

# Biology

# Exam Board: AQA

## Summary of course content

- 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 (A-level only)
- 6 Organisms respond to changes in their internal and external environments (A-level only)
- 7 Genetics, populations, evolution and ecosystems (A-level only)
- 8 The control of gene expression (A-level only)

## Summary of assessment

### A2 year 1

Paper 1	Paper 2
<b>Any content from topics 1-4, including relevant practical skills</b>	<b>Any content from topics 1-4, including relevant practical skills</b>
<b>Internally assessed written exam: 1 hour 30 minutes</b> <b>75 marks</b> <b>50% of AS</b>	<b>Internally assessed written exam: 1 hour 30 minutes</b> <b>75 marks</b> <b>50% of AS</b>
<b>Questions</b> <b>65 marks: short answer questions</b> <b>10 marks: comprehension question</b>	<b>Questions</b> <b>65 marks: short answer questions</b> <b>10 marks: extended response questions</b>

### A2 Year 2

Paper 1	Paper 2	Paper 3
<b>Any content from topics 1–4, including relevant practical skills</b>	<b>Any content from topics 5–8, including relevant practical skills</b>	<b>Any content from topics 1-8, including practical skills</b>
<b>Assessed written exam: 2 hours</b> <b>91 marks</b> <b>35% of A-level</b>	<b>Assessed written exam: 2 hours</b> <b>91 marks</b> <b>35% of A-level</b>	<b>Assessed written exam: 2 hours</b> <b>78 marks</b> <b>30% of A level</b>
<b>Questions</b> <b>76 marks: a mixture of short and long answer questions 15 marks: extended response questions</b>	<b>Questions</b> <b>76 marks: a mixture of short and long answer questions 15 marks: comprehension question</b>	<b>53 marks: a mixture of short and long answer questions 25 marks on a final synoptic essay</b>

## Why you should consider studying Biology in the 6<sup>th</sup> Form

*Biology is an ideal choice for students with an interest and curiosity about the diversity and origins of the living world around them.*

The main advantages are:

- Biology is one of the eight *facilitating* subjects. Russell Group Universities, suggest you take at least one of these subjects at A level.
- The 100% pass rate in A level Biology.
- A high practical element to the course

### **How do I know if biology is for me?**

A good Biology student needs to be interested in the 'way things work' and 'how things happen'. Perhaps you have watched natural history programmes on television or seen some of the technological developments in genetic modifications or fertility treatment reported in the news and been inspired to think more about the issues. If so, then Biology could be for you.

### **What skills do I need?**

- During the course you will learn how to think in a scientific way - to look critically at evidence and be analytical in drawing conclusions.
- Test ideas through planned experiments, design, implement and evaluate experimental evidence. Discuss and report ideas clearly.
- An ability to learn material thoroughly and to understand concepts and new ideas.

Studying Biology is a route into a variety of careers. Students go on to study for science degrees or into medical or paramedical careers. Biology can lead to nursing, teaching or more technical vocational qualifications. In addition, the skills developed through Biology A Level are valued by employers. Skills such as the ability to think logically and analytically, to work independently or in groups and to present ideas clearly both orally and in writing are invaluable.

You can combine Biology with complementary subjects such as Maths, Chemistry, Physics, or PE, or choose it for contrast with subjects such as English, Art or Philosophy.

### **Frequently asked questions**

#### **Do I need to have GCSE science qualifications?**

You will need to have either passed 3 separate sciences at GCSE with a minimum of a 6 grade. Students who have taken double award science need 2 6 grades for GCSE.

#### **Are there any other GCSEs that would be useful?**

You will need a good understanding of basic mathematical skills during this course and should have a basic confidence with rearranging equations, be able to draw graphs with confidence and be willing to learn and use statistical formulae. You should be able to write concisely using key biological terminology to correctly analyse and interpret unfamiliar data.

***Kate Branston, Head of Science***

***Luke Lazarou, Teacher of Biology***