



## Key Stage: 5

## Subject: Biology

### Aims of the subject:

A-level Biology is a challenging, rewarding course that helps students develop skills and knowledge necessary for a successful career. It offers students freedom, creativity and opportunity for independent progression from GCSE Science or Biology. This course allows all students to show what they can do, as well as being suitable for those looking for a challenge. A-level Biology builds on the concepts and skills developed in the GCSE and it is particularly suitable for students who have the skills and knowledge associated with a GCSE Additional Science course or equivalent. Students who study A-level Biology may go on to a Biology-related degree course. The specification presents essential principles in contexts that the students find interesting. We aim to stimulate the enthusiasm of students from the start. The course emphasises the way in which scientists work and the contributions of science to modern society in a way that underpins the specification but is never intrusive, allowing the teachers to discuss the moral, social, economic and ethical impacts of some subject matter. We aim to mould the students into scientists who are capable of investigating questions, analysing data and presenting their findings using scientific literacy skills.

### A-Level Examination Board: AQA

### Assessment Overview:

- The examinations will take place at the end of year 2. There will be 3 papers in total, each 2 hours in length.
- Papers 1 will focus on year 1 content, paper 2 will focus on year 2 content and paper 3 will have a focus on the practical aspects of the course. This paper also includes a 25-mark synoptic essay.

Course	What will I study?	Assessment
Year 1	<b>Term 1</b> Biological molecules Cell structure Transport across cell membranes	Topic tests at the end of each topic will assess factual recall.  Mock exam.  Required practicals 1, 2, 3 and 4.

	<p><b>Term 2</b> Nucleic Acids Immunity Exchange in organisms DNA, genes and protein synthesis</p> <p><b>Term 3</b> Mass transport Genetic diversity and adaptation Ecology Photosynthesis</p>	<p>End of topic past paper questions.</p> <p>Mock exam Required practicals 5 and 6.</p>
Year 2	<p><b>Term 1</b> Malham field trip Inheritance Respiration Energy and ecosystems Evolution</p> <p><b>Term 2</b> Gene expression Recombinant DNA technology Response to stimuli Nervous control Homeostasis</p> <p><b>Term 3</b> Essay preparation Revision</p>	<p>End of topic past paper questions.</p> <p>Required practicals 12, 7, 8, 9.</p> <p>Mock exam.</p> <p>End of topic past paper questions.</p> <p>Required practicals 10 and 11.</p> <p>Mock exam.</p>

### **Enrichment opportunities**

Visiting speakers are invited in throughout the year.

Student support sessions are timetabled.

Mentoring of Year 7 and 8 pupils completing the Springboard Science scheme, designed to stretch and challenge our younger pupils.

Biology Olympiad.

Ripley Biology Society.

### **Suggestions for wider reading**

Revision guides are available.

Biological Sciences Review.