



CHEMISTRY

Stage 5: Years 9-10 Subject Overview

- Course Numbers - 11050 for Year 11 Chemistry and 15050 for Year 12 Chemistry
- 2 units for Year 11 (Preliminary) and Year 12 (HSC).
- Board Developed Course.
- Exclusions: Nil

Course Description

The Year 11 course develops the knowledge, understanding and skills in relation to the properties and structures of matter, the types and drivers of chemical reactions and how we measure the quantities involved in these processes.

The Year 12 course builds on the concepts introduced in Year 11 by examining particular classes of chemicals, processes and a variety of chemical reactions which incorporate organic compounds and acid/base equilibrium reactions. The course challenges students to apply this knowledge to the investigation of a range of methods used in identifying and measuring quantities of chemicals which leads to an understanding of the structure, properties and trends of and between classes of chemicals.

Content

Year 11

The Year 11 course consists of four modules.

- Module 1 Properties and Structure of Matter
- Module 2 Introduction to Quantitative Chemistry
- Module 3 Reactive Chemistry
- Module 4 Drivers of Reactions

Year 12

The Year 12 course consists of four modules.

- Module 5 Equilibrium and Acid Reactions
- Module 6 Acid/base Reactions
- Module 7 Organic Chemistry
- Module 8 Applying Chemical Ideas

Course Requirements

Students are provided with 15 hours of course time for depth studies in both Year 11 and Year 12. During this time students may undertake an investigation/activity that allows for the further development of one or more scientific concepts. A depth study may be one investigation/activity or a series of investigations/activities. Depth studies may be included in one module or across several modules. Practical investigations are an essential part of the Year 11 and Year 12 courses and must occupy a minimum of 35 hours of course time each year.