

## Why study this course?

Biology is the study of life. There are at least 1.9 million different species on the planet, with new organisms being identified all of the time. Many of the organisms require powerful microscopes to see them; there are often more bacteria in your mouth than the number of people living on the planet. Studying Biology will help you to understand what unites all of these remarkable life forms. It's a study about structure and division of labour, what fuels life processes and how a tiny molecule like DNA can result in such incredible variation in life.

Biology is a very popular subject in the College and many of our students progress onto further Biology-related studies in Higher Education. It combines well with many other subjects, including Chemistry, Physics, Mathematics, Physical Education, Geography and Psychology.

## What will I learn on this course?

In Year 12, you will study cell structure, biological molecules, biological membranes, cells and cells organisation, exchange surfaces, transport in plants and animals, disease and the immune system, biodiversity, classification and evolution.

In Year 13, you will study neuronal and hormonal communication, homeostasis, excretion, plant and animal responses, photosynthesis and respiration, cellular control, inheritance, biotechnology and cloning, ecosystems and populations and sustainability.

## What specific skills will I learn?

During the course you will develop practical and analytical skills, in addition to problem solving and considering ethical issues associated with biological concepts.

## What career paths could this course lead to?

The Biology course is an excellent starting point for many degree courses and professional careers such as Medicine, Dentistry, Veterinary Science, Nursing, Biotechnology, Biochemistry, Forensic Science, Zoology, Genetic Engineering, Sports Science, Physiotherapy, Teaching, Microbiology, Biophysics and Pharmacology.



## How is the course structured?

Content is split into six teaching modules:

- Module 1 – Development of practical skills in Biology
- Module 2 – Foundations in Biology
- Module 3 – Exchange and transport
- Module 4 – Biodiversity, evolution and disease
- Module 5 – Communication, homeostasis and energy
- Module 6 – Genetics, evolution and ecosystems

Paper 1 (Biological processes) assesses content from modules 1, 2, 3 and 5.

Paper 2 (Biological diversity) assesses content from modules 1, 2, 4 and 6.

Paper 3 (Unified Biology) assesses content from all modules (1 to 6).

## Extra opportunities

Students will have the opportunity to participate in a field trip (to have first-hand experience of ecological techniques and ecosystems) and various dissections throughout the course.



**Sandbach College**

**[www.sandbachcollege.co.uk](http://www.sandbachcollege.co.uk)**

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