

## QUALIFICATION:- A Level

### You will study the following units:-

#### Year 12

**Unit 1** - Biological Molecules—studying the structure and role of fats, carbohydrates, proteins and DNA in living organisms,

**Unit 2** - Cells - cell structure of eukaryotes and prokaryotes, microscopy, cell transport and the immune system,

**Unit 3** - Exchange - lungs, digestive system, circulatory system,

**Unit 4** - Genetics - DNA, genes and chromosomes, protein synthesis, genetic diversity and taxonomy.

#### Year 13

**Unit 5** - Energy Transfer - photosynthesis, respiration, nutrient cycles,

**Unit 6** - Organisms Responses to their Environment - Stimulus and response, nerve impulses, muscles, homeostasis,

**Unit 7** - Genetics, Populations and Ecosystems - inheritance, evolution and populations,

**Unit 8** - Gene Expression - mutations, Human Genome Project, genetic engineering, genetic fingerprinting.

### Skills you could acquire or develop further:-

You could develop core skills giving the ability to communicate with both staff and peers in written and verbal form at a high level.

A proportion of the course is in the form of practical work - this type of assessment involves planning, organisation, implementation and analysis-based skills all of which will be assessed to allow you to improve, augment and showcase your abilities.

### Possible careers paths you could follow include:-

Medicine; nursing; sports scientist; pharmacist; embryologist; biomedical scientist; clinical research; forensic biologist; marine biologist; genetic counsellor; dentistry; conservation; biology teacher; physiotherapist; midwife; pathologist

## SUBJECT:- Biology

### Entry Profile for your course:-

You will traditionally enjoy the biological sciences and may wish to pursue a career in one of the related industries, although this is not always the case.

Most students are aware of the academic rigor that is attributed to the subject, as are universities and employers. This is why a large proportion of them regard a student with this qualification as very desirable.

It is often regarded that having a Science A-Level would add weight and depth to a CV and this is often the case when applying to universities and employers.

### Entry Requirements:-

To be eligible, you will need to have at least 5 GCSEs grade A\*-C which should include at least a grade C in Maths.

At least a grade B in either GCSE Biology, Additional Science or Further Additional Science is essential.

### How will my course be assessed:-

**Paper 1** - 2 hours - questions on Year 12 content

**Paper 2** - 2 hours - questions on Year 13 content

**Paper 3** - 2 hours - questions on Year 12 *and* 13 content

### When will my course be assessed:-

Assessment comes from three exams to be sat at the end of the course (i.e. at the end of Year 13) with no exams in Year 12.

Practical work is assessed throughout the course in the form of 12 essential practicals which contribute towards a practical endorsement which appears on the final A-Level certificate. Practical skills are assessed in each of the three exams. There is no ISA exam.