Rangi Ruru Girls' School

Year 12 Koiora - Biology
2025

Course Information

for Students

Ma te huruhuru, ka rere te manu
Adorn the bird with feathers so it can fly

Welcome to level 2 Biology in 2025! We hope that your year will be interesting, valuable, challenging and successful.

Biologists and students studying biology want to explain the nature of living things and to understand where and how life is evolving, how evolution links life processes and ecology, and the impact that humans have on all forms of life. The course this year aims to provide a solid foundation of knowledge and skills on which to base further studies in Biology.

In your Biology class, your Rangi Ruru values and Rangi 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 Biology this year?

Biology helps us make sense of the living world.	Biology 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.
Biology has a continuous, evolving human history.	*Nō ngā tupuna, tuku iho, tuku iho.* The human ideas that have been passed down from generation to generation over time can help people today develop their thinking.
Biology is elegant, explorative, creative and powerful.	Biology uses data, evidence and relationships to find out, explore and explain.
Biology helps us in our everyday lives and decisions and is key to many areas of knowledge and practice.	The concepts, skills and processes of Biology are used in everyday practices and decisions. We aim to provide you with the knowledge, understanding and skills that enable you to be 'scientifically literate' citizens
Biology rewards persistence and positivity.	Biology offers multiple ways to approach and solve problems. Experimentation and failures play an important role in understanding

What will you know and do in Biology this year?

This year you will:

- learn about the diverse ways in which animals and plants carry out life processes.
- understand that DNA and the environment interact in gene expression.
- carry out an investigation that includes developing your understanding of the relationship between the investigation and scientific theory
- analyse the biological validity of information to develop an understanding of socio-scientific issues.

What skills will you develop this year?

Using language, symbols and texts appropriately: You will develop knowledge of biological vocabulary, numeric and symbol systems and conventions of Science such as graphs, formulae, units and diagrams.

Critical thinking: There is a lot of "fake Science" presented in the media and on various social platforms. As global citizens it is important that you can tell the difference between fact and fiction.

Gathering evidence: Science investigations are used to generate and evaluate knowledge to answer questions

Self-management: If you have missed lessons – it is up to you, and not your teacher, to ensure you catch up.

Effective collaboration: Collaborative tasks will allow you to focus on good communication, so your group reaches a common goal.

Achievement Standards offered in Level 2 Biology 2025

Achievement Standard Number	Subject Reference	Version Number	Topic/Title	Mode of Assessment	Credits
91153	Bio 2.1	2	Carry out a practical investigation in a biology context, with supervision	Internal	4
91154	Bio 2.2	2	Analyse the biological validity of information presented to the public	Internal	3
91155	Bio 2.3	2	Demonstrate understanding of adaptation of plants or animals to their way of life	Internal	3
91156	Bio 2.4	2	Demonstrate understanding of life processes at the cellular level	External	4
91159	Bio 2.7	2	Demonstrate understanding of gene expression	External	4

Assessment Information

- 5 Achievement Standards will be offered with a total of 18 credits.
- 2 Achievement Standards will be assessed by an external examination (8 credits). Formative Tests will be used as indicators of your progress.
- 3 Achievement Standards will be assessed internally during the year (10 credits).
    - Bio 2.1 Practical Investigation Term 1 week 6 4 credits
    - Bio 2.3 Animal Adaptations Term 2 week 8 3 credits
    - Bio 2.2 Analysing Bio Information Term 3 week 4 3 credits

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

Workbooks and Online Learning

SciPad workbooks and Education Perfect online platform will be used for the external standards.

Important Information for Internal Assessments

- **Absences –** It is important that you do not miss any assessments 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 https://hub.rangiruru.school.nz/assessment/. Ensure you read these thoroughly and follow all guidelines. Know your rights and responsibilities.
- **Authenticity of your assessments** – You will be asked to sign a declaration at the beginning of the year that all work completed for assessment for qualification is your own. If evidence of plagiarism is found in an assessment, the grade of "Not Achieved" will be presented.

  Authenticity means that you will:

  - Produce your best work independently and have a trail of evidence to show the development of the work
  - Provide oral clarification, if necessary, to show the depth of your understanding
  - Integrate, acknowledge, and reference your research appropriately
  - Use AI with integrity by disclosing when, where, and how you have used AI. AI use should be consistent with the AI Acceptable Use Policy

  Authenticity means that the teacher will:

  - Monitor your progress by checking drafts, version histories and give feedback.
  - Communicate the authenticity expectations for each assignment task.
  - Seek oral clarification if required.
- **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 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 2025

Teacher: Cd, Dm, Rs **Subject: Biology** **Level: 2**

Week		Date From		Date To	
1	A	27 January	-	2 February	TOD 27/1 & 28/1
2	B	3 February	-	9 February	Bio 2.4 CELL PROCESSES (E) Waitangi Day 6/2
3	A	10 February	-	16 February	Camp 9/2-11/2
4	B	17 February	-	23 February	Bio 2.1 PRACTICAL INVESTIGATION (I)
5	A	24 February	-	2 March	Athletics Day 25/2
6	B	3 March	-	9 March	
7	A	10 March	-	16 March	
8	B	17 March	-	23 March	Bio 2.4 CELL PROCESSES (E)
9	A	24 March	-	30 March	Tournament week
10	B	31 March	-	6 April	
		7 April	-	13 April	
		14 April	-	20 April	Good Friday 18/4, Easter Monday 2/4
		21 April	-	27 April	ANZAC Day 25/4
1	A	28 April	-	4 May	
2	B	5 May	-	11 May	
3	A	12 May	-	18 May	
4	B	19 May	-	25 May	
5	A	26 May	-	1 June	Bio 2.3 ANIMAL ADAPTATIONS (I)
6	B	2 June	-	8 June	King's Birthday 2/6
7	A	9 June	-	15 June	
8	B	16 June	-	22 June	Matariki 20/6
9	A	23 June	-	29 June	Bio 2.2 BIOLOGICAL VALIDITY (I)
		30 June	-	6 July	
		7 July	-	13 July	
		14 July	-	20 July	
1	B	21 July	-	27 July	
2	A	28 July	-	3 August	
3	B	4 August	-	10 August	
4	A	11 August	-	17 August	
5	B	18 August	-	24 August	Bio 2.7 GENE EXPRESSION (E)
6	A	25 August	-	31 August	Tournament week
7	B	1 September	-	7 September	
8	A	8 September	-	14 September	
9	B	15 September	-	21 September	
		22 September	-	28 September	
		29 September	-	5 October	
1	A	6 October	-	12 October	
2	B	13 October	-	19 October	
3	A	20 October	-	26 October	
4	B	27 October	-	2 November	Final Day 29/10 Labour Day 27/10
5	A	3 November	-	9 November	NCEA exams start 4/11
6	B	10 November	-	16 November	Show Day 14/11
7	A	17 November	-	23 November	Level 2 Biology exam 17/11