

Biology

A Level



Overview

Biology is a tremendously varied and enjoyable subject, enabling students to develop valuable knowledge and skills.

The course is designed to provide a grounding and real-life contextualisation of all aspects of Biology including Biochemistry, Cell Biology, Animal and Plant Physiology, Ecology, Molecular Biology and Genetics.

Students develop their biological knowledge through a variety of means: interactive tasks, independent learning, group work and laboratory practicals. There is no compulsory dissection.

What goes well with this course?

- Chemistry
- Maths
- Psychology
- Geography
- Physical Education
- Health & Social Care

Progression

A Biology qualification can lead to a host of opportunities and not just in the medical field. Biotechnology is a fast expanding area that requires enthusiastic Biologists. Our fragile Earth needs scientists to develop new technologies to ensure we can provide for future generations.

Course Content

The course covers a wide range of topics including:

- Cellular Biology and Biochemistry
- Molecular Biology and Inheritance
- Biodiversity, Conservation, Evolution
- Ecology and Ecosystems
- Infection and Immunity
- Muscles and the Nervous System

Students are also expected to take part in a mandatory field trip that typically costs in the region of £160 to £180.

Educational Experiences

Course Specific Trips, Visits & Experiences

Biology A Level students have the opportunity to take part in a variety of course related experiences. In recent years, these have included:

- A field-trip in the second year to Juniper Hall, Dorking. This provided students with the opportunity to learn sampling techniques in Woodland, Grassland and Fresh Water Ecology
- The chance to work as a Nuffield Science placement student
- Visits to *Biology in Action*, *Biology Live* and the *New Scientist* exhibition in London
- Animal encounter Experience at Merrist Wood, Guildford

Assessment

Biology A Level is assessed through 100% examinations and follows the Pearson Edexcel Biology A (Salters-Nuffield) specification.

Entry Requirements

All students need to have at least five GCSEs at Grade 4 or above (and a satisfactory school reference) in order to be accepted on an A Level/BTEC Level 3 Programme.

In addition, students should meet the following minimum combination of GCSE grades:

- Grade 6 in Maths (Higher Tier), 5 in English Language and 6 in Biology or 6, 6 in Combined Science

Students will enjoy this course and be successful if they:

- Have a genuine interest in the living world
- Work hard and maintain a high level of commitment to their studies
- Enjoy researching new ideas and concepts and remembering them to a high level of detail
- Have excellent written and verbal communication skills
- Have the confidence to develop into independent learners

Students should be numerate, good at written and spoken communication and problem-solving and also capable of retaining and using large quantities of biological information.