

BIOLOGY

Nothing in Biology makes sense except in the light of evolution"

Dobshansky

*If a student who currently attends another school achieves less than two Grade 7s, we will ask them to arrange for their school's Examination Officer to complete a form to provide evidence of their performance in each Science subject

Current Teaching Staff:

Mrs K Bumby - Head of Department
Dr D Halliday, Mrs S Faro, Mrs N Leflaive, Mrs J Kittow

Examination board and syllabus:

AQA GCE A level Biology

Entrance requirement:

Separate Science GCSE students: Grade 7 or above in Biology.

Double Award Science GCSE students:
Grade 7-6 or above in Combined Science.

First year of A2:

Module 1: Development of practical skills in biology - ongoing across both years

Module 2: Foundations in Biology

Module 3: Exchange and Transport

Module 4: Communication, homeostasis and energy

A2 year two outline:

Module 5: Biodiversity, evolution and disease

Module 6: Genetics, evolution and ecosystems

Paper 01: assesses content from modules 1, 2, 3 and 5

Paper 02: assesses content from modules 1, 2, 4 and 6

Paper 03: assesses content from all modules (1 to 6)

Each class is taught by two teachers who each teach five lessons per fortnight. A diverse range of interactive teaching and learning strategies are employed, for example, practical work, class and group discussions, debates, student presentations and revision games.

Examples of homework include: research, data-handling exercises, follow-up to practical work, practice examination questions, presentations and A2 synoptic essays.

Paper	Content	Format	Weighting
Paper 1: Biological processes (H420/01)	Modules 1, 2, 3 and 5: practical skills, foundations in biology, exchange and transport, communication, homeostasis and energy	2 hours 15 minutes, 100 marks. Multiple choice plus structured and extended-response questions, including calculations and unfamiliar data	37%
Paper 2: Biological diversity (H420/02)	Modules 1, 2, 4 and 6: practical skills, foundations in biology, biodiversity, evolution and disease, genetics, evolution and ecosystems	2 hours 15 minutes, 100 marks. Multiple choice plus structured and extended-response questions, including calculations and unfamiliar data	37%
Paper 3: Unified biology (H420/03)	All modules (1 to 6). Synoptic: questions draw on content from across the whole course	1 hour 30 minutes, 70 marks. Short structured and extended-response questions, including questions on unfamiliar data and practical skills	26%

Lunchtime help is available; students are able to drop-in or request individual appointments with their teacher. Students working below their expected level are provided with additional homework, and expected to attend the weekly lunchtime help sessions. In year 13, Immersion Day activities are offered to help boost examination performance across the ability range.

More able students are provided with a suggested reading list, for example, articles from the Biological Sciences Review journal. The British Biology Olympiad competition in Year 13 is offered to the top performing students at AS level.

Students will be invited to attend a visit to the electron microscope unit at Plymouth University and the A2 Ecology residential field course.

Students will need to:	Compulsory	Optional
Attend extra sessions before Examinations	X	
Read widely around the subject	X	
Make extensive notes	X	
Carry out detailed revision for regular tests beyond public examinations	X	
Be willing to lead class discussions		X

CAREERS

Medicine and allied healthcare professions including dentistry, nursing, physiotherapy; veterinary medicine and allied professions; research and development; teaching; specialist e.g. forensic science, geneticist; environmental management and conservation; science writing and communication; law; politics and policy. In common with other science qualifications, biology is well-regarded by a wide range of potential employers.