Subject name Chemistry

Subject code TCM (General subject)

Additional Subject fee Nil

**Prerequisites** Minimum C Science, Maths and English

## **Course Overview**

Chemistry is the study of materials and their properties and structure. In this subject, students will be introduced to concepts such as atomic theory, chemical bonding, and the structure and properties of elements and compounds. They may also explore aspects of topics such as intermolecular forces, gases, aqueous solutions, acidity and rates of reaction.

Studying this subject will enable students to:

- develop interest in and appreciation of chemistry and its usefulness in helping to explain phenomena and solve problems encountered in their ever-changing world
- experience learning opportunities and experiences within Chemistry at a greater depth and breadth than those available in the core Junior Science course.
- develop a sound knowledge base on which to build on in future.
- develop the study skills and processes necessary to apply knowledge in Chemistry.
- have an opportunity to refine their skills through practical activities
- make an informed subject choice for Year 11 and 12.

## **Course Outline**

The topics covered in the program will be different from those covered in the core Year 10 Science course.

The course introduces aspects of the senior general Chemistry curriculum, which can include:

- Chemical fundamentals structure, properties and reactions
- Molecular interactions and reactions
- Equilibrium, acids and redox reactions
- Structure, synthesis and design

## **Assessment**

Assessment within Chemistry uses techniques modelled on those used in Year 11 and 12. This includes a Data Test, Research Investigation, and/or a Student Experiment. Overall, the assessment program will require students to take more responsibility for their own plans and actions in line with the Senior School.

## **Career Opportunities**

Studying Chemistry can establish a basis for further education and employment in the fields of forensic science, environmental science, engineering, medicine, dentistry, pharmacy and sports science.

**Note:** This option is separate from the Rural Operations, Physics, Biology or Science in Practice subject options. While these options complement each other, they each act as stand-alone units as well. Students may, and are encouraged to, select up to three of the Year 10 subject options.