# BIOLOGY KEY STAGE 5 SCHEDULE

# 2023-2025

## MODULES/UNITS

**Unit 1 Biological Molecules**
All life on Earth shares a common chemistry. Despite their great variety, the cells of all living organisms contain only a few groups of carbon-based compounds that interact in similar ways.

**Unit 2 Cells**
All life on Earth exists as cells. These have basic features in common. Differences between cells are due to the addition of extra features. This provides indirect evidence for evolution.

**Unit 3 Organisms exchange substances with their environment**
The internal environment of a cell or organism is different from its external environment. The exchange of substances between the internal and external environments takes place at exchange surfaces.

**Unit 4 Genetic Information, Variation and Relationships between Organisms**
Biological diversity – biodiversity – is reflected in the vast number of species of organisms, in the variation of individual characteristics within a single species and in the variation of cell types within a single multicellular organism.

**Unit 5 Energy Transfers in and between Organisms**
Life depends on continuous transfers of energy.

**Unit 6 Organisms Respond to changes in their Internal and External Environments**
A stimulus is a change in the internal or external environment. A receptor detects a stimulus. A coordinator formulates a suitable response to a stimulus. An effector produces a response.

**Unit 7 Genetics, Populations, Evolution and Ecosystems**
The theory of evolution underpins modern Biology. All new species arise from an existing species. This results in different species sharing a common ancestry, as represented in phylogenetic classification.

**Unit 8 The control of gene expression**
Cells are able to control their metabolic activities by regulating the transcription and translation of their genome.

| COURSEWORK DEADLINES/EXAMS | WHEN |
|---|---|
| YR 12 POST 18 GATEWAY INTERNAL EXAMINATION | MAY/JUNE 2024 |
| YR 13 PAPER 1 EXTERNAL EXAMINATION | MAY/JUNE 2025 |
| YR 13 PAPER 2 EXTERNAL EXAMINATION | MAY/JUNE 2025 |
| YR 13 PAPER 3 EXTERNAL EXAMINATION | MAY/JUNE 2025 |
| YR12 / 13 PRACTICAL ENDORSEMENT | CONTINUOUS |

THE PRACTICAL ENDORSEMENT WORK WILL CONTINUE THROUGHOUT THE TWO YEARS. IT IS REQUIRED THAT STUDENTS MAINTAIN THEIR LABORATORY NOTEBOOK AS A LIVE DOCUMENT, KEEPING QUALITY RECORDS OF THEIR PRACTICAL WORK.
THE PRACTICAL ENDORSEMENT IS AN INTEGRAL PART OF THE A LEVEL BIOLOGY QUALIFICATION AND WILL BE REQUIRED BY MANY UNIVERSITIES AS PART OF THEIR CONDITIONAL OFFERS.

| PROJECTS/SCHEME OF WORK/TOPICS FOR 12 & 13 | DURING |
|---|---|
| Y12: UNITS 1 & 2 | AUTUMN 2023 |
| Y12: UNITS 3 & 4 | SPRING 2024 |
| Y13: UNITS 5 & 6 | AUTUMN 2024 |
| Y13: UNITS 7 & 8 | SPRING 2025 |

## OTHER INFORMATION

**Exam Board and Specification**
We follow the AQA syllabus – Biology A-level (7402)

**Textbooks**
We recommend the OUP, CGP & Pearson series of textbooks. We encourage students to select a textbook that they feel best suits their learning needs. Copies of all books are available for use in school.

**Independent Work**
Pupils have access to the resources on the TBSHS Biology Gateway, which includes revision videos, past papers, suggested resources, revision sites, & reading material which is regularly updated. Also past papers are available to download from www.aqa.org.uk.

**Equipment**
Scientific calculators are required and can be ordered through the school.

**Contacts**
If you have any queries, please telephone the school or contact Mr. M Smith (Head of Biology) matthew.smith@tbshs.org