

**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 2023

YR 13 PAPER 1 EXTERNAL EXAMINATION

MAY/JUNE 2024

YR 13 PAPER 2 EXTERNAL EXAMINATION

MAY/JUNE 2024

YR 13 PAPER 3 EXTERNAL EXAMINATION

MAY/JUNE 2024

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 2022

Y12: UNITS 3 & 4

SPRING 2023

Y13: UNITS 5 & 6

AUTUMN 2023

Y13: UNITS 7 & 8

SPRING 2024

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