

# Biology

## Why choose to study Biology?

The biological sciences have led to so many advances in our society today. Many diseases have been eradicated, while others are now curable. New crops have been developed that grow more successfully and help to feed the world. There are controversies too: e.g. about genetically modified crops and cloning. It is important that we understand the issues and that we are well informed enough to make reasoned decisions.

## Entrance Requirements

- Success at A Level requires a very good understanding of Science at GCSE Level. You should, therefore, have achieved at least one grade 6 in your GCSE Sciences.
- Calculations are an important part of the course, as are graphic skills and analysis of experimental data. You should have followed the Higher Tier Maths course at GCSE to meet the mathematical demands of the course.
- You will be required to complete 12 core practicals across the two years so good practical skills are essential.
- Good study skills and a commitment to independent learning.

## Course Content & Learning Styles

Some of the topics and concepts that you study are: cells, cell transport, biochemistry, enzymes, digestion, cell cycle, the genetic code, energy and exercise and transport systems in animals and plants. Many of the topics and concepts studied you will recognise as developments of work first met at GCSE Level, and the emphasis of biology on modern developments.

You will have the opportunity to hear lectures at the 'A Level Biology Live!' conference.



## What skills will I develop?

- You will learn to apply your biological knowledge to unfamiliar contexts.
- You will learn to analyse, to evaluate and to synthesise.
- Through devising and planning investigative work, you will develop transferable problem-solving skills.

## Progression Opportunities

Biology is essential for higher education courses in a range of scientifically-related courses, e.g. medicine, dentistry, veterinary science, biochemistry, dietetics and physiotherapy. It can also be a valuable preparation for degree courses in, for example, chemistry and geography. Equally, the qualification will also allow you to step into careers where subject specialism is unimportant.

## Did you know...

Each cell in the body contains about 2 metres of DNA. If the DNA in all the cells of a single human being were stretched out it would reach to the moon and back 8,000 times.

