

## Biology A Level

This course is aimed at students who wish to cover key biological theories and processes to further their knowledge from GCSE level science, perhaps with a view to progress on to university.

### Quick Information

**Qualification:**

**Date:** On Application

**Assessment:** There will be exams at the end of two years (plus a compulsory practical endorsement portfolio which does not count to the final A-Level grade but is required to study any science related degree at University).

**Level:** 3

**Area:** A-Levels

**Course Code:** CDSBY1

### About the Course

This course will suit you if you wish to have career or study a degree in a biological science and will enable you get an introduction to more complex theory than you will have covered at GCSE as well as develop the necessary practical and analytical skills needed for further study.

You will study a wide range of key elements, such as human, animal and plant cells; biological molecules, genetics and ecology.

At the end of two years you will sit examinations, so you will need to acquire a thorough understanding of all the different topics you have studied. You will also benefit if you enjoy the intellectual challenge of the work.

### Key Units

#### Year 1 (AS Level)

- Biological molecules (proteins, lipids, carbohydrates, enzymes, nucleic acids)
- Cells and cell structure and membranes
- Transport (osmosis, diffusion, active transport) as well as plant transport
- The cardiovascular system
- The gas exchange system

You will also cover an ecology module and look at evolution and explain the immune response in infectious disease as well as look at non-infectious diseases such as coronary heart disease.

#### Year 2 (A Level)

Find us on social media platforms

SEARCH: **Sheffield College**

Please visit [www.sheffcol.ac.uk](http://www.sheffcol.ac.uk) for more information and details on how to apply.

- Nervous and hormonal control of systems
- The biochemistry of respiration and photosynthesis,
- Excretion
- Genetics and gene technology (cloning, and genetic engineering)
- Ecology

Practical work features heavily on the course and you will complete a series of practicals to fulfil the practical endorsement aspect of the course.

What else will I gain?

You will develop practical and investigative skills as well as numerical skills (10% of the Biology A Level). You will have the opportunity for group work developing communication skills as well as literacy – to interpret questions and provide logical answers.

## Entry Requirements

### To study 3 A Levels

5+ GCSEs grades 9-4 / A\*-C in different subjects, including English Language and Maths at a minimum of grade 4/C.

### To study 4 A Levels

6+ GCSEs grades 9-6 / A\*-B in different subjects, including English Language and Maths at a minimum of grade 6/B.

### Additional Requirements

- 9-6 / A\*-B in Maths
- 9-6 / A\*-B in Biology if taking separate sciences
- 9-6 / A\*-B in Double Science / Core Science AND Additional Science (not applied or vocational Science)

The Sheffield College welcomes students who have studied vocational qualifications. However, the minimum entry requirements for the A Level programme, as shown above, must be GCSEs.

## Assessment

There will be exams at the end of two years (plus a compulsory practical endorsement portfolio which does not count to the final A-Level grade but is required to study any science related degree at University).

## Where does this Lead

Many of our science A Level students' progress to university to continue their studies in a variety of course areas, including but not limited to:

- Biology

Find us on social media platforms

SEARCH: **Sheffield College**

Please visit [www.sheffcol.ac.uk](http://www.sheffcol.ac.uk) for more information and details on how to apply.

- Chemistry
- Pharmacology/Pharmaceutical Sciences
- Nursing
- Medicine/Biomedical Sciences
- Psychology

## Future Opportunities

Biology could prepare you for a wide range of scientific careers including:

- Medicine
- Veterinary Science
- Genetics
- Forensic Science
- Ecology
- Agriculture

Some students go on to scientific careers in industrial or medical laboratories via apprenticeships. Even if you don't end up as a scientist, the skills you develop will be relevant to a wide range of careers.

## Tell Me More

### Personal Study Time

A-Level students are expected to devote as much time outside the classroom to their studies as in lessons. Homework is set on a regular basis and it is expected that students will work independently of set work in order to broaden their knowledge.

### Why study this course at The Sheffield College?

All classes are delivered in purpose built laboratories. You will learn from specialist highly qualified staff with a range of academic and science work related backgrounds.

## Extra Costs

---

Find us on social media platforms

SEARCH: **Sheffield College**



Please visit [www.sheffcol.ac.uk](http://www.sheffcol.ac.uk) for more information and details on how to apply.