THE WORTHGATE SCHOOL
CANTERBURY

COURSE DESCRIPTOR

A LEVEL BIOLOGY

SUBJECT OVERVIEW

The study of life itself, A Level Biology explores the theories and principles involved in living systems, in all their intricate beauty. Topics you will learn about include Cell Biology, Exchange and Transport, Biodiversity, Evolution, Homeostasis, Genetics and Ecosystems, as well as practical biology and research skills. By the end of the course you will have a thorough understanding of key principles in Biology, ready to take the next steps in your education or career.

PRIOR LEARNING REQUIRED

It is extremely helpful to have grade 5s or above at GCSE in Biology (or Double Science), English and Mathematics, or the equivalent.

A basic understanding of key principles in Chemistry from GCSE or equivalent is important, as chemical principles link to many concepts in Biology. Biology also requires you to be competent in maths: you need to be comfortable with data presented in tables and graphs, with calculations and with applying statistical tests.

Biology will support your study of other Sciences and Maths, as well as subjects like Geography and Psychology. Additionally, if you study Biology alongside a language or an essay subject like English at A level, you might have even more career options.

GCSE or equivalent
IELTS 5.5 or equivalent

EXAM BOARD

OCR

COURSE CONTENT

Year 1	Year 2

MODULE 1 – Development of practical skills in biology **MODULE 2** – Foundations in biology **MODULE 3** – Exchange and transport **MODULE 4** – Biodiversity, evolution and disease	**MODULE 5** – Communication, homeostasis and energy **MODULE 6** – Genetics, evolution and ecosystems

ASSESSMENT

During the course, topic assessments take place once every half term and homework is set on a weekly basis. An End of Year 1 exam must be passed at a Grade C or higher for entry to the second year of the course.

Your A level grade is determined by your performance in three written papers at the end of the course, which include questions relating to both theory and practical skills. The first two papers (containing a combination of multiple choice, short-answer and extended response questions) each cover roughly half of the course content and account for 74% of the final mark in total. Paper 3 includes synoptic questions which might relate to any part of the specification, and contains only short-answer and extended response questions. It accounts for 26% of the final mark.

Practical skills are assessed by your teacher throughout the A Level course, with a record kept of the skills you have demonstrated. If you demonstrate all the required skills, a Practical Endorsement will be awarded as part of the A Level qualification at the end of the course. This does not contribute to your final grade, but it is needed for many Science-related university courses and careers.

Paper	Length of paper	Weighting
Biological Processes (01)	100 marks 2 hour 15 minutes written paper	37% of A level
Biological Diversity (02)	100 marks 2 hour 15 minutes written paper	37% of A level

Unified Biology (03)	70 marks 1 hour 30 minutes written paper	26% of A level
Practical Endorsement in Biology (04)	(non-exam assessment)	Reported separately

TEXTBOOKS/REVISION GUIDES

Title	ISBN	Author
OCR AS/A level biology A Student Book 1 and ActiveBook	9781447990796	Sue Hocking, Frank Sochacki, Mark Winterbottom
OCR AS/A level biology A Student Book 2 and ActiveBook	9781447990802	Sue Hocking, Frank Sochacki, Mark Winterbottom
A-Level Biology for OCR A Year 1 & AS Student Book with Online Edition (CGP A-Level Biology)	9781782943204	CGP Books
A-Level Biology for OCR A Year 2 Student Book with Online Edition (CGP A-Level Biology)	9781782943259	CGP Books

Summaries of each unit, your notes and past examination papers will be your major source of revision. There are revision guides available for both AS and A2. Kerboodle is a useful online resource. Revision guides and workbooks will be offered by your teacher at a discounted price.

HIGHER EDUCATION PATHWAYS

A-level Biology is an essential prerequisite for degree courses such as Medicine, Veterinary Medicine, Dentistry, and Pharmacy (please be aware that for many of these courses you will also need to study A-level Chemistry). It is also a useful subject to study in preparation for many degree courses, due to the demanding nature of the course and the skills this allows you to

develop. Biology-related degrees are a popular option at university – you can study a broad-based degree or choose to specialise in a specific aspect of Biology, and these qualifications open the door to an enormous variety of potential career paths.

COMPLEMENTARY SUBJECTS OF STUDY
Chemistry, Psychology, Maths, Physics

CURRICULUM DIRECTOR
Ms. Emma Lock