



Science

Description

This unit is designed to provide students with a variety of experiences in science with relevant links to the real world. They will further develop their general skills and knowledge related to the study of science with a focus on selected elements of Biological Science, Chemical Science, Earth and Space Science and Physical Science. An emphasis will be placed on laboratory work; students will learn by using equipment, making observations, gathering information, solving problems and performing experiments. Year 9 science aims to further develop the students understanding of the scientific method and purposeful investigation techniques.

Unit Topics

- *Investigate the interdependencies between biotic and abiotic components of ecosystems*
- *Explore the ways in which the human body as a system responds to its external environment.*
- *Begin to apply their understanding of energy and forces to global systems including continental movement.*
- *Are introduced to the notion of the atom as a system of protons, electrons and neutrons, and understand how this system can change through nuclear decay*
- *Learn that matter can be rearranged through chemical change and that these changes play an important role in many systems*
- *Begin to develop a more sophisticated view of energy transfer.*
- *Explore the physical evidence for different theories, such as the Big Bang theory.*

Skill Development

- *Students formulate hypotheses and analyse data to draw and evaluate conclusions using primary and secondary sourced evidence.*
- *Focus on explaining phenomena involving science and its applications.*
- *Begin to evaluate current scientific views and construct evidence based arguments*
- *Communicate science ideas for specific purposes*

Possible Assessment Tasks

Scientific Reports, Practical investigations, Presentations, Unit tests, Scientific posters, models of concepts

Activities

Class discussion, group work, modelling, designing, investigating.

Career Options

Year 9 Science provides essential skills for further science studies in VCE in Chemistry, Physics and Biology. It also provides underpinning knowledge for a number of technology subjects and various trades.