

<b>Contextualised course title:</b> LEVEL 1 Science - Our Changing World	<b>Credits: 20+</b>
<b>Learning areas: Science</b>	

**What is this course about?**

During this course, you will explore the current big issues (Climate Change and Pandemics for 2021) we are facing in the world today. You will learn the science behind the issue, the consequences and what solutions we could put in place. This course is a mix of Earth science, biology, chemistry and physics.

**What sort of things will I do?**

Science is a way of investigating, understanding, and explaining our natural, physical world and the wider universe. It involves generating and testing ideas, gathering evidence – including by making observations, carrying out investigations and modelling, and communicating and debating with others – in order to develop scientific knowledge, understanding, and explanations. Scientific progress comes from logical, systematic work and from creative insight, built on a foundation of respect for evidence. Different cultures and periods of history have contributed to the development of science.

**Learning capabilities/ critical skills**

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|--------------------------------|---|
| Decision-making skills         | Communication and interpersonal skills      |
| Logical argument               | Observation and analysis                    |
| Critical thinking              | Sorting/classifying                         |
| Problem solving and creativity | Inferring                                   |
| Computer literacy              | Predicting                                  |
| Teamwork                       | Experimenting                               |
|                                | Practical scientific and statistical skills |

**Science Threshold Concepts**

- Science is informed by current scientific theories and aims to collect evidence that will be interpreted through processes of logical argument.
- Scientists develop and carry out complex investigations, including using models
- Apply their understandings of science to evaluate both popular and scientific texts (including visual and numerical literacy).
- Develop an understanding of socio-scientific issues by gathering relevant scientific information in order to draw evidence-based conclusions and to take action where appropriate.

**Science standards available (possible range - would expect 20 - 24 credits)**

<b>NCEA Level</b>	<b>Standard Number</b>	<b>Name of standard</b>	<b>Credits</b>	<b>L1 Lit</b>	<b>L1 Num</b>
1	AS90943	Investigate implications of heat for everyday life	4		y
1	AS90942	Investigate implications of wave behaviour for everyday life	4		y
1	AS90945	Investigate implications of the use of carbon compounds as fuels	4		
1	AS90949	Investigate life processes and environmental factors that affect them	4		
1	AS90950	Investigate biological ideas relating to interactions between humans and microorganisms	4		
1	AS90951	Investigate the biological impact of an event on a New Zealand ecosystem	4		
1	AS90953	Demonstrate understanding of carbon cycling	4	y	
1	AS90955	Investigate an astronomical or Earth science event.	4	y	
1	AS90930	Carry out a practical chemistry investigation, with direction	4		y
1	AS90925	Carry out a practical investigation in a biological context, with direction	4		y
1	AS90926	Report on a biological issue	3	y	
1	AS90944	Demonstrate understanding of aspects of acids and bases	4		
1	AS90948	Demonstrate understanding of biological ideas relating to genetic variation	4	y	