

Biology A Level



COURSE DESCRIPTION

A level Biology at The Grey Coat Hospital covers a broad range of study, including biochemistry, botany, evolutionary biology, genetics, human biology, immunology, microbiology and zoology.

A full overview of the content and assessment of the course is provided overleaf. If you enjoy learning about the structure and function of organisms, how organisms interact with one another and their environment and how life has evolved over time then you will very much enjoy this course.



A level Biology is a highly respected course and can open doors to a huge range of university courses and future careers.

SKILLS REQUIRED

- Ability to recall information and apply subject knowledge in familiar and unfamiliar contexts;
- Ability to identify limitations and suggest improvements to scientific investigations;
- Ability to recall equations, change the subject of an equation and convert between units;
- Ability to use a wide range of equipment and techniques, both in the laboratory and in the field;
- Ability to apply investigative techniques, record results accurately and display them in a graphical format;
- Ability to identify and explain trends present in data;
- Ability to undertake independent research;

HEAD OF SUBJECT

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EXAM BOARD

OCR

PROGRAMME OF STUDY

Biological Processes

Development of practical skills in biology (M1)

Foundations in biology (M2)

Exchange and transport (M3)

Communication, Homeostasis and energy (M5)

Exam paper (100 marks)
2 hours 15 minutes

37% of total A Level

Biological Diversity

Development of practical skills in biology (M1)

Foundations in biology (M2)

Biodiversity, evolution and disease (M4)

Genetics, evolution and ecosystems (M6)

Exam paper (100 marks)
2 hours 15 minutes

37% of total A Level

Unified Biology

All modules (M1-M6) are assessed

Exam paper (70 marks)
1 hour 30 minutes

26% of total A Level

EXAMINATION RESULTS

In 2021, 20.5% of students were awarded an A* for Biology. Overall, students achieved 41% A*-A grades and 87.2% A*-C grades. Across the whole 2021 cohort, 29% of students have progressed onto a STEM-related course at university, which is a 3% improvement compared to 2020. Of these students, 46% are now studying a biology-related course, including Biology, Ecology and Conservation, Medicine, Biomedicine, Neuroscience at a range of universities, including Oxford, Edinburgh, St George's, Manchester, University College London, and King's College London.

PRACTICAL ENDORSEMENT

Students will complete a minimum of 12 practical investigations, including microscopy, dissection, colorimetry, microbiological and sampling techniques.

Practical skills are assessed in every examination.

ENRICHMENT ACTIVITIES

We regularly advertise and promote opportunities for students to enrich their subject knowledge further, such as lectures organised by The Linnaean Society, Westminster School and The Zoological Society of London. We also invite university lecturers to come into the school and present to the students. New discoveries and developments within the field of Biology are shared via "Biology in the news", which is a weekly bulletin discussed between teachers and students during lessons.



In Year 12, all Biology students are invited to participate in a visit to King's College London and Guy's and St Thomas' Hospital. During the visit, students will tour the hospital wards, visit the life sciences and pathology museums, meet current PhD students undertaking laboratory research and receive advice on how to apply successfully for undergraduate degrees in a range of biological sciences. Following this visit, students are encouraged to undertake internships/work experience placements to enhance their UCAS application. This will culminate in the awarding of the Rosalind Franklin Prize to a student who makes the most effort to do an internship. The Grey Coat Hospital is the only school in the UK that provides this opportunity and this prize.

FUTURE CAREERS

Studying A level Biology opens doors to a huge range of future courses and careers and is counted as a 'facilitating' subject by the Russell Group of universities. For many universities, A Level Biology is a pre-requisite for studying Medicine, Dentistry and Veterinary Science. Students go on to study Biology, Biochemistry, Biological Sciences, Biomedical Sciences, Dentistry, Medicine, Neuroscience, Pharmacy, Pharmacology, Radiography and Zoology. Our students have also been awarded positions on a wider range of degree courses, such as Civil engineering, Chemical engineering, Chemistry, Economics, History, Nursing, Politics, Prosthetics and Orthotics, Psychology and Sociology.