Senior Cycle – Chemistry

Subject Group: Science

These subjects demonstrate how to explore nature using carefully planned methods, and teach the basic methods and findings of scientific investigation.

What is Chemistry?

The Leaving Certificate course follows directly from Junior Cert Science and deals with more topics in alot more depth. The course includes 28 mandatory practical experiments which must be completed in the lab, as well as a written paper including questions on the experiments and examining the theory and applications of chemistry.

Why do Chemistry?

Chemistry exists everywhere not just in laboratories but in every living thing on land and sea and in our bodies. It is often described as 'the central science' containing a lot of formulas. So, if you enjoyed Junior Cert Science and you did well in it and maths you should be a good candidate for Leaving Cert Chemistry. Chemistry is an essential element in the study of careers including: Medicine, Dentistry, Veterinary Science, Physiotherapy, Nursing, Pharmacy and Medical Laboratory Technology.

Career Possibilities

Chemistry is considered most useful for careers in Pharmacy, Ag Science, Medicine, Engineering, General Sciences and Biotechnology.

Subject Content

Leaving Cert. Chemistry is comprised of all the essential and relevant topics within general chemistry. The major topics involved include the following:

Atomic structure

Volumetric analysis

Organic chemistry

Water chemistry

Reaction mechanisms.

There also is an option to be taken as part of the course which involves the study of atmospheric and industrial chemistry or the study of materials and electrochemistry.

Experimental investigations are an essential part of the leaving certificate course. Each student must complete at least 28 experiments over the duration of the course.

Experimental work is examined as part of the leaving cert exam and forms the basis for a minimum of three questions on the exam paper.

Exam Structure

The leaving cert exam is three hours in duration. Each candidate must answer at least two questions from Section A (experimental section) and a maximum of six questions from Section B.

There are eleven questions in total on the exam paper, each carrying fifty marks.

There is no element of continuous assessment but experimental copies must be available for inspection by the State Examinations Commission. Students taking chemistry have to memorize the chemical components of a series of prescribed experiments. They will need to present the elements of four such experiments in their exam.