



A-LEVEL BIOLOGY

A Level Biology A will give you an exciting insight into the contemporary world of biology. It covers the key concepts of biology and practical skills are integrated throughout the course. This combination of academic challenge and practical focus makes the prospect of studying A Level Biology A highly appealing.

You will learn about the core concepts of biology and about the impact of biological research and how it links to everyday life. You will learn to apply your knowledge, investigate and solve problems in a range of contexts.

KEY FEATURES

- Simple straightforward assessment through examinations
- Based on key concepts in biology
- Opportunities to develop practical skills through a range of experiments and investigations.

**HAVE YOU EVER
WONDERED...**

**Why your sister looks
like you?**

How medicines work?

What DNA is?

Do clones exist?

Who Darwin was?

**Study A-level
Biology to find
out the answers**

WHAT'S INCLUDED

- Development of practical skills in biology
- Cell structure
- Biological molecules
- Nucleotides and nucleic acids
- Enzymes
- Biological membranes
- Cell division, cell diversity and cellular organisation
- Exchange surfaces
- Transport in animals
- Transport in plants
- Communicable diseases, disease prevention and the immune system
- Biodiversity
- Neuronal communication
- Hormonal communication
- Plant and animal responses
- Photosynthesis
- Respiration
- Cellular control
- Patterns of inheritance
- Manipulating genomes
- Cloning and biotechnology
- Ecosystems
- Populations and sustainability
- Classification and evolution
- Communication and homeostasis
- Excretion as an example of homeostatic control

Emphasis throughout the course is on increasing knowledge, developing competence and confidence in practical skills and developing problem solving.

You will learn how society makes decisions about scientific issues and how science contributes to the success of the economy and society.



ARE YOU?

- Aiming to be a doctor, nurse or vet?
- Thinking of a career in research?
- Interested in the environment and the world around you?
- A problem solver?
- Interested in science?
- Keen on practical work?
- Studying other sciences or maths?

How will you be assessed?

Total of six hours assessment split over three examination papers (2 x 2 hours 15 minutes and 1 x 1 hour 30 minutes) taken at the end of the two year course.

A wide range of question types including: multiple choice, short answer and extended response questions. Opportunity to demonstrate your knowledge of both theory and practical skills through the examinations.



A Level Biology A is an excellent base for a university degree in healthcare, such as medicine, veterinary or dentistry, as well as the biological sciences, such as biochemistry, molecular biology or forensic science.

Biology can also complement sports science, psychology, sociology and many more.

A Level Biology A can open up a range of career opportunities including: biological research, medical,

scientific, communication, basic life sciences. The transferable skills you will learn, such as problem solving, are also useful for many other areas, such as law.

Benefits

- An interesting and challenging learning experience, linking key biological ideas and understanding how they relate to each other. The development of transferable skills including: investigative, problem solving, research, decision making, mathematical skills and analytical skills. Opens up a range of possibilities for further study and careers associated with the subject.
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To achieve a Practical Endorsement you will be expected through a range of experiments to display your competency in:

- Following procedures
- Applying an investigative approach when using instruments and equipment
- Working safely
- Making and recording observations
- Researching, referencing and reporting.

THOUGHT PROVOKING QUESTIONS

- How are all organisms related?
- What is the human impact on the biological world?
- How can genetics be used as evidence?
- What are mitochondria?
- How does the body function?