



A level

Biology

**What will I learn?**

Biology is the study of life in all of its forms. It combines problem solving with practical skills and enables you to develop a scientific approach to the subject.

The first year will focus on the fundamentals of biology: biological molecules, transport in and out of cells including many other topic areas.

The second year will build on these by delving into some important and fascinating subjects such as: photosynthesis and respiration, speciation, forensics, determining time of death, microbiology, diseases and immunology.

**What could this course lead on to?**

Courses in biology, biology-related fields, one of the other sciences or subjects, or to enter employment where knowledge of biology would be useful. It is an exceptionally good foundation for careers in human biology, ecology, environmental biology, cell and molecular biology and many more. Biology also is an excellent foundation for students planning to attend medical, dental, veterinary, chiropractic, physical therapy, physician's assistant or optometry schools.

**Entry Requirements:**

Grade 6 in GCSE Biology or Combined Science  
Grade 6 in GCSE Maths

**How will I be assessed?**

You will be assessed by your teacher at the end of each unit of study so that we can monitor your progress and support you where necessary.

At the end of year 13 you will sit three exams, all of which are two hour exams. These include Paper 1 focusing on topics 1-4 (35% of A level) , Paper 2 focusing on topics 5-8 (35% of A level) and Paper 3 focusing on topics 1-8 including an essay style question (30% of A level). All papers also assess your relevant practical skills.

**Key content**

**Unit 1 Biological Molecules**

This unit explores the fundamental building blocks of all organisms – the molecules of which their cells are composed.

**Unit 2 Cells**

This unit explores cells the fundamental unit of life covering eukaryotic, prokaryotic cell structure and the use of microscopy.

**Unit 3 Organisms - exchange substances with their environment**

This unit allows the study of complex exchange surfaces within organisms and the various methods of transport across a membrane.

**Unit 4 Genetic Information - variation and relationship between organisms**

This unit has been designed to allow you to look at the living world around us and to understand the striking variety of life.

**Unit 5 Energy transfer in and between organisms**

This unit encompasses the study of photosynthesis and respiration within organisms.

**Unit 6 Organisms respond to changes in their internal and external environments**

This unit allows you to explore many aspects of our nervous system including nervous pathways and how we are able to control our body conditions.

**Unit 7 Genetics, populations, evolution and ecosystems**

This unit explores inheritance and populations which exist within ecosystems.

**Unit 8 Gene expression is controlled by a number of features**

This unit allows the study of gene expressions and recombinant DNA technology.

**Course Details**

**Awarding Body:** AQA

**Website Specific Number:** 7402

**Staff Contact:** Mr C Epie-Nanje