

A level Biology

Overview:

Exam Board: AQA

Why Study?

We believe that A level biology is a fascinating subject as it gives you the opportunity to learn more about the natural world and all living things – including your own organs and cells. Biology is relevant to everyone as in one way or another it will affect every person on Earth. A level biology provides answers to many interesting questions such as:

- How are genetic disease passed between generations?
- How can we edit the DNA of living things?
- How do bacteria become resistant to antibiotics?
- What causes cancer? How can it be treated?
- How can vaccination protect us from disease?
- How does the brain control heart rate?

By studying A level Biology, you could go on to help solve many of the challenges that are being faced in today's world such as climate change, emerging diseases and antibiotic resistance.

As well as learning lots of interesting biology content, you will also learn a range of subject-specific skills such as good laboratory practice and statistical skills. Furthermore, you will learn a range of transferable skills including problem solving, data analysis, research and independent study skills. Biology is a subject that can open up a variety of options in the future as it gives you the option to specialise in a variety of different areas of interest.

Content:

Year 1

Biological molecules, cells, how organisms exchange substances with their environment and genetic information, variation and relationships between organisms.

Year 2

Energy transfers in and between organisms, how organisms respond to changes in their internal and external environments, genetics, populations, evolution and ecosystems and the control of gene expression.

Key Skills

- Practical laboratory skills
- Research
- Independent study
- Problem solving
- Data analysis
- Statistical

Entry Requirements:

You will need:

- GCSE grade 6-6 or higher in Combined Science
OR
- GCSE 6 in Triple Science Biology plus one other grade 6 in either Chemistry or Physics
- GCSE grade 5 or above in GCSE Mathematics and English.
- You will need to show a high level of interest and enthusiasm in class and be capable of independent study.

How Assessed:

A-level grades will be based only on marks from three written exams.

A separate endorsement of practical skills will be taken alongside the A-level. Students will complete 12 required practical's and will be assessed on their competency in a range of practical skills.

Exam	Overview of Assessment	Breakdown of marks
Paper 1	2 hour written exam Year 1 content including practical skills, maths skills and 15 marks of extended response questions.	91 marks 35%
Paper 2	2 hour written exam Year 2 content including practical skills, maths skills and 15 marks of comprehension questions.	91 marks 35%
Paper 3	2 hour written exam All year 1 and year 2 content including practical skills, maths skills, 15 marks of analysis questions and a 25 mark synoptic essay.	78 marks 30%

Progression:

Careers:

A level biology can lead to a wide range of careers including: medicine; veterinary medicine; dentistry; research scientist; medical research; physiotherapist; forensic scientist; pharmacologist; science writer; genetic counsellor; marine biologist; microbiologist and many more.

University Courses:

A level biology can lead to a variety of university courses. Common ones include: biology; midwifery; medicine; dentistry; veterinary medicine; biochemistry; biomedical sciences.

Links with other subjects:

A level biology partners well with Maths, Physics and Chemistry.