

WHY CHOOSE BIOLOGY?

Biology is the study of life, to prepare you for life. With the many exciting new developments in the Biological Sciences, for example in biotechnology and genetics, and the ever increasing prominence given to environmental issues in the headlines, there can be few subjects which have greater relevance or make such an impact on our lives.

HOW USEFUL WILL IT BE?

Biology is an important qualification for a wide range of science and science related Higher Education courses and careers, including those in the fields of:

Biochemistry, Biophysics, Biotechnology, Catering, Cosmetics, Environmental Sciences, Food Science, Forensic Science, Genetics, Marine Biology, Biology, Medicine, Nursing, Veterinary Science and Zoology, Plant Sciences, Botany, Horticulture, Psychology, Sports Science, Pharmacology, Physiotherapy.

WHAT WILL YOU NEED TO DO TO BE SUCCESSFUL?

To study this subject you will need a minimum of five GCSE subjects at Grade A*-C. A Level Biology students need to have a GCSE grade B in Science. Students should also have achieved a B in Mathematics to help them with the mathematical components of the course. If you want to study Biology in higher education you should also choose A level Chemistry.

The important qualities for A Level students of the Biological Sciences are an interest in new discoveries and determination, as the course requires a considerable amount of individual work. Biology is suitable for students taking other science A Levels and wishing to study Biological Sciences at university.

WHAT WILL YOU STUDY ON THE COURSE IN YEAR 12 – THE AS LEVEL?

The following topics will be completed at AS Level:

Unit 1: Biology and Disease

- Causes of disease.
- Enzymes and the digestive system.
- Cells and movement in and out of them.
- Lungs and lung disease.
- The heart and heart disease.
- Immunity.





SIXTH FORM

Unit 2: The Variety of Living Organisms

- Variation, DNA and meiosis.
- The cell cycle and cellular organisation.
- Exchange and transport.
- Classification, adaptation and selection.
- Biodiversity.

Unit 3: Investigative and Practical Skills - Practicals relating to Unit 1 and Unit 2.

WHAT WILL YOU STUDY ON THE COURSE IN YEAR 13 – THE A2 LEVEL?

The following topics will be completed at A2 Level:

Unit 4: Populations and environment

- Energy transfer through ecosystems.
- Nutrient recycling.
- Human impact on the environment.
- The formation of new species.

Unit 5: Control in cells and in organisms

- Nervous system.
- Endocrine system.
- Homeostasis and the control of the internal environment.
- Genes and genetic expression.

Unit 6: Investigative and Practical Skills

- Practicals relating to Unit 4 and Unit 5.

HOW ARE THE AS and A2 LEVELS ASSESSED?

AS

Unit 1: Exam 33.3% 1 hour 15 mins.

Unit 2: Exam 46.7% 1 hour 45 mins.

Unit 3: Controlled assessment 20%.

A2

Unit 4: Exam 16.7% 1 hour 30 mins.

Unit 5: Exam 23.3% 2 hours 15 mins.

Unit 6: Controlled assessment 10%.

HOW MUCH TIME WILL YOU HAVE TO SPEND ON PRIVATE STUDY/RESEARCH?

AS Level: at least 4 hours per week.

A2 Level: at least 5 hours per week.



For further information please contact: Mrs F. Warran