

NCEA Chemistry Remote Learning and Assessment

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

General Guidance

Where teaching, learning and assessment is done via remote means students will need access to digital devices and the internet.

Students may need access to specific chemicals and equipment to collect primary data for some standards. This may pose issues regarding health and safety.

The requirements above may well pose access and equity issues for some students which you will need to consider in your programme planning.

Chemistry 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 specific chemicals and equipment, the need to collect primary data and there are health and safety issues, therefore they are not suitable for remote teaching, learning and assessment.

Domain	Level 1	Level 2	Level 3
Science/ Material World	<p>AS90930 1.1</p> <p>Carry out a practical chemistry investigation, with direction</p> <p>It is suggested that this standard be assessed once students have safe access to suitable chemicals and equipment.</p> <p>4 credits Internal</p>	<p>AS91910 2.1</p> <p>Carry out a practical investigation into a substance present in a consumer product using quantitative analysis</p> <p>It is suggested that this standard be assessed once students have safe access to suitable chemicals and equipment.</p> <p>4 credits Internal</p>	<p>AS91367 3.1</p> <p>Carry out an investigation in chemistry involving quantitative analysis</p> <p>It is suggested that this standard be assessed once students have safe access to suitable chemicals and equipment.</p> <p>4 credits Internal</p>

Domain	Level 1	Level 2	Level 3
Science/ Material World	<p>AS90931 1.2</p> <p>Demonstrate understanding of the chemistry in a technological application</p> <p>Teaching, learning and assessment, both formative and summative, could take place digitally.</p> <p>2 credits Internal</p>	<p>AS91191 2.2</p> <p>Carry out an investigation into chemical species present in a sample using qualitative analysis</p> <p>It is suggested that this standard be assessed once students have safe access to suitable chemicals and equipment.</p> <p>3 credits Internal</p>	<p>AS91388 3.2</p> <p>Demonstrate understanding of spectroscopic data in chemistry</p> <p>Teaching, learning and assessment, both formative and summative, could take place digitally.</p> <p>3 credits Internal</p>
Science/ Material World	<p>AS90932 1.3</p> <p>Demonstrate understanding of aspects of carbon chemistry</p> <p>Teaching and learning towards assessment of this standard is suitable remotely. The current Assessment Specifications will continue to apply.</p> <p>4 credits External</p>	<p>AS91163 2.3</p> <p>Demonstrate understanding of the chemistry used in the development of a current technology</p> <p>Teaching, learning and assessment, both formative and summative, could take place digitally.</p> <p>3 credits Internal</p>	<p>AS91389 3.3</p> <p>Demonstrate understanding of chemical processes in the world around us</p> <p>Teaching, learning and assessment, both formative and summative, could take place digitally.</p> <p>3 credits Internal</p>

Domain	Level 1	Level 2	Level 3
Science/ Material World	<p>AS90933 1.4</p> <p>Demonstrate understanding of aspects of selected elements</p> <p>Teaching and learning towards assessment of this standard is suitable remotely. The current Assessment Specifications will continue to apply.</p> <p>4 credits External</p>	<p>AS91164 2.4</p> <p>Demonstrate understanding of bonding, structure, properties and energy changes</p> <p>Teaching and learning towards assessment of this standard is suitable remotely. The current Assessment Specifications will continue to apply.</p> <p>5 credits External</p>	<p>AS91930 3.4</p> <p>Demonstrate understanding of thermochemical principles and the properties of particles and substances</p> <p>Teaching and learning towards assessment of this standard is suitable remotely. The current Assessment Specifications will continue to apply.</p> <p>5 credits External</p>
Science/ Material World	<p>AS90934 1.5</p> <p>Demonstrate understanding of aspects of chemical reactions</p> <p>Teaching and learning towards assessment of this standard is suitable remotely. The current Assessment Specifications will continue to apply.</p> <p>4 credits External</p>	<p>AS91165 2.5</p> <p>Demonstrate understanding of the properties of selected organic compounds</p> <p>Teaching and learning towards assessment of this standard is suitable remotely. The current Assessment Specifications will continue to apply.</p> <p>5 credits External</p>	<p>AS91391 3.5</p> <p>Demonstrate understanding of the properties of organic compounds</p> <p>Teaching and learning towards assessment of this standard is suitable remotely. The current Assessment Specifications will continue to apply.</p> <p>5 credits External</p>

Domain	Level 1	Level 2	Level 3
Science/ Material World		<p>AS91196 2.6</p> <p>Demonstrate understanding of chemical reactivity</p> <p>Teaching and learning towards assessment of this standard is suitable remotely. The current Assessment Specifications will continue to apply.</p> <p>4 credits External</p>	<p>AS91392 3.6</p> <p>Demonstrate understanding of equilibrium principles in aqueous systems</p> <p>Teaching and learning towards assessment of this standard is suitable remotely. The current Assessment Specifications will continue to apply.</p> <p>5 credits External</p>
Science/ Material World		<p>AS91167 2.7</p> <p>Demonstrate understanding of oxidation-reduction</p> <p>Teaching, learning and assessment, both formative and summative, could take place digitally.</p> <p>3 credits Internal</p>	<p>AS91393 3.7</p> <p>Demonstrate understanding of oxidation-reduction processes</p> <p>Teaching, learning and assessment, both formative and summative, could take place digitally.</p> <p>3 credits Internal</p>