

# Biology

**Qualification:**

A-Level Biology

**Additional Entry Information:**

**Maths /  
Numeracy**

B

**English**

B

**Other Subjects**

**Triple Award :** B  
or above in Biology  
and Chemistry

**Double Award :**  
AB minimum in  
Double Award  
Science

**Other Comments**

Pupils will be expected to sit an assessment early in year 12 to determine whether Biology A level is an appropriate course to follow. The exam will cover a selection of GCSE topics and a very simple A level topic. Revision materials will be available at the end of the summer term.

Speak to **Mrs E Mitchell** for more information.

## What do students need to know or be able to do before taking the course?

The numeracy and literacy demands of A Level Biology have increased significantly. Since the change to the specification in 2015, most B grade Maths/Numeracy/English Language pupils have struggled to make the transition from GCSE to A level and have failed to complete the course. Medical Science may be a more suitable alternative.

## What will students learn on this course (skills and course content)?

The Biology AS and A Level course aims to:

- Provide a broad factual base and stimulate an interest in all things biological
- Promote an investigatory approach and understanding of scientific methods
- Provide a critical appreciation of wider issues arising from the subject.

## What sort of student is this course suitable for?

Biology is a demanding A level, so students need to be high achieving across the curriculum and be able to revise large amounts of work

Examples of Topics you may be interested in: Medical and Health issues e.g. disease and disease control (vaccination programmes, overuse of antibiotics), genomics, gene therapy, genetic engineering, DNA fingerprinting, the effects of drugs

Environmental issues e.g. greenhouse effect, agricultural exploitation, pest control Evolution and natural selection

## What kind of work will students need to be able to do outside of lessons?

The specification content is very large and has to be known in detail. You will be expected to complete a large number of past paper questions and revise thoroughly for regular tests. Tests and some assessed practicals will be completed in free periods. It is also useful to keep abreast of current developments in Biology via television programmes, newspapers, Internet.



## **What is the course content and how is this assessed?**

### AS – Year 12

Basic Biochemistry and Cell Organisation (20%) - Written paper – 1 hour 30 minutes

Biodiversity and Physiology of Body Systems (20%) - Written paper – 1 hour 30 minutes

### A2 – Year 13

Energy, Homeostasis and the Environment (25 %) - Written paper – 2 hours

Variation, Inheritance and Options (25%) - Written paper – 2 hours

Practical Examination (10%) - 2 x 1 hour

## **What could students go on to do at the end of this course?**

Very important for medicine, dentistry, pharmacy, optometry and allied fields. Career opportunities exist in many areas such as the food industry, environmental monitoring and obviously forms a base for many science based degrees courses. Biology is one of the subjects listed as a 'facilitator' subject by universities in the Russell Group.