitable for remote teaching, learning and assessment. The 2019 assessment specifications still apply.</p> <p style="text-align: right;">6 credits External</p>	<p>AS91526 3.6 Demonstrate understanding of electrical systems</p> <p>This standard is suitable for remote teaching, learning and assessment. The 2019 assessment specifications still apply.</p> <p style="text-align: right;">6 credits External</p>

Domain	Level 1	Level 2	Level 3
Physics			<p data-bbox="1525 193 2114 325">AS91527 3.7 Use physics knowledge to develop an informed response to a socio-scientific issue</p> <p data-bbox="1525 363 2092 560">Teaching, learning and assessment both formative and summative, could take place digitally. Teachers will need to be confident that each candidate has had an opportunity to produce a submission which meets the authenticity requirements for assessment.</p> <p data-bbox="1525 644 2114 671">3 credits Internal</p>