RADYR

Chemistry

Exam Board: WJEC

Chemistry is a central subject for students wishing to study sciences at post-GCSE level. It covers a wide range of topics, from the physical and mathematical perspective through to the chemistry of molecules in living organisms. It is highly regarded by universities, colleges and employers as it develops skills of analysis, logical thinking and application of knowledge in new and changing situations. Chemistry is based on experimental evidence, and the links between theory and experiment are stressed.

Minimum Entry Requirements

 A minimum of 6 A* to C grades at GCSE with BB grades in Science or a B Grade in Chemistry.

If you have any queries, please contact Mr J Firth (Head of Department).

The AS course

This course stresses the beneficial role of chemistry to society, and an understanding of environmental and ethical issues is developed. Students are made aware of how advances in information technology and instrumentation are used in Chemistry. Students will be encouraged to increase their knowledge and understanding of the concepts of Chemistry and use them to find the reasons behind many of the facts learned at GCSE.

Module Ch1 (AS Level 50% / A Level 20%)

 This module covers atomic structure; moles and equations; solids, liquids and gases. Assessment will be by external examination.

Module Ch2 (AS Level 50% / A Level 20%)

 This module covers kinetics, equilibria and energetics; introduction to organic chemistry; industrial and environmental aspects, bonding and trends in the periodic table. Assessment will be by external examination.

The A2 course

Module Ch3 (A Level 25%)

• This module covers spectroscopy and further organic chemistry. Assessment will be by external examination.

Module Ch4 (A Level 25%)

 This module covers further inorganic chemistry and further physical chemistry. Assessment will be by external examination.

Module Ch5 (A Level 10%)

This unit comprises two tasks:

- Experimental Task (30 marks)
- Practical Methods and Analysis Task (30 marks)

Career Opportunities

Any student wishing to apply for any Scientific course at University will find an AS or A2 qualification in Chemistry extremely useful. In fact, some University courses make such a qualification compulsory, e.g. Medicine, Dentistry, Veterinary Science, Biochemistry, Biology (& associated subjects), Metallurgy, Biomedical Studies.