

## ST MARY'S COLLEGE



## INTRODUCTION

You will study the reactions of inorganic compounds and organic compounds. You will learn how to predict the structures of the product substances and you will study the theory of why chemical substances react with each other. Chemicals are essential to the quality of your life, from anti-cancer drugs, drugs to control blood pressure and many other conditions, to shampoos and plastic bottles.

## AS LEVEL

*Content*

Module	Assessment
Unit 1 – Foundation Chemistry	Examination paper 1¼ hours 4 – 5 short answer questions plus 1 longer structured question. 33⅓ % of the total AS marks 16⅔ % of the total A-level marks
Unit 2 – Chemistry in Action	Examination paper 1¾ hours 6 – 8 short answer questions plus 2 longer structured questions 46⅔% of the total AS marks 23⅔% of the total A-level marks
Unit 3 – Investigative & Practical Skills in AS Chemistry	Internal Assessment Investigative Skills Assignment Practical Skills Assessment 20% of total AS marks 10% of total A-level marks

*How is the course delivered?*

Chemistry is a practical subject and you will have regular experiment sessions; some experiments you will do individually and some in pairs. The course will be taught via practical work, problem solving, lectures and tutorials.



## Entry requirements

To follow advanced level Chemistry successfully students should have gained a minimum of two grade C, at higher tier, in appropriate science subjects. It is expected that students will have studied Chemistry as a separate subject or will have followed the 'science and additional science' route. Due to the mathematical nature of chemistry, a grade C or better in Mathematics is also preferred.

*Please note that the exact entry requirements for an AS programme depend upon the number and type of AS courses that you intend to take.*

## How does it build upon studies in Key Stage 4?

In the first year the topics studied will be an extension of GCSE work. Old friends such as the mole, atomic structure and chemical bonding will be studied, but in more detail than at GCSE. Much more organic chemistry is dealt with than you have come across before. Organic chemicals are the basis for much of our quality of life, used in:

- textiles
- medicine and drugs (you will make aspirin on your second year)
- detergents, from washing powders to shampoos and conditioners
- cosmetics
- brake fluids and antifreeze

You will begin to study the machinery of Chemistry, ie what makes chemical reactions take place, how much energy is needed or given out and how fast they go.

## How is the course assessed?

The modules will be assessed through one written examination paper in January and two in June and an internal assessment of your experimental skills.

## A2 LEVEL

### Content

Module	Assessment
Unit 4 – Kinetics, Equilibria and Organic Chemistry	Examination paper 1¾ hours 6 – 8 short answer questions plus 2 structured questions. Some of the questions will have synoptic elements. 20% of the total A-level marks
Unit 5 – Energetics, Redox and Inorganic Chemistry	Examination paper 1¾ hours 5 – 7 short answer questions plus 2-3 longer structured questions. Some of the questions will have synoptic elements. 20% of the total A-level marks
Unit 6 – Investigative and Practical Skills in A2 Chemistry	Internal Assessment Investigative Skills Assignment Practical Skills Assessment 10% of total A-level marks

### ***How is the course delivered?***

The methods will be similar to those for AS, but you will be expected to work more on your own and to apply facts to new problems.

### ***Entry requirements***

A pass grade at AS.

### ***How is the course assessed?***

The modules will be assessed via two examination papers. These will be taken in January and June of your second year. You will also be able to re-sit any of modules in the examination sessions of your second year.

### ***Progression routes***

Advanced level Chemistry is compulsory for medicine and dentistry. It is desirable for many biological science courses as well. Chemistry is a very desirable degree to have and graduates in this subject rarely have difficulty in finding employment, and not necessarily in the chemical field.

### ***Further Information***

***For further information please contact Cheryl Rowney***

***Full specifications can be found at [www.aqa.org.uk](http://www.aqa.org.uk)***

**NOTES:**

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