



AOTE A COLLEGE

NCEA Course Outline 2025



Course title:	Science Level 1
NCEA level(s):	1
Course Code:	SCD100
Prerequisites	N/A

Goals

The goals of this course are for students to

- develop the ability to choose appropriate problem solving strategies, eg solving a simpler problem or looking at extremes
- compare and contrast theories in order to understand the power and scope of a particular theory
- discuss implications of a theory to explore deep questions such as the nature of the universe
- contrast worldviews around the origins of the universe and investigate how these worldviews have shaped the scientific development of our understanding of the nature of our universe
- identify gaps in your own understanding and seek help in order to understand more complex concepts
- develop understanding of cause and effect when looking at the interactions between the geosphere, biosphere, hydrosphere, and atmosphere
- use systems thinking to look at the interweaving of the spheres
- develop three-dimensional thinking in explanations of phenomena
- make predictions about the effects of natural events
- explore the concept of thought experiments, asking the question: what would it mean if...?
- **test systems and make sense of theories**
- make links between models and physics concepts
- discuss the strengths and limitations of models.

Assessment

- School Examination (August)
- Level 1 NCEA Internal Assessments in March (1.2) and August (1.1)
- Level 1 NCEA External Assessments in November (1.3 and 1.4)

Appeal

Students have the right to appeal their internal assessment grade. First, talk to your teacher about the grade you got. If you still want to appeal after that, fill out the [appeal form](#) and send it to Whaea Rowan. You have seven days from when you get your grade to appeal. Students can't change anything in their assessment during those seven days—if you do, the original grade will stay the same.

Course Endorsement

Course endorsement with **Achieved**, **Merit** or **Excellence** is possible.

Learning Partnerships

This course includes the college's partnership with an external institution.

Assessment summary

NZQF Standard Code	NCEA Level	Standard Title	Credits	Is this a Literacy standard? (Yes or No)	Is this a Numeracy standard? (Yes or No)	UE Literacy Reading (Yes or No)	Assessment type (External or Internal)	Is reassessment available? (Yes or No)
1.1 (92044)	1	Demonstrate understanding of human-induced change within the Earth system	5	No	No	Internal	No	
1.2 (92045)	1	Demonstrate understanding of a physical phenomenon through	5	No	No	Internal	No	

		investigation						
1.3 (92046)	1	Demonstrate understanding of the effect on Earth of interactions between the Sun and the Earth-Moon system	5	No	No	External	No	
1.4 (92047)	1	Demonstrate understanding of energy in a physical system	5	No	Yes	External	No	

Topic outline (in teaching order)

Topic	NZQF Standard Code	Content	Teaching Time
Demonstrate understanding of a physical phenomenon through investigation	92045 Science 1.2	This Standard requires learners to understand physical phenomenon through investigation For this Standard, learners use relevant physics concepts to describe relationships involved in a physical phenomenon using supporting evidence. The physics concept must derive from an aspect of mechanics and could include: motion - constant speed, motion - constant acceleration, distance-time graphs, speed-time graphs, forces and pressure.	
Demonstrate understanding of the effect on Earth of interactions between the Sun and the Earth-Moon system	92046 Science 1.3	This Standard requires learners to show understanding of how life on Earth is affected by the interactions between the Sun and the Earth-Moon system. Learners can explore how Māori, Pacific, and other indigenous knowledge describes the interaction of the Sun, Earth, and Moon, and the implications for life on Earth. Learners will demonstrate skills in gathering and interpreting evidence from different sources, using models to show understanding of the concepts, linking of cause to effect, writing explanations, and using appropriate science concepts, knowledge, and literacy.	
Demonstrate understanding of energy in a physical system	92047 Science 1.4	This Standard requires learners to demonstrate understanding of energy in a physical system Physics concepts related to the ideas of energy involved in a physical system by describing energy transfer and transformation supported by representation and calculation. The forms of energy will include: Mechanical energy, Thermal energy, Electrical energy and Work	

		As part of this assessment learners will need to demonstrate skills in simple problem solving, interpreting how relationships are used to describe and represent concepts. Students will also demonstrate use of statements, descriptions, calculations and representations to explain concepts	
Demonstrate understanding of human-induced change within the Earth system	92044 Science 1.1	For this Standard, learners will need to show their understanding of how human - induced change affects the Earth system. As part of this assessment, learners will need to demonstrate knowledge or interactions in the Earth system related to the concept of spheres, and the effects that can result from human-induced changes in the system. This can be done through a mātauranga Māori or other scientific understanding, or an interweaving of both.	

This may yet be subject to change as the completed Standards and Assessment Tasks are provided by NCEA
Internal Assessment Timeline 2025

	Term 1 04 Feb - 11 Apr	Term 2 28 Apr - 27 Jun	Term 3 14 Jul - 19 Sept	Term 4 06 Oct - 11 Dec
Week 1	Mon 27 Jan <i>Course Confirmation Week</i>	Mon 28 Apr Assessment 1.2 to be completed and turned in at the end of the week	Mon 14 Jul	Mon 06 Oct
Week 2	Mon 03 Feb <i>Year 9 Powhiri 04/02</i> <i>Whole school 5/02</i> <i>Waitangi observed 06/02</i> 1.2 Physical phenomenon through investigation	Mon 05 May 1.4 energy in a physical system (just mechanical energy)	Mon 21 Jul 1.4 energy in a physical system (thermal and electrical energy)	Mon 13 Oct
Week 3	Mon 10 Feb	Mon 12 May	Mon 28 Jul	Mon 20 Oct
Week 4	Mon 17 Feb	Mon 19 May	Mon 4 Aug	Mon 27 Oct <i>Labour day 27/10</i> <i>Seniors Last Day 29/10</i> 1.1 Human induced change due
Week 5	Mon 24 Feb	Mon 26 May 1.3 interactions between Sun and Earth-Moon systems	Mon 11 Aug	Mon 03 Nov NCEA Exams Begin 04/11
Week 6	Mon 03 Mar	Mon 02 Jun <i>Mon 02/06 King's Birthday</i>	Mon 18 Aug <i>Course Selection Day</i>	Mon 10 Nov
Week 7	Mon 10 Mar Practical assessment starts	Mon 9 Jun	Mon 25 Aug <i>Winter Tournament Week</i> <i>TOD - TBC</i>	Mon 17 Nov
Week 8	Mon 17 Mar <i>Goal Setting afternoons Tues, Wed, Thurs - TBC</i>	Mon 16 Jun <i>Fri 20/06 Matariki</i>	Mon 01 Sep 1.1 Human-induced change Start of 5 cred research internal (2 periods pre-teaching).	Mon 24 Nov <i>NCEA Exams Finish 28 Nov</i>

			Students start research or begin revision for school exams.	
Week 9	Mon 24 Mar <i>Summer Tournament Week TOD 28/03 - TBC</i>	Mon 23 Jun	Mon 08 Sep Derived Grade Exams 1.3 and 1.4 derived grade exams start Wed 10 Sept	Mon 01 Dec
Week 10	Mon 31 Mar		Mon 15 Sep Derived Grade Exams	Mon 08 Dec <i>Last day for Juniors 11/12</i>
Week 11	Mon 07 Apr			

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