

Course: **BIOLOGY**

2 units for each of Preliminary and HSC Board Developed Course



Exclusions: Nil

Course Description:

The *Biology Stage 6 Syllabus* explores the diversity of life from a molecular to a biological systems level. The course examines the interactions between living things and the environments in which they live. It explores the application of biology and its significance in finding solutions to health and sustainability issues in a changing world.

Biology uses Working Scientifically processes to develop scientific investigative skills. It focuses on developing problem-solving and critical thinking skills in order to understand and support the natural environment. When Working Scientifically, students are provided with opportunities to design and conduct biological investigations both individually and collaboratively.

The study of biology, which is often undertaken in interdisciplinary teams, complements the study of other science disciplines and other STEM (Science, Technology, Engineering and Mathematics) related courses. Through the analysis of qualitative and quantitative data, students are encouraged to solve problems and apply knowledge of biological interactions that relate to a variety of fields.

The Biology course builds on the knowledge and skills of the study of living things found in the Science Stage 5 course. The course maintains a practical emphasis in the delivery of the course content and engages with the technologies that assist in investigating current and future biological applications.

The course provides the foundation knowledge and skills required to study biology after completing school, and supports participation in a range of careers in biology and related interdisciplinary industries. It is a fundamental discipline that focuses on personal and public health and sustainability issues, and promotes an appreciation for the diversity of life on the Earth and its habitats.

Preliminary Course

		Modules	Indicative hours	Depth studies
Year 11 course (120 hours)	Working Scientifically Skills	Module 1 Cells as the Basis of Life	60	*15 hours in Modules 1–4
		Module 2 Organisation of Living Things		
		Module 3 Biological Diversity	60	
		Module 4 Ecosystem Dynamics		

HSC Course

		Module	Indicative hours	Depth studies
Year 12 course (120 hours)	Working Scientifically Skills	Module 5 Heredity	60	*15 hours in Modules 5–8
		Module 6 Genetic Change		
		Module 7 Infectious Disease	60	
		Module 8 Non-infectious Disease and Disorders		

*15 hours must be allocated to depth studies within the 120 indicative course hours.