

A Level Biology OCR (A Level Biology A Spec)

Overview: Studying A Level Biology at a UTC provides students with a deep understanding of the living world, from the microscopic workings of cells to the complexities of entire ecosystems. Our industry-oriented environment ensures that students can apply biological principles in real-world scenarios, with access to advanced lab facilities and practical experiences that go beyond the classroom. This approach not only supports students in mastering challenging content but also prepares them for further study and careers in life sciences and biotechnology.

Why Study A Level Biology?

Biology is the study of life and living organisms, making it a vital subject for those interested in understanding the natural world. It allows students to explore the complexities of biological systems, from genetic inheritance to ecosystem dynamics. A Level Biology is a gateway to numerous scientific and medical fields, and it develops analytical, practical, and research skills that are highly valued by universities and employers.

Potential Career Pathways:

A Level Biology can lead to a wide range of university courses and careers, including:-

- Medicine
- Veterinary Science
- Genetics
- Biotechnology
- Environmental science, and more

It is also highly beneficial for careers in healthcare, pharmaceuticals, conservation, and research.

Topics Covered:

Year 1 Topics:

- Cells
- Biological Molecules
- DNA
- Enzymes
- Exchange and Transport in Living Things
- Communicable Disease and Immunity
- Biodiversity
- Classification and Evolution

Year 2 Topics:

- Homeostasis
- Neuronal Communication
- Hormonal Communication
- Photosynthesis
- Respiration
- Genetic Inheritance
- Manipulating the Genome
- Cloning and Biotechnology
- Ecosystems and Populations
- Sustainability

Assessment:

- Biological Processes (Paper 1): 2 hours 15 minutes written paper, 37% of A Level.
- Biological Diversity (Paper 2): 2 hours 15 minutes written paper, 37% of A Level.
- Unified Biology (Paper 3): 1 hour 30 minutes written paper, 26% of A Level.

Entry Requirements:

- Grade 6 in Biology GCSE or
- Grade 6/6 in Combined Science GCSE
- Grade 6 in GCSE Mathematics
- Grade 5 in GCSE English Language

