

WHAT IS BIOLOGY?

Biology is the scientific study of living organisms and how they interact with each other and their environments. Biology is a wide-ranging subject from molecular biology to field ecology. Biology explores how living systems are constructed, as well as how they develop, communicate, interact, reproduce, defend themselves, and change the environment around them.

WHY STUDENTS CHOOSE THIS COURSE

Biology suits students that enjoy Science GCSE and wish to study the subject to a far greater level of complexity. It also appeals to students that have good memory skills and want to learn about what goes on inside living organisms.

It is a Science A level that appeals to enquiring minds and whilst it is often chosen to compliment with other Science A levels, Maths and Psychology, Biology can be taken with any combination of other subjects.

WHAT STUDENTS CAN DO WITH THIS COURSE

A Level Biology is particularly useful and usually required for progression to many science-based university courses and careers such as animal science, biology, nursing, medicine, dentistry, zoology, ecology, clinical science, marine biology, life sciences, medicine, environmental science, forensic science or any other subject related to the natural world.

Biology A level is a well-respected course that can help students progress to non-science degree choices such as History, Economics, Finance or Law.

HOW THIS COURSE IS ASSESSED

100% Examination; three exams at the end of the course. A level content is assessed through two 120-minute exams, one covering topics 1-4 (YR1) and the other topics 5-8 (YR2), plus the associated practical skills from the 12 required practical lessons in the course. The third exam covers data analysis and extended writing.

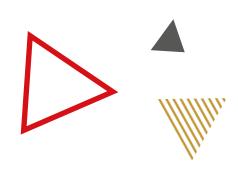
ENTRY REQUIREMENTS

All our course entry requirements are detailed in the Entry Requirements document located in the admissions section of our website.

FURTHER READING

The website below features notes on each Biology topic to give you a snapshot into the content you will be learning:

http://www.a-levelnotes.co.uk/biology-aqa-as- level-notes-new-spec.html



WHAT THE COURSE COVERS

Students study 8 content topics over two years, these are:

1. Biological molecules

Carbohydrates, lipids, proteins and DNA. Students study how large molecules are formed, bonding and properties.

2. Cells

Cell structure as seen through the electron microscope, cell division processes, the mammalian immune system.

- Organisms exchange substances with their environment Gas exchange in fish, plants, insects and mammals, the circulatory system, digestion.
- 4. Genetic information, variation and relationships between organisms

Genes, protein synthesis, taxonomy (classification) and diversity in ecosystems.

- Energy transfers in and between organisms
 Photosynthesis, respiration, ecosystems and nutrient cycles.
- 6. Organisms respond to changes in their internal and external environments

Nerves and the nervous system, muscles and homeostasis.

- **7. Genetics, populations, evolution and ecosystems** Inheritance, populations and evolution.
- 8. The control of gene expression

Mutations, molecular gene technology and the control of gene expression.

The majority of this course is theoretical; however, students will complete a number of set practical activities during the course and there will be a field trip to complete an ecological investigation.

STUDENT PROFILE

ASIFA MAYAT

SCHOOL ATTENDED:

Bradford Girls' Grammar

GRADUATED WITH:

A level Biology A
A level Maths A
A level Chemistry A
EPQ A

DESTINATION:

Gap Year Medicine Re-Applicant

Ichose to study A level Biology because I wanted to improve my understanding of the natural world. From understanding the human body to developing medicines and technologies, Biology at D6A has proved its position at the forefront of scientific innovation and discovery. I hope to pursue a career in Medicine, and studying Biology at D6A has provided me with a solid foundation for further study in this area. With group activities, practical work, and expert guidance in every lesson, I thoroughly enjoyed reinforcing my learning in a focused and supportive environment.

