



A LEVEL

BIOLOGY

Course Summary

COURSE OVERVIEW

A-level Biology explores the foundations of life, from cells, biological molecules and genetics to ecosystems and evolution. Students develop practical and analytical skills through experiments, data interpretation and problem-solving. Key themes include homeostasis, energy transfer, biodiversity and the impact of human activity on biological systems.

WHY SHOULD I STUDY BIOLOGY?

Studying Biology helps you understand the living world, from how your body works to how ecosystems function. It develops analytical, practical and problem-solving skills valued in medicine, healthcare, research, and environmental careers. Biology fosters curiosity, critical thinking and awareness of global issues like disease, genetics and climate change.

WHAT COURSES CAN THIS PREPARE ME FOR AT UNIVERSITY?

Medicine, dentistry, veterinary science, biomedical science, genetics, neuroscience, environmental science and biochemistry. It also supports degrees in psychology, sports science, nursing, pharmacology and biotechnology.

WHAT CAREERS CAN THIS SUBJECT SET ME UP FOR?

Can lead to careers in medicine, healthcare, research, environmental science, and education. It's essential for roles like doctor, nurse, vet, pharmacist, biologist, or forensic scientist, and valuable in fields such as biotechnology and conservation.

COURSE SPECIFICATION

EXAM BOARD: AQA 7401

Paper	Content	Duration	Weighting
1	Biological molecules, cells, organisms exchanging substances, and genetic information, variation and relationships between organisms.	2 hours	35%
2	Energy transfers in and between organisms, organism responses to internal and external environments, genetics, populations, evolution and ecosystems, and the control of gene expression.	2 hours	35%
3	Assesses content from all eight topics, focusing on synoptic understanding, analysis of experimental data, and one essay.	2 hours	30%