


School Code	SIP		
Year Level	11 & 12	QCE Credits	4
Subject Type	Applied Subject	VET Contribution	N/A
Recommended Academic Performance	Science—C Standard		
21 st Century Skills	Communication 		

Science in Practice develops critical thinking skills through the evaluation of claims using systematic reasoning and an enhanced scientific understanding of the natural and physical world.

Students learn through a contextual interdisciplinary approach that includes aspects of at least two science disciplines — Biology, Chemistry, Earth and Environmental Science or Physics. They are encouraged to become scientifically literate, that is, to develop a way of thinking and of viewing and interacting with the world that engages the practical and analytical approaches of scientific inquiry.

Students plan investigations, analyse research and evaluate evidence. They engage in practical activities, such as experiments and hands-on investigations. Through investigations they develop problem-solving skills that are transferable to new situations and a deeper understanding of the nature of science.

Pathways

A course of study in Science in Practice is inclusive and caters for a wide range of students with a variety of backgrounds, interests and career aspirations. It can establish a basis for further education and employment in many fields, e.g. animal welfare, food technology, forensics, health and medicine, the pharmaceutical industry, recreation and tourism, research, and the resources sector.

Objectives

By the conclusion of the course of study students should:

- describe and explain scientific facts, concepts and phenomena in a range of situations
- describe and explain scientific skills, techniques, methods and risks
- analyse data, situations and relationships
- apply scientific knowledge, understanding and skills to generate solutions
- communicate using scientific terminology, diagrams, conventions and symbols
- plan scientific activities and investigations
- evaluate reliability and validity of plans and procedures, and data and information
- draw conclusions, and make decisions and recommendations using scientific evidence.

Structure:

The Science in Practice course is designed around four topics from the below list:

Core topics	
<ul style="list-style-type: none"> • Forensic science • Transport • Ecology 	<ul style="list-style-type: none"> • Disease • Sustainability • Consumer Science

Assessment:

For Science in Practice, assessment from Units 3 and 4 is used to determine the student's exit result, and consists of four instruments, including:

- 2 projects
- 2 investigations

Project	Investigation
A response to a single task, situation and/or scenario.	A response that includes locating and using information beyond students' own knowledge and the data they have been given.
<p>At least two different components from the following:</p> <ul style="list-style-type: none"> • written: 500–900 words • spoken: 2½–3½ minutes • multimodal <ul style="list-style-type: none"> - non-presentation: 8 A4 pages max (or equivalent) - presentation: 3–6 minutes • performance: continuous class time • product: continuous class time. 	<p>Presented in one of the following modes:</p> <ul style="list-style-type: none"> • written: 600–1000 words • spoken: 3–4 minutes • multimodal <ul style="list-style-type: none"> - non-presentation: 10 A4 pages max (or equivalent) - presentation: 4–7 minutes.