

## Chemistry (Advanced Higher)

### Course Content:

This course provides the ideal opportunity for pupils to work using their own initiative. It is therefore ideal for those intending to go to university, whether the intention is to study Chemistry or not.

The course is organised into 3 units:

- 1. Inorganic and Physical Chemistry** – Electromagnetic Radiation, Atomic orbitals, Spectroscopy, Transition metals and Chemical equilibrium
- 2. Organic Chemistry and Instrumental Analysis** – Aromatics, Amines, Medicines, Elemental Analysis, Mechanisms and Colour Chemistry
- 3. Researching Chemistry** – Chemical Analysis, Chemical calculations, Practical skills, Stoichiometry and Safety.

### Assessment:

#### External

- An external examination paper of 2.5 hours which includes multiple choice, structured questions and data handling exercises.(100 marks)
- A written report and a lab book on the pupil's investigation. (30 marks)

#### Internal

- One unit assessment covering knowledge, understanding and problem solving for each of the units.
- One practical write up chosen from any unit.

### Entry requirements:

A prerequisite of this course is a minimum 'C' grade pass at Higher Chemistry.

### Homework:

Each week there will be two or three homework sets. In addition to this students will be expected to spend time learning the theory covered in class.

### Progression:

This course provides pupils with a sound grounding in Advanced Chemistry. It is excellent for students who intend to progress onto chemistry, chemical engineering, dentistry, medicine and vet medicine at university.