

BIOLOGY

A LEVEL

OCR

Entry Requirements	Trilogy Science 6-6 or 6 in Biology for Triple science. GCSE Maths Grade 5 (Higher) essential, GCSE English Grade 5 desirable
Head of Department or Course Contact	Miss H Moore
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Brief introduction to subject:

The A level course is designed to provide a suitable preparation for degree courses. As well as developing biological knowledge and understanding the course emphasises the way biologists work and the contributions they make to modern society.

The course builds on concepts and skills that will have been developed in the new GCSE science specifications. It presents biology as exciting, relevant and challenging.

Progression to Career/ University Courses:

Biological sciences, microbiology, genetics, molecular biology, ecology, environmental sciences, medicine, veterinary sciences and sport sciences.

Year 12

Module 1 - Development of practical skills: (planning, implementing, analysis and evaluation)

This module underpins the whole of the specification, and covers the practical skills that students should develop throughout the course. The practical skills in this module can be assessed within written examinations.

Module 2 - Foundations in biology

Includes: Cell structure; Biological molecules; Nucleotides and nucleic acids; Enzymes; Biological membranes; Cell division, cell diversity and cellular organisation

Module 3 – Exchange and Transport

Includes:

Exchange surfaces
Transport in animals,
Transport in plants

Module 4 Biodiversity, evolution and disease

Includes:

Communicable diseases, disease prevention and the immune system
Biodiversity
Classification and evolution

Information regarding Assessment: The AS award is assessed by two examination papers :

Paper 1: Breadth in Biology: 70 mark total (1hr 30 mins) weighting: 50%

Section A – Multiple choice (20 mark)

Section B – Structured questions covering theory and practical skills (50 mark)

Paper 2: Depth in Biology: 70 mark total (1hr 30 mins) weighting: 50%

Structured questions and extended response questions covering theory and practical skills (70 mark)

Year 13

Module 1 - Development of practical skills: (planning, implementing, analysis and evaluation)

This module underpins the whole of the specification, and covers the practical skills that students should develop throughout the course. The practical skills in this module can be assessed within written examinations and (for A Level only) within the Practical Endorsement.

Module 5

Communications, homeostasis and energy

Includes;

Communication and homeostasis
Excretion as an example of homeostatic control
Neuronal communication
Hormonal communication
Plant and animal responses
Photosynthesis
Respiration

Module 6

Genetics, evolution and ecosystems

Includes

Cellular control
Patterns of inheritance
Manipulating genomes
Cloning and biotechnology
Ecosystems
Populations and sustainability

Information regarding Assessment: The A Level award is assessed by three examination papers

Paper 1: Biological processes: 100 mark total (2hr 15 mins) weighting: 37%

Section A - Multiple choice (15 mark)

Section B - Structured questions covering theory and practical skills (85 mark)

Paper 2: Biological diversity: 100 mark total (2hr 15 mins) weighting: 37%

Section A – Multiple choice (15 mark)

Section B – Structured questions covering theory and practical skills (85 mark)

Paper 3: Unified Biology: 70 mark total (1hr 30 mins) weighting: 26%

Structured questions and extended response questions covering theory and practical skills (70 mark)

Non Exam assessment.

In addition to the A Level reported grade. A separate statement called **Practical Endorsement for Biology - Pass/ Fail** will be included on the certificate. This will be awarded when the student has successfully completed the twelve practical tasks set out in module 1. This is a teacher assessed, moderated component.