

# BIOLOGY – A Level



“Biology is the study of complicated things that have the appearance of having been designed with a purpose.” *Richard Dawkins*

## Overview

Although we know a lot (but not everything) about individual organisms these do not exist in isolation and understanding how these communities work is one of the forefronts of Biological research.

At A level you will learn how scientific models are developed, the applications and implications of science, the benefits and risks that science brings and the ways in which society uses science to make decisions.

## Year 12

**Module 1:** Practical skills are developed through a range of guided practical activities

**Module 2:** Understand how sub-cellular structures and biochemistry interact to allow cells in living organisms to function effectively

**Module 3:** Study the structure and function of gas exchange and transport systems in a range of animals and in terrestrial plants.

**Module 4:** Learn about the biodiversity of organisms, their classification and the ways in which biodiversity can be measured as well as evolution and phylogeny.

## Year 13

**Module 5:** Develop understanding of how organisms respond to stimuli by using chemical and/or electrical carriers.

**Module 6:** investigate the role of genes in regulating and controlling cell function and development together with associated ethical considerations.

## Assessment method

At the end of Year 12 you will sit end of year exams, these will not count towards your final results.

There are three final written examinations at A level, two of which are 2 hours 15 minutes long and the third is 1 hour 30 minutes long. Practical skills will be tested in the exams and you will be awarded a pass on your certificate if you successfully complete the practicals and laboratory books.

## Additional information

Additional assessed homework is set weekly per teacher and consists of a range of reinforcement exercises and past examination questions. In addition to homework you will be expected to carry out a minimum of 5 hours independent study per fortnight in each subject studied during which time you are expected to write up lesson notes and complete end of chapter questions. A catch-up session is also held weekly.

All specialist textbooks, scientific papers and publications will be made available. You will need to have a scientific calculator and an internet enabled device such as a laptop or notebook.

We recommend the following book to help support studies but this is not essential - revision guide CGP 'A Level Biology'.

## Entry requirements

Five GCSE Grade 6 to 9.  
Students require a GCSE Grade 6 in Maths and English.

## For more information contact

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## Futures

Medicine, scientific research (including biotechnology, systems biology, biofuels, stem cells; genetics), sports science, food safety and development, zoology, veterinary science, agriculture, building and industry, ecology, conservation, oceanography, forestry, environmental health, etc.

## Exam board

**OCR**  
Oxford Cambridge and RSA