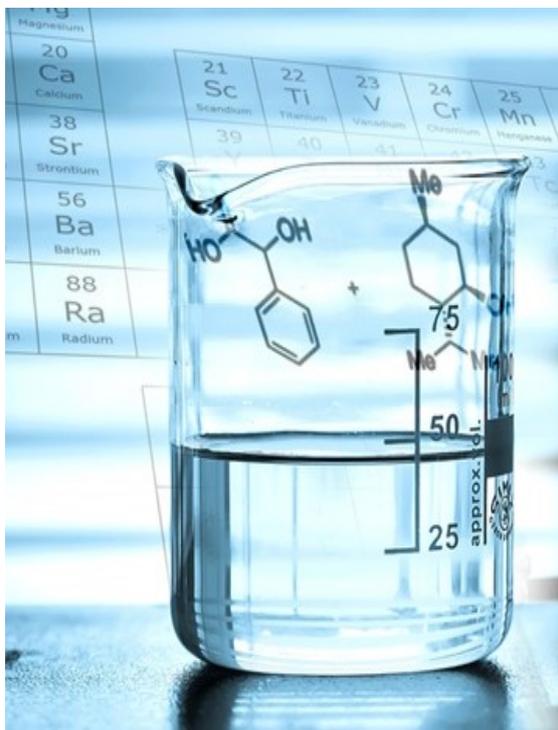


A Level Chemistry



Chemistry is the scientific study of life. It encompasses the study of matter, its properties, how and why substances combine or separate to form other substances, and how substances interact with energy. Understanding basic chemistry concepts is important for almost every profession.

The aim of this course is to allow students to develop their interest in and enthusiasm for chemistry and to provide them with the qualifications needed to allow them to pursue their chosen career.

FOR FURTHER INFORMATION:

<http://www.rsc.org/learn-chemistry/>

COURSE CONTENT:

In the first year of A level study you will study:

Atomic structure, amount of substance, bonding, energetics, kinetics, chemical equilibria and Le Chatelier's principle.

Periodicity, Group 2 the alkaline earth metals, Group 7 the halogens.

Introduction to organic chemistry, alkanes, halogenoalkanes, alkenes, alcohols, organic analysis.

In the second year of A level study you will study:

Thermodynamics, rate equations, equilibrium constant (K_c) for homogeneous systems, electrode potentials and electrochemical cells.

Properties of Period 3 elements and their oxides, transition metals, reactions of ions in aqueous solution.

Optical isomerism, aldehydes and ketones, carboxylic acids and derivatives, aromatic chemistry, amines, polymers, amino acids, proteins and DNA, organic synthesis.

DEGREE COURSES / CAREERS:

If you want to go into a career in any form of medicine including doctor or veterinarian then you will find A-level chemistry compulsory, however there are many subjects and careers where this is the case, as well as there being many options where an A-level chemistry qualification is desirable.

Possible career and course options available to you include: medicine, pharmacy, veterinary science, chemistry, biochemistry, food science/nutrition, forensic science, biological/engineering careers, optical management, optometry, microbiology, natural sciences, pharmacology, software engineering and physiology, and these all require A-level chemistry as essential. Careers and courses that find chemistry desirable include food technology, nursing, physiotherapy, radiography, paramedical courses, law and zoology.

DEPARTMENT:
SCIENCE

LEVEL: ADVANCED

AWARDING BODY:
AQA

DURATION:
TWO YEARS

ENTRY
REQUIREMENTS:
CHEMISTRY 6 and a
SECOND SCIENCE 6

COMBINED
SCIENCE: 66

MATHS: 6

ENGLISH LANG: 6

ASSESSMENT AND
UNITS:

At the end of two
years you will take:

Three 2 hour
written papers.

A separate
endorsement of
practical skills will
be taken alongside
the A-level. This
will be assessed by
teachers and will
be based on
observing
students'
competency during
12 practicals.