

# Chemistry Advanced Higher

## Award Received

Advanced Higher Chemistry is graded A – D.

## Entry Level: What do I need to do it?

Advanced Higher Chemistry is an ideal introduction to university level study and as such is aimed at students who show a serious interest in the subject and who from their prelim results are predicted to attain H Chemistry at Grade A or B.

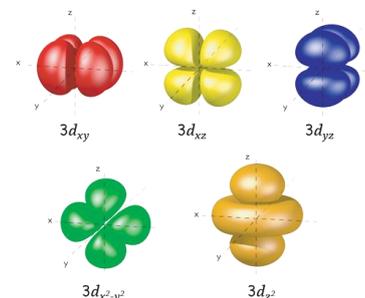
In addition you **must** have a high degree of commitment, self-motivation and the ability to study independently.

## Course Content: What will I learn?

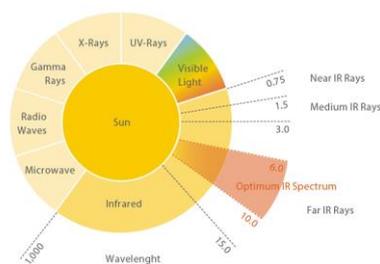
The general aim of this course is to continue to develop your knowledge and understanding of chemistry. In addition, a whole Unit is dedicated to developing your practical skills as well as skills of scientific inquiry, investigation and analytical thinking. This Unit prepares you for your Project.

## Inorganic & Physical Chemistry

In this Unit you will learn about the key areas of electromagnetic radiation and atomic spectra, atomic orbitals and electronic configurations and the Periodic table, transition metals, chemical equilibrium, reaction feasibility and kinetics.



## Organic & Instrumental Analysis



In this Unit you will learn about the key areas of molecular orbitals, molecular structure, stereo chemistry, synthesis, experimental determination of structure, and pharmaceutical chemistry.

Infra-red, UV/Visible and nmr Spectroscopy.

## Researching Chemistry

In this Unit you will learn about the key areas of gravimetric analysis, volumetric analysis, practical skills and techniques and stoichiometric calculations



## **Teaching Methods: What will I do?**

The course will consist of a mixture of taught, written and practical work, but there will be a high expectation that you will commit to extended periods of independent study.

## **Assessment: How will I be assessed?**

You will be assessed as follows:

- \* **Topic Tests and Prelim** - covering knowledge and understanding of key areas and problem solving
- \* **Final Exam** - covering knowledge and understanding and problem solving,
- \* **Project** - you will independently carry out an in-depth and extensive project on a topic of your choice

## **Home Study.**

The distinction between class work and home study will become less obvious. Study periods must also be incorporated to maintain the necessary pace of this course.

Limited quality time for Practical work makes it essential that preparation is completed prior to the commencement of this work to ensure maximum use of time. Similarly, work must be processed immediately to allow for remedial actions, if necessary.

A high level of organisational skills will be needed.

## **Progression in the Senior Phase.**

Most students are aiming for university on completion of the AH Chemistry course.