**CHEMISTRY NATIONAL 5**

**CONTENT**

The Course has 3 mandatory units:

**Chemical Changes and Structure**

In this Unit, learners will develop scientific skills and knowledge of the chemical reactions in our world. Through practical experience, learners will investigate average rates of reaction and the chemistry of neutralisation reactions. Focusing on these reactions, learners will work towards the concept of balanced chemical reactions. Learners will explore the mole concept, formulae and reaction quantities. The connection between bonding and chemical properties of materials is investigated.

**Nature’s Chemistry**

The Earth has a rich supply of natural resources which are used by all of us. In this Unit, learners will investigate the physical and chemical properties of cycloalkanes, branched chain alkanes and alkenes, and straight chain alcohols and carboxylic acids. They will explore their chemical reactions and their uses in everyday consumer products. Learners will investigate the comparison of energy from different fuels.

**Chemistry in Society**

In this Unit, learners will develop skills and carry out practical investigations related to the chemistry of materials. Learners will focus on the chemistry of metals and their bonding, reactions and uses. The connection between bonding in plastics, their physical properties and their uses is investigated. Learners will investigate the chemical reactions and processes used to manufacture fertilisers. They will research the use and effect of different types of nuclear radiation. Learners will investigate chemical analysis techniques used for monitoring the environment.

**ASSESSMENT**

To pass National 5 Chemistry, learners must pass all of the required Units mentioned above and the final exam.

**HOMEWORK**

Homework will be given on a regular basis to assist in learning. In addition, pupils are expected to prepare for end of topic tests and unit assessments. Pupils should spend approximately 40 minutes on homework each week.

**ENTRY REQUIREMENTS**

* National 4 Chemistry
* By negotiation with the department