

BIOLOGY

Entry requirements: Minimum of 5 GCSEs at Grade 4 - 9; minimum Grade 6 Biology or Core and Additional Science; minimum Grade 6 Maths and average GCSE Score 5.5*

STUDENT PROFILE

This course will appeal to those students who:

- are passionate about studying living organisms
- enjoy carrying out investigations in the laboratory or in the field
- are interested in current developments in Biology and their impact on society
- are keen to develop powers of observation as well as analytical and evaluative skills.

PROGRESSION

- Follow a degree course in Biology, Biomedical Science, Environmental Science, Medicine, Veterinary Science, Nursing, Dentistry, Psychology, Pharmacy, Biochemistry, Microbiology, Zoology, Forensic Science and many more
- Enter a Higher National course in Biological Science, and related programmes
- Employment in areas such as healthcare, land management or technical work.

*Information on how to calculate your average GCSE Score can be found at www.abbeygatesfc.ac.uk/courses

STUDENT VIEW

"The great variety of Topics, from antibiotic resistance and ecosystems, to developments in stem cell research, make Biology one of the most useful subjects to take at A-level."

COURSE CONTENT

The course is split into six modules, which, combined with a Practical Endorsement, constitute the A-level qualification.

Module 1 - Development of Practical Skills in Biology

Development of planning, implementing, analysis and evaluation skills. This module underpins the whole of the specification, and covers the practical skills that students will develop throughout the course. The practical skills in this module will be assessed within written examinations.

Module 2 - Foundations in Biology

This module includes cell structure, biological molecules, DNA and nucleic acids, enzymes, biological membranes, cell division, cell diversity and organisation. This module covers key concepts required throughout the remaining modules.

Module 3 - Exchange and Transport

This module includes exchange surfaces, transport in animals and transport in plants.

Module 4 - Biodiversity, Evolution and Disease

This module includes communicable diseases, disease prevention and the immune system, biodiversity and classification, and evolution.

Module 5 - Communications, Homeostasis and Energy

This module includes communication and homeostasis, excretion, neuronal and hormonal communication, plant and animal responses, respiration and photosynthesis.

Module 6 - Genetics, evolution and Ecosystems

This module includes cellular control, patterns of inheritance, manipulating genomes, cloning and biotechnology, ecosystems, populations and sustainability.

Assessment

At A-level, students will be assessed through three examinations. Papers 1 and 2 will last 2 hours 15 minutes and Paper 3 will last 1 hour 30 minutes. The examinations will cover both theory and practical skills-based questions. Synoptic assessment will appear across all papers. Students will also receive a practical endorsement alongside their A-level qualification, indicating the completion of a variety of practical activities.

