

SCIENCE

800

INTRODUCTION

This is a continuation of the Year 9 course. The aims of the course include: helping students to acquire an understanding of the living, physical, material and technological components of their environment; developing skills of scientific investigation and providing the opportunities to develop the attitudes on which scientific investigation depends.

CONTENT

Seven units covering the Nature of Science, taught in a variety of contexts:

Making New Materials	Survival
Electricity	Body in Question
Chemistry in Action	Force and Motion
Geology	

10 SCI — SCIENCE

SKILLS

Gather and interpret data	Use evidence
Critique evidence	Interpret representations
Engage with science	

ACTIVITIES

Australian Science Competition; Environment Club; UC Science Outreach Programme; Canterbury-Westland Schools Science & Technology Fair.

ASSESSMENT

Each module is assessed. There is a two hour examination at the end of the year.

Selected students may be given the opportunity to complete a NCEA Level 1 Achievement Standard.

FUTURE PATHWAYS

11SCA or 11SCI or 11BCH and 11PSC

NCEA STANDARD – 10 SCI

	Level	Credits	L1 Lit.	L1 Num.	
Internal					
90935 v3	1	4	no	yes	Physics 1.1 - Carry out a practical physics investigation that leads to a linear mathematical relationship, with direction

801

INTRODUCTION

We live in an age that uses the products of science and technology: genetically modified food, DVDs, computers, microwave ovens, etc. But our eager use of technology brings problems: pollution and acid rain; conservation or the development of resources? Jobs or robots? Through classroom experiences students learn many of the basic ideas of science. They are assisted in developing the knowledge and abilities to make informed judgements on many of the scientific and technological issues society faces today.

FUTURE PATHWAYS

12AGR and/or 12BIO and/or 12CHE and/or 12PHY

11 SCI — SCIENCE

CONTENT

- Genetic variation
- Motion and energy, electrical circuits
- Chemical reactions
- Micro-organisms
- A practical investigation.

SKILLS

- Understand and carry out instructions efficiently
- Observe phenomena and use laboratory equipment correctly
- Design and carry out simple laboratory investigations
- Organise, record, present, interpret and critically appraise data
- Explain findings in the language of science
- Work together as part of a team.

NCEA STANDARDS – 11SCI

Not all standards will necessarily be assessed.

	Level	Credits	L1 Lit.	L1 Num.	
External					
90927 v3	1	4	yes	no	Biology 1.3 - Demonstrate understanding of biological ideas relating to micro-organisms
90940 v3	1	4	no	yes	Science 1.1 - Demonstrate understanding of aspects of mechanics
90948 v3	1	4	yes	no	Science 1.9 - Demonstrate understanding of biological ideas relating to genetic variation
Internal					
90930 v3	1	4	no	yes	Chemistry 1.1 - Carry out a practical chemistry investigation, with direction
90947v4	1	4	no	no	Science 1.8 - Investigate selected chemical reactions