



# BIOLOGY



## *Who are Biologists?*

- Biologists study living organisms.
- Biologists investigate organism's structure, function, growth, origin, evolution and distribution.
- Biology is a wide discipline with many different specialisms including, but not limited, to Zoology, Microbiology, Ecology, Evolutionary Biology, Biochemistry, Physiology, Cell biology, Botany & Molecular Biology. Many of these are touched upon over the 2 year A-Level course.

Students will study a wide range of topics more than just human biology, though this is covered. Students must therefore be interested in the world around them and how living things interact with each other and the environment.

## ASSESSMENT

**Level:** AS (H020) + A Level (H420)

**Specification:** OCR Biology A

[www.ocr.org.uk](http://www.ocr.org.uk)

### Assessment details:

**A Level (Year 2) 3 papers; Biological processes 37% & Biological diversity 37% (2hrs 15 mins each),  
Unified Biology 26% (1hr 30 mins)**

## QUALITIES AND QUALIFICATIONS

Biology is a diverse subject which requires many skills; an ability to think about abstract concepts, maths (inc. statistics), and literacy as there is a large amount of scientific vocabulary that must be learnt and often extended questions that require the use of good English. Students must be able to manipulate scientific equipment and work methodically to obtain data through investigation in labs and fieldwork.

## OUTLINE OF SUBJECT

### In Year 1 you will study:

Module 1: Practical skills in Biology, this will be embedded in other modules

Module 2: Foundations in Biology; Cells, Organisation of organisms & Biochemistry

Module 3: Exchange & Transport; Exchange and transport in animals and plants

Module 4: Biodiversity, Evolution & Disease; Communicable disease, disease transmission, immunity, Diversity of living things, Classification & Evolution

### In year 2 you will study:

Module 5: Communications, Homeostasis and Energy; Nerves, Hormones, responding to change, Photosynthesis & Respiration

Module 6: Genetics, Evolution & Ecosystems; Cellular control, inheritance, Biotechnology, Ecology & sustainability

The Practical endorsement: A pass/fail based on the completion of a variety of practical tasks (12 in total)

## COMPLEMENTARY SUBJECTS AND FUTURE PATHWAYS

- Biology is a great choice of subject for people who want a career in health and clinical professions, such as medicine, nursing, biochemistry, dentistry or forensic science.
- Most of the Biological disciplines listed above can be studied at degree level. Biology is, like all of the sciences, regarded highly as an A-Level subject of high academic rigour.
- The scientific sector is a growth area in the UK and Biology students could move into areas of research in disease, pharmaceuticals, conservation & genetics to name but a few.
- Many other degree courses and professions recognise the achievement an A Level in Biology represents.