


School Code	BIO		
Year Level	11 & 12	QCE Credits	4
Subject Type	General Subject	VET Contribution	N/A
Recommended Academic Performance	Science — B Standard English — C Standard Foundation General Maths—C Standard		
21st Century Skills	<div style="text-align: center;">  <p>Communication</p> </div>		

Biology provides opportunities for students to engage with living systems.

Students develop their understanding of cells and multicellular organisms. They engage with the concept of maintaining the internal environment. They study biodiversity and the interconnectedness of life. This knowledge is linked with the concepts of heredity and the continuity of life.

Students learn and apply aspects of the knowledge and skills of the discipline (thinking, experimentation, problem-solving and research skills), understand how it works and how it may impact society. They develop their sense of wonder and curiosity about life; respect for all living things and the environment; understanding of biological systems, concepts, theories and models; appreciation of how biological knowledge has developed over time and continues to develop; a sense of how biological knowledge influences society.

Students plan and carry out fieldwork, laboratory and other research investigations; interpret evidence; use sound, evidence-based arguments creatively and analytically when evaluating claims and applying biological knowledge; and communicate biological understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

Pathways

A course of study in Biology can establish a basis for further education and employment in the fields of medicine, forensics, veterinary, food and marine sciences, agriculture, biotechnology, environmental rehabilitation, biosecurity, quarantine, conservation and sustainability.

Objectives

By the conclusion of the course of study, students will:

- describe and explain scientific concepts, theories, models and systems and their limitations
- apply understanding of scientific concepts, theories, models and systems within their limitations
- analyse evidence
- Interpret evidence
- investigate phenomena
- evaluate processes, claims and conclusions
- communicate understandings, findings, arguments and conclusions.

Structure:

Unit 1	Unit 2	Unit 3	Unit 4
Cells and multicellular organisms <ul style="list-style-type: none"> Cells as the basis of life Multicellular organisms 	Maintaining the internal environment <ul style="list-style-type: none"> Homeostasis Infectious diseases 	Biodiversity and the interconnectedness of life <ul style="list-style-type: none"> Describing biodiversity Ecosystem dynamics 	Heredity and continuity of life <ul style="list-style-type: none"> DNA, genes and the continuity of life Continuity of life on Earth

Assessment:

Schools devise assessments in Units 1 and 2 to suit their local context.

In Units 3 and 4 students complete four summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall subject result (A–E).

Summative assessments:

Unit 3	Unit 4		
Summative internal assessment 1 (IA1): <ul style="list-style-type: none"> Data test 	10%	Summative internal assessment 3 (IA3): <ul style="list-style-type: none"> Research investigation 	20%
Summative internal assessment 2 (IA2): <ul style="list-style-type: none"> Student experiment 	20%		
Summative external assessment (EA): 50% <ul style="list-style-type: none"> Examination 			

Costs

It is expected that students studying this subject participate in BYOD. Please see page 155 for further information and device specifications.

- approximately \$50 excursion costs