

A Level Biology

The specification has been designed to be co-teachable with the standalone AS Level in Biology A qualification. The first four modules comprise the AS Level in Biology A course and learners studying the A level continue with the content of modules 5 and 6. The internally assessed Practical Endorsement skills also form part of the full A level.

A summary of the content for the A level course is as follows:

Module 1 – Development of practical skills in biology

- 1.1 Practical skills assessed in a written examination
- 1.2 Practical skills assessed in the practical endorsement

Module 2 – Foundations in biology

- 2.1.1 Cell structure
- 2.1.2 Biological molecules
- 2.1.3 Nucleotides and nucleic acids
- 2.1.4 Enzymes
- 2.1.5 Biological membranes
- 2.1.6 Cell division, cell diversity and cellular organisation

Module 3 – Exchange and transport

- 3.1.1 Exchange surfaces
- 3.1.2 Transport in animals
- 3.1.3 Transport in plants

Module 4 – Biodiversity, evolution and disease

- 4.1.1 Communicable diseases, disease prevention and the immune system
- 4.2.1 Biodiversity
- 4.2.2 Classification and evolution

Module 5 – Communication, homeostasis and energy

- 5.1.1 Communication and homeostasis
- 5.1.2 Excretion as an example of homeostatic control
- 5.1.3 Neuronal communication
- 5.1.4 Hormonal communication
- 5.1.5 Plant and animal responses
- 5.2.1 Photosynthesis
- 5.2.2 Respiration

Module 6 – Genetics, evolution and ecosystems

- 6.1.1 Cellular control
- 6.1.2 Patterns of inheritance
- 6.1.3 Manipulating genomes
- 6.2.1 Cloning and biotechnology
- 6.3.1 Ecosystems
- 6.3.2 Populations and sustainability