

Title	Write, and present orally, a scientific report in an industrial or research laboratory		
Level	6	Credits	30

Purpose	<p>This unit standard is for people who wish to gain practical experience to show competency working in an industrial or research laboratory.</p> <p>People credited with this unit standard are, in an industrial or research laboratory, able to: demonstrate skills for a scientific process; report, record, and evaluate the requirements of a scientific process; and write a scientific report and make an oral presentation of the requirements for a scientific process.</p>
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Classification	Science > Science - Core
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Available grade	Achieved
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Guidance Information

- 1 All work must be carried out in accordance with the quality management system, documented protocol system or Standard Operating Procedures (SOP) typically acceptable in a research or an industrial laboratory or with a technical International Accreditation New Zealand (IANZ) accredited agency or an equivalent accreditation.
- 2 Health and Safety practices must conform to Australian/New Zealand Standard AS/NZS 2243 – *Safety in Laboratories* Parts 1, 2, 3, 7, and 10 available at <http://www.standards.co.nz> and <http://infostore.saiglobal.com/store>.
- 3 Legislation applicable to this unit standard includes:
Health and Safety at Work Act 2015;
Hazardous Substances and New Organisms Act 1996.
- 4 Assessment against this unit standard will occur within the context of a qualification in science. This unit standard is designed to enable candidates to apply theory and skills; and to carry out, analyse and evaluate processes, through practical experience. It is expected that assessment of this unit standard will take place after candidates have been awarded 60 credits at Level 5 or above in the subfield *Science*.

This unit standard requires candidates to have practical experience working in an industrial or research laboratory as a laboratory assistant or technician. The credits allocated to this unit standard reflect a recommended 300 hours in an industrial or research laboratory; of which 120 hours must be practical laboratory work.

- 5 The scientific report may be submitted on a template which the assessor has provided to the candidate.
- 6 A *scientific process* is one that is undertaken and/or observed at the industrial or research laboratory.
- 7 Glossary
Presentation is an oral presentation of the report to peers, not to exceed 10 minutes in length.
Laboratory procedures refer to documented systems or processes of operation, which may be found in a SOP manual, quality management system or protocol system documentation. These procedures are external and/or internal laboratory requirements governing laboratory work.
- 8 Recommended for entry: Unit 8029, *Work safely in a microbiological laboratory*; or Unit 8467, *Work safely in a chemical laboratory*.

Outcomes and performance criteria

Outcome 1

Demonstrate skills for a scientific process in an industrial or research laboratory.

Performance criteria

- 1.1 The skills for a scientific process are demonstrated in accordance with the requirements of the industrial or research laboratory.

Range may include – written communication, oral communication, accuracy, quality, repeatability, equipment installation and maintenance, technical, computer technology, error anomalies.

Outcome 2

Report, record, and evaluate the requirements of a scientific process in an industrial or research laboratory.

Performance criteria

- 2.1 Requirements of the scientific process are reported on and recorded in accordance with laboratory procedures and the scientific process.

Range may include but is not limited to – report log, notes, diary, summaries, data, references for the procedures, legislation, standards.

- 2.2 The requirements of the scientific process are evaluated in relation to a process.

Outcome 3

Write a scientific report and make an oral presentation of the requirements for a scientific process in an industrial or research laboratory.

Performance criteria

3.1 The scientific report is written consistent with the requirements of the process, and in accordance with the requirements of the industrial or research laboratory.

Range clarity, relevance, succinctness, structure.

3.2 The scientific process is presented orally in accordance with the requirements of the industrial or research laboratory, and may include the use of handouts and Information and Communication Technology tools.

3.3 The scientific process is presented orally in a relevant industrial or research laboratory context.

Range clarity, relevance, succinctness, structure, timeliness.

Planned review date	31 December 2023
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 June 2010	31 December 2016
Rollover and Revision	2	27 January 2015	N/A
Review	3	27 September 2018	N/A

Consent and Moderation Requirements (CMR) reference	0113
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact NZQA National Qualifications Services nqs@nzqa.govt.nz if you wish to suggest changes to the content of this unit standard.