# CHEMISTRY

## GCE A LEVEL

OCR GCE Advanced Level Chemistry
6 Lessons per week teaching time
Course leader: Mr Robert McGough
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## Course Structure

- Development of practical skills in Chemistry
- Foundations in chemistry - atoms, compounds, molecules and equations, amount of substance, acid - base and redox reactions, electrons, bonding and structure.
- Periodic table and energy – the period table and periodicity, Group 2 and the halogens, qualitative analysis, enthalpy changes, Reaction rates and equilibrium.
- Core organic chemistry - basic concepts, hydrocarbons, alcohols and haloalkanes, organic synthesis, analytical techniques.
- Physical chemistry and transition elements -reaction rates, quantitative equilibrium, pH and buffers, enthalpy, entropy and free energy, redox and electrode potentials, transitions elements.
- Organic chemistry and analysis - aromatic compounds, carbonyl compounds, carboxylic acids and esters, nitrogen compounds, polymers, organic synthesis, chromatography and spectroscopy.

## Assessment

2 Examinations 2hours 15 mins
(37% each)
1 Examination 1 hour 30 mins (26%)
Practical endorsement by teacher

## Course Features

A Level Chemistry offers the opportunity to understand how society makes decisions about science issues and how the sciences contribute to the success of the economy and society. It is a facilitating subject that is well regarded by top universities and employers
Practical skills are developed throughout the course and are assessed as part of the written examination.

**Progression & careers**
Chemistry is an ideal A level to study as it complements many other subjects. It sits well with Maths, Physics and Biology, as well as being a good stand-alone science if you are mainly studying Art subjects at AS.
People go into a diverse range of professions with a Chemistry background. It is essential if considering any scientific based degrees which would benefit from this subject knowledge such as Biological sciences, Engineering, Medicine, Veterinary sciences and Geology.
Equally it is a facilitating subject so the more competitive Universities view it very favourably due to its academic nature.
**Recommended Texts**
A level Chemistry A for OCR
**ISBN-10:** 019835197
**ISBN-13:** 978-0198351979
A level Chemistry A for OCR Year 1 and AS student book
**ISBN-10:** 0198351968
**ISBN-13:** 978-0198351962

**Entry requirements**

Grade 6 or above in GCSE Mathematics
AND
Grade 7 or above in GCSE Chemistry OR
Grade 7 or above in both Combined Science Trilogy Higher Tier