



Rangi Ruru Girls' School

Science for Citizenship 2024

Programme of learning



Ko te manu kai i te miro, nōna te ngāhere. Ko te manu kai i te mātauranga, nōna te ao.

The bird that consumes the miro berry owns the forest; the bird that consumes knowledge, owns the world.

Welcome to Level 3 Science for Citizenship

Level 3 Science for Citizenship provides a flexible course that can be tailored to the interests and tertiary aspirations of each student.

Through a range of Biology and Earth and Space Science internal standards set in environmental and health contexts, students can explore many issues that we face as global citizens and challenge them to develop informed viewpoints and meaningful courses of action to address these issues.

Through the external standard, students will apply their understanding of genetics to the context of Human Evolution, exploring the how and why behind the emergence of the Human species.

This range of standards exposes students to a balance of research and practical work that will develop their scientific knowledge and skillset to help them engage confidently in Science beyond school.

In Science for Citizenship, your Rangī Ruru values and Rangī Graduate dispositions will be demonstrated through:

Whakaute Respect: Acknowledge and respect different perspectives.

Aroha: Take opportunities to work with others in a supportive way.

Rikarika Endeavour: Take responsibility for your own learning and give things a go.

Ngaana Enthusiasm: Have a positive attitude towards learning.

Manaakitanga - Generosity of Spirit: Listen carefully to other's opinions and be curious.

Tika Integrity · Be honest about your own work and be responsible for your own behaviours.

What will you begin to understand in Science for Citizenship this year?

Science helps us make sense of and care for our world.	Science connects us to the world we live in and reminds us of our interconnectedness with all other life forms. To understand the world, we must understand the relationships between ourselves and the environment in which we live and our role as guardians of the land, kaitiakitanga.
The composition and processes occurring within the Earth and its atmosphere shape the Earth's surface and its climate	Our understanding of the natural geological, biological and physical processes that govern the climate help us better understand our influence on it.
Science is elegant, explorative, creative and powerful.	Science uses data, evidence and relationships to find out, explore and explain.
Applications of science often have ethical, social, economic, and political implications	The use of scientific knowledge in technologies makes many innovations possible. Whether or not particular applications of science are desirable is a matter that science alone cannot address. Ethical and moral judgments may be needed, based on such considerations as human safety and impacts on people and the environment

What will you know and do in Science for Citizenship this year?

This year you will

- Investigate the mechanisms that are currently driving climate change, the consequence of this on the Earth system and how it impacts communities.
- Develop a deeper understanding of a chosen contemporary biological issue to better understand the science and viewpoints that surround the issue before proposing actions to make positive change.
- Carry out a practical investigation to produce data that further reinforces the impacts of climate change on both biological and social systems.
- Develop your understanding of the biological and cultural changes that have driven the evolution of Humans.

Achievement Standards offered in Level 3 Science 2024

Achievement standard number	Subject reference	Version number	Title	Mode of assessment	Credits	Numeracy or Literacy
91411	ESS 3.2	2	Investigate a socio-scientific issue in an Earth and Space Science context	Internal	4	Literacy
91601	BIO 3.1	2	Carry out a practical investigation in a biological context with supervision.	Internal	4	Literacy and Numeracy
91602	BIO 3.2	2	Integrate biological knowledge to develop an informed response to a socio-scientific issue	Internal	3	Literacy
91410	ESS 3.1	2	Carry out in independent investigation in an Earth and Space Science Context	Internal	4	Literacy and Numeracy
91606	3.6	2	Demonstrate understanding of trends in Human Evolution	External	4	Literacy

Credits: 19

ASSESSMENT PROCEDURES

5 Achievement Standards will be offered with a total of 19 credits. Some flexibility is possible within the course, with students able to choose different standards depending on their interests.

1 Achievement Standards will be assessed by an **external** examination. (4 credits). The other 4 are internally assessed.

Tests and task sheets will be given regularly throughout the year to give you practice in answering questions related to the topics being studied. Formative Tests will be used as indicators of your progress.

All Achievement Standard tasks will have a checklist of what is required to attain an Achieved, Achieved with Merit or Achieved with Excellence.

Important Information for Internal Assessments

- **Absences** – It is important that you do not miss any assessments (Internal or External) except for genuine reasons of sickness, accident or other extreme emergency. Providing a Medical Certificate from your Doctor must cover absence during an assessment. On your return to school you will be given the opportunity to do the task for the particular Achievement Standard. This will NOT be possible if you choose to go on a family holiday, or similar non-school related event, at the time of assessment.
- **Assessment Policies** – Information regarding the school policy on assessment, authenticity and appeal procedures is found on www.rangilife.school.nz (Student links/Curriculum support/NCEA). Ensure you read these thoroughly and follow all guidelines. Know your rights and responsibilities.
- **Filing** – When an Internal assessment task has been marked you will be asked to **verify the sighting and acceptance of the grade awarded by signing the cover sheet**. All assessed work will then be filed at school for security and for moderation by NZQA, if required.
- **Assessment** – If a '**Not Achieved**' grade is awarded for an **internally** assessed Achievement Standard, there will be no further assessment opportunities in that Achievement Standard.
- You **may be** offered the opportunity of a **resubmission** if your work requires a minor corrections or change that you may have overlooked and should be able to identify within a few minutes. Your teacher will approach you prior to the task being handed back to the class as a whole if this is relevant for you. You will be required to identify and make any changes immediately. Your teacher is **not** able to tell you of the specific change required; you must be able to identify the required change yourself.

YEAR PLANNER

Week		Date			
1	A	29 January	-	2 February	ESS 3.2 (I)
2	B	5 February	-	9 February	Waitangi Day: Tues 6 th Feb
3	A	12 February	-	16 February	
4	B	19 February	-	23 February	
5	A	26 February	-	1 March	
6	B	4 March	-	8 March	ESS 3.2 due on the 8 th @ 3:20pm
7	A	11 March	-	15 March	BIO 3.2 (I)
8	B	18 March	-	22 March	
9	A	25 March	-	29 March	Easter Fri: 29 th March
10	B	1 April	-	5 April	Easter Mon & Tues: 1 st & 2 nd April
11	A	8 April	-	12 April	
		15 April	-	19 April	
		22 April	-	26 April	Anzac Day: Thurs 25 th April
		29 April	-	3 May	
1	B	6 May	-	10 May	
2	A	13 May	-	17 May	BIO 3.2 due on the 8 th @ 3:20pm
3	B	20 May	-	24 May	ESS/BIO 3.1 (I)
4	A	27 May	-	31 May	
5	B	3 June	-	7 June	King's B/D: Mon 3 rd June
6	A	10 June	-	14 June	
7	B	17 June	-	21 June	
8	A	24 June	-	28 June	Matariki: Fri 28 th June
9	B	1 July	-	5 July	
		8 July	-	12 July	
		15 July	-	19 July	
		22 July	-	26 July	
1	A	29 July	-	2 August	ESS/BIO 3.1 due on the 2 nd @ 3:20pm
2	B	5 August	-	9 August	BIO 3.6 (E)
3	A	12 August	-	16 August	
4	B	19 August	-	23 August	
5	A	26 August	-	30 August	
6	B	2 September	-	6 September	
7	A	9 September	-	13 September	
8	B	16 September	-	20 September	
9	A	23 September	-	27 September	
		30 September	-	4 October	
		7 October	-	11 October	
1	B	14 October	-	18 October	
2	A	21 October	-	25 October	
3	B	28 October	-	1 November	Labour Day: Mon 28 th Oct
4	A	4 November	-	8 November	
5	B	11 November	-	15 November	NCEA Biology exam on 13 th Show Day: Fri 15 th Nov
6	A	18 November	-	22 November	
7	B	25 November	-	29 November	
8	A	2 December	-	6 December	