

# CHEMISTRY

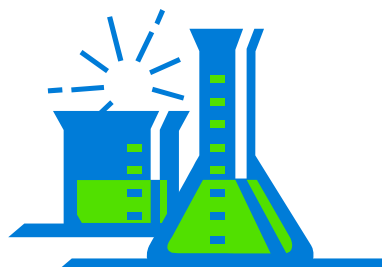
## CHE 301

*This **is** an approved subject for University Entrance*

Chemistry is concerned with the accumulation of knowledge about the behaviour of substances and their conversion into new substances. A basic understanding of chemistry is required by many of the more glamorous sciences like forensics, genetic engineering and nano technology.

### Course content includes:

- Atomic structure
- Inorganic Chemistry
- Quantitative Chemistry
- Energy in Reactions
- Aqueous Solutions
- Oxidation and Reduction
- Organic Chemistry



### Assessment

Assessment is by both practical and theory exams. Theory exams take place at the end of the year but during the year unit standard assessments will be used as end of topic tests.

#### INTERNAL ASSESSMENTS

Achievement/ Unit Standard	Number	Title	Credits
AS 3.1	90694	Carry out extended practical investigation involving quantitative analysis	4
AS 3.2	90695	Determine the concentration of an oxidant or reductant by titration	2
US	6345	Analyse spontaneous oxidation – reduction reactions	4
US	6343	Explain periodic trends in the properties of elements and compounds	4
US	8948	Calculate the enthalpy change associated with chemical reactions	2
US	6344	Investigate the characteristic properties and reactions of organic substances	5
US	8950	Predict the formation of precipitates of sparingly soluble substances	2
US	8949	Characterise the composition of acid and base solution	4

#### EXTERNAL ASSESSMENTS

Achievement/ Unit Standard	Number	Title	Credits
AS 3.3	90696	Describe oxidation-reduction processes	3
AS 3.4	90780	Describe properties of particles and thermochemical principles	5
AS 3.5	90698	Describe aspects of organic chemistry	5
AS 3.7	90700	Describe properties of aqueous systems	5

<b>Suggested pre-requisites</b>	:	<b>CHE 201 (10 credits achieved)</b>
<b>Course costs</b>	:	<b>Revision book \$35</b>
<b>Contact persons</b>	:	<b>Mr S Sawtell/Mr S McMillan</b>