A LEVEL BIOLOGY

Biology is an interesting, fast-moving and enlightening subject. Studying Biology at A Level through AQA provides the opportunity to explore in greater depth many of the topic areas studied at GCSE, including enzymes and digestion, cells and subcellular structures, body systems, DNA and inheritance, protein synthesis, plant transport and photosynthesis, respiration and transport across cell membranes. Ultimately, a deep understanding of Biology enables the comprehension of almost everything that goes on inside our bodies, as well as much of what goes on in the world around us!

A Level Biology is also a subject valued by employers and as an entry requirement for many university courses because of the range of skills developed by those who study it. However, **it is important that you only choose to study Biology at A-level if you actually enjoy the subject!** As well as **practical skills** such as **manipulation of equipment, collection and analysis of data and biological drawing**, A Level Biology develops skills in **extended writing and essay writing, mathematics** (including data handling, data interpretation and statistical analysis)**, team work, problem solving, critical thinking, evaluation** and **communication.** You will also develop your ability to link, and explain links between, different topic areas as you progress, as this is a vital aspect of the course.

Classes, structure and results

Each class is taught by highly experienced teachers with excellent subject knowledge who will share the delivery of the course content across five lessons per week. While A Level Biology class sizes vary, they typically comprise an average of 15 students.

Results in A Level Biology are consistently high, with 44% of Year 13 students achieving at A* or A grade in the summer 2023 examinations.

Course content

Students studying A Level Biology will develop knowledge and understanding of a wide range of topic areas relating to plants, animals and bacteria, as shown below:

	Year 12	Year 13
Areas of Study	1. Biological molecules 2. Cells 3. Organisms exchange substances with their environment 4. Genetic information, variation and relationships between organisms	5. Energy transfers in and between organisms 6. Organisms respond to changes in their internal and external environments 7. Genetics, populations, evolution and ecosystems 8. The control of gene expression

Assessment

The A Level Biology course is linear, meaning that students will be assessed at the end of the two-year course (in June 2026). Students will sit three 2-hour exam papers, as shown in the table below. Students can receive a grade ranging from A* to E; there is also an unclassified (U) grade.

	Paper 1	Paper 2	Paper 3
Content	Year 12 topics and practical skills	Year 13 topics and practical skills	Year 12 and 13 topics and practical skills
Structure	Structured questions and extended response questions	Structured questions and comprehension questions	Structured questions, data analysis questions and essay
Weighting	35% of total A-level	35% of total A-level	30% of total A-level

Practical assessment

In addition to the written examinations, students will also be assessed on their practical skills and teachers must verify that students have mastered a range of associated competencies, developed a number of skills in using biological apparatus and techniques, and have actively participated in at least 12 practical activities Required Practical Activity 12 is carried out as a field trip to investigate ecological succession at Formby beach at the end of Year 12. For this component of the course, students are awarded a Pass or a Fail (there is no grading). Many universities include a "Pass" in the practical element of A-level Science courses when making conditional offers, so it is a vital part of the course.

Where to next?

A-level Biology is an excellent foundation for a range of degree and employment options, as illustrated in the table below:

Degree Courses		Careers	
• Biology • Biomedical Sciences • Dentistry • Forensic Science • Midwifery • Medicine	• Nursing • Optometry • Pharmacology • Pharmacy • Physiotherapy • Psychology • Zoology	• Dentist • Doctor • Genetic Counsellor • Geneticist • Lecturer • Midwife	• Nurse • Optometrist • Pathologist • Pharmacist • Physiotherapist • Research Scientist • Vet

Entry requirements

To study A-level Biology at BRGS, you will need a **minimum** of:

- GCSE Biology grade 6

or

- GCSE Combined Science grade 6-6

plus

- GCSE Maths grade 5