

Biology

Entrance requirements

To make a success of this A level **you require at least a grade BB** in GCSE Double Award Science. Only in exceptional circumstances will a pupil with a double grade C be considered for A level Biology. Students with a BB grade will have their performance in the three sciences at GCSE closely examined to ensure that they are making an appropriate choice.

The subject content of AS/A2 Biology is divided into 6 modules over two years.

AS Course (Year13)

AS Module 1: Molecules and cells

This involves the study of molecules (including enzymes) and cells. DNA is studied as a fundamental unit of continuity. Its role in the processes of cell division (mitosis & meiosis) and its application in recombinant DNA technology (genetic engineering) are examined.

AS Module 2: Organisms and biodiversity.

This module deals with transport and exchange mechanisms in plants and mammals. Adaptation of organisms and biodiversity are also studied with an emphasis on local contexts.

AS Module 3: Practical Skills

This involves Keeping a lab-book for seven AS practicals and completing an exam involving structured questions on the practical tasks.

A2 Course (Year 14)

A2:1 Module 4: Physiology, Coordination & Control and Ecosystems

This unit deals with Homeostasis, Immunity, Coordination & Control in plants and animals and Ecosystems and Nutrient cycles..

A2:2 Module 5: Biochemistry, Genetics and Evolutionary Trends.

This module includes Respiration, Photosynthesis, DNA as the Genetic Code, Gene Technology, Genes and Patterns of Inheritance, Mechanism of Change, Kingdom Plantae and Kingdom Animalia.

A2:3 Module 6: Practical Skills

This involves Keeping a lab-book for five A2 practicals and completing an exam involving structured questions on the practical tasks. The exam will also assess the skills involved in writing a bibliography detailing source references.

Scheme of Assessment

Module	How it is assessed	Weighting
AS 1	1½ hour written examination in May/June of Year 13	37.5% of AS and 15% of the A level award
AS 2	1½ hour written examination in May/June of Year 13	37.5% of AS and 15% of the A level award
AS 3	Internal practical assessment and 1hour written examination in May/June of Year 13	25% of AS and 10% of the A level award
A2 1	2 hour 15 min written examination in May/June of Year 14	24% of the A level award
A2 2	2 hour 15 min written examination in May/June of Year 14	24% of the A level award
A2 3	Internal practical assessment and 1hour 15 min written examination in May/June of Year 14	12% of the A level award

Career Opportunities

- Medicine
- Radiography
- Occupational Therapy
- Haematology
- Physiology
- Environmental Science
- Horticulture
- Biochemistry
- Zoology
- Immunology
- Teaching
- Sports Coaching
- Veterinary
- Physiotherapy
- Dentistry
- Medical Research
- Environmental Health
- Agriculture
- Commercial Farming
- Pharmacy
- Botany
- Food Science
- Nursing