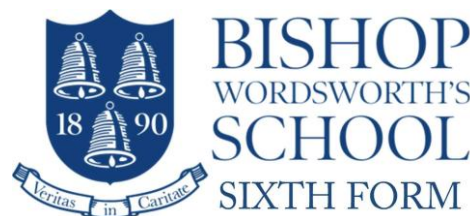


# Biology

## OCR A specification



### General information:

The course provides a broad understanding of the principles and applications of biological processes. Students will develop a detailed knowledge of the living world from the molecular level to the whole-ecosystem perspective. Students are carefully prepared to meet the demands of exam questions, and we ensure students practise applying their understanding to unfamiliar contexts. The course is structured to ensure that students build on the skills and knowledge acquired at GCSE and can apply this understanding to current biological issues in the wider world. The Biology course is varied, relevant, and challenging, providing a gateway to a wide range of career paths.

---

### Course content:

Module 1: Practical Skills, which is integrated into the modules taught in both years.

The Year 12 course is set out in three modules:

Module 2: Foundations, which covers cell biology, biochemistry, enzymes, biological membranes, and cell division.

Module 3: Exchange and Transport, which covers gas exchange in a range of organisms and transport systems in plants and mammals.

Module 4: Biodiversity, Evolution, and Disease. This module studies common diseases, the immune response, and treatments. It also covers the environment and methods of conservation, classification, variation, and the theory of evolution.

The Year 13 course is set out in two modules:

Module 5: Communication and Energy, which covers hormonal and nervous control, movement, photosynthesis, and respiration.

Module 6: Genetics, Evolution, and Ecosystems, which covers inheritance, evolution, genetic control mechanisms, genetic engineering, and ecology.

---

### How is the course taught and assessed?

The course is split between two teachers. Practical work is taught in well-resourced labs and is assessed within the modules taught throughout both years. A range of practical tasks covering 12 Practical Activity Groups (PAGs) must be completed to be awarded a pass. These tasks ensure that students develop good practical skills and gain experience of using a range of equipment and techniques. Students are expected to complete a programme of independent study in addition to homework tasks. The schedule for each term, including any worksheet instructions and deadlines, is set out in a document on the BWS website in the Biology Files.

Students are regularly assessed at the end of each module and at key points during the year. At the end of Year 13, students will sit the A Level examination, which consists of three papers:

Biological Processes — 37% of total marks

Biological Diversity — 37% of total marks

Unified Biology— 26% of total marks

The outcome of the Practical Endorsement is reported to the exam board.

---

## Entry requirements

In addition to the general entry requirements for BWS, students need a grade 7 in GCSE Biology or grades 6–7 in Combined Science.

## Results information

Biology consistently achieves excellent results. In 2026, over 91% of students achieved A\*–C grades at A Level, with 79% gaining A\*–B.

## Top destinations for students

Medicine, Veterinary Science, Dentistry, Pharmacology, Physiotherapy, Biomedical Science, Marine Biology, Sports Science, and many others, at universities including Oxford and Cambridge, Imperial College London, Exeter, Bristol, and Bath.

---

## Beyond the curriculum:

### BAYS

The BAYS programme (British Association of Young Scientists) provides students with after-school talks on a wide range of scientific topics.

### Intermediate Biology Olympiad

The Intermediate Biology Olympiad is a national competition that runs in June and is entered by most of our A Level biologists in Year 12. Results have been strong, and students can use their results to enhance their UCAS applications.

### STEM Careers Conference

In March, we run a STEM conference at which Year 12 students hear keynote talks from professionals working in a broad range of STEM areas.

### Support for Medics, Vets, and Dentists

As well as Young Medic talks, we offer application advice and interview sessions.

### Headstart and Nuffield Placements

We support and encourage students to apply for these schemes, and a number attend each year. These placements give students at the end of Year 12 the opportunity to find out more about a university course, enabling a more informed decision about university and job applications.

### Leadership Opportunities within Science

We have Biology prefects, who co-ordinate science-wide activities for all students and run mentoring sessions at lunchtimes.