

Subject name	Biology
Subject code	BIO
Subject type	General
Subject fee	\$20
Prerequisites	Minimum C+ Year 10 Semester 2 General Science AND Minimum C+ Year 10 Semester 2 Taster General Maths, Maths Methods and General English, Literature

Course overview

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 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.

Course outline

Unit 1	Unit 2	Unit 3	Unit 4
Cells and multicellular organisms <ul style="list-style-type: none"> Cells as the basis of life Exchange of nutrients and wastes Cellular energy, gas exchanges and plant physiology 	Maintaining the internal environment <ul style="list-style-type: none"> Homeostasis – thermoregulation and osmoregulation Infectious disease and epidemiology 	Biodiversity and the interconnectedness of life <ul style="list-style-type: none"> Describing biodiversity and populations Functioning ecosystems and succession 	Heredity and continuity of life <ul style="list-style-type: none"> Genetics and heredity Continuity of life on Earth

Assessment

In Units 1 and 2 students complete a Data Test, Student Experiment, Research Investigation and Exam. Units 1 and 2 are devised to replicate instruments used in Units 3 and 4. Assessments in Unit 1 and 2 are formative. 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 exit subject result from QCAA that is A-E.

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1: • Data test	10%	Summative internal assessment 3: • Research investigation	20%
Summative internal assessment 2: • Student experiment	20%		
Summative external assessment: 50% - Examination			

Career opportunities

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.

Special Course requirements

Students are expected to do homework regularly, to follow up class activities and to prepare for the next class. Total homework over the period of a week should be approximately 2½ hours. Appropriate footwear is to be worn in the laboratory, i.e. shoes with impervious uppers. The course places considerable emphasis upon practical work conducted within a laboratory and in the field. There is a minimum time commitment for field work and this is a mandatory component of the course.