

Biology

About the course

Many people consider biology to be the science of the future with biologists developing strategies to both prolong and improve the quality of human life whilst making sustainable demands on Earth's limited resources.

Biology at Key Stage 5 is an exciting, relevant and challenging subject which builds on the knowledge and understanding of life processes you developed while studying at GCSE level. The course will develop your skills of investigation, analysis and application and provide you with a framework for further study on a number of University courses.

The topics covered are:

1. Biological molecules - the study of the carbon based compounds essential for life.
2. Cells - the structure and function of cells including animal, plant and bacteria.
3. Organisms exchange substances with their environment - the study of mass transport systems such as digestive and respiratory system.
4. Genetic information, variation and relationships between organisms.
5. Energy transfer in and between organisms - the importance of respiration, photosynthesis and nutrient cycles.
6. Organisms respond to changes in their internal and external environments - the study of the nervous, hormonal and muscular systems.
7. Genetics, populations, evolution and ecosystems.
8. The control of gene expression - the study of up-to-date research on cancer and DNA technology.



***They are in you and
me....they go by the
name of genes, and
we are their survival
machines
Richard Dawkins***

How it will be assessed

AS Level - two external examinations, each will test Topics 1 - 4 and any relevant practical skills.

A Level - three external examinations. Paper 1 will examine Topics 1 - 4, paper 2 will examine Topics 5 - 8 and Paper 3 Topics 1 - 8.

What it prepares you for

Biology is a desirable qualification for a wide range of university courses including Medicine, Dentistry, Veterinary Science, Horticulture and Ecology. It is also important for paramedical studies such as Nursing, Radiography, Pharmacy, Physiotherapy and medical laboratory work.

