Biology

Biology: AS and Advanced Level. OCR 3881,7881.

Why AS or A Level Biology?

Because you enjoy what you have read, seen on television and experienced in lessons, or perhaps because you like the challenges which this multidisciplinary subject offers, and feel that it will prepare you for your intended university course and career?

Rapid evolution of the Biology syllabus has occurred recently, encouraging students to tackle exciting new concepts, building upon a broad foundation of knowledge. Whatever the reason for choosing Biology, you should find it to be both interesting and rewarding.

How is the programme structured?

Students will follow a Modular Biology course. AS certification is determined by three separate theory papers. A2 is awarded after a further three modules, two of which are compulsory, whilst there is a degree of choice for the remaining module. Practical skills are assessed both at AS and A2 by practical examinations (i.e. no coursework needed!). Some of the areas explored include:

AS MODULES	**A2 MODULES**		
Biological molecules	Population dynamics		
Cytology	Respiratory & Photosynthetic biochemistry		
Transport across membranes	Genetics & Evolution		
Enzyme kinetics	Homeostasis		
Protein synthesis	Kidney function		
Cell cycle	Control of blood sugar levels		
Transport in humans & plants	Nervous co-ordination		
Gas exchange	Plant hormones		
Human health & disease	Examination of these in January		
Immunology			
Diet			
Ecosystems			
Biology Field Trip			
	Options: choose one of the following:		
	Mammalian Physiology	Applications of Genetics	Environmental Biology

All students are invited to attend the residential Biology Field Trip, and those who develop an interest in genetic engineering will take part in the Biotechnology Workshop run by the National Centre for Biotechnology Education. In addition, students will attend an all day conference in Central London to hear some of the world's leading experts give presentations.

What does A level Biology require?

Ideally, A level Chemistry should be taken in tandem with Biology for those embarking upon a Biology related career, especially for those considering the Medical and Veterinary Sciences. Physics, Mathematics and Geography also make excellent additional subjects.

Pupils must spend a minimum of three hours per week researching essays, answering structured question papers and writing up practicals, and be prepared to read around the subject. Sound analytical, practical and communication skills are essential for success, although we hope these will develop during the course.