Biology KS5 Curriculum Overview

	Links to KS4	Students will all have studied either combined science or separate sciences at GCSE. The A level Biology course builds and expands upon this foundation of knowledge.					
Intent	**Statement of Intent**	Develop essental knowledge and understanding of diferent areas of the subject and how they relate to each other. Develop and demonstrate a deep appreciaton of the skills, knowledge and understanding of scientfc methods. Develop competence and confidence in a variety of practcal, mathematcal and problem solving skills. Develop their interest in and enthusiasm for the subject, including developing an interest in further study and careers associated with the subject. Understand how society makes decisions about scientfc issues and how the sciences contribute to the success of the economy and society (as exemplifed in 'How Science Works' (HSW)).					
	Timeline	**Term 1 - 7 Weeks**	**Term 2 - 7 Weeks**	**Term 3 - 6 Weeks**	**Term 4 - 6 Weeks**	**Term 5 - 6 Weeks**	**Term 6 - 7 Weeks**
Implementation (Year 12)	**Year 12 Overview**	**Module 1: Pracitcal skills in biology**. How to plan, implement, analyse science and evaluate practical work in Biology. **Module 2: Foundations in biology**. Cell structure, biological molecules, nucelic acids, enzymes, cell membranes and cell division. **Module 3: Exchange and transport**. Exchange surfaces, exchange and transport, and plant transport. **Module 4: Biodiveristy, evolution and disease**. Communicable diseases, immunity, vaccination, biodiveristy, sampling, classification, phylogeny, natural selection and evolution, adaptations and statistics.					
	SOW	**End of Unit Assessments**		**Modue Booklets**		**Practical Assessments**	
	Assessment Type & Unit Focus	Each module with have an end of module test. This will be a set of exam questions covering the content in that unit. They could also include questions that require knowledge from prior content.		Each module has an associated booklet to be completed in parallel to the teaching. It covers key words and defintions, a PLC and exam question practice.		Throughout the two year course students willl complete a minimum of 12 assessed practicals to allow them to demonstrate consistent aptitude with a number of key skills. This will lead to a separate practical endorsment qualification.	
Implementation (Year 13)	**Year 13 Overview**	**Module 5: Communication, homeostasis and energy**. Communication and homeostasis, excretion, neurones, hormonal communication, plant and animal responses, photosynthesis and respiration. **Module 6: Cellular control**. Cellular control, patterns of inheritance, manipulating genomes, cloning and biotechnology, ecosystems and population and sustainability.					
	SOW	**End of Unit Assessments**		**Modue Booklets**		**Practical Assessments**	
	Assessment Type & Unit Focus	Each module with have an end of module test. This will be a set of exam questions covering the content in that unit. They could also include questions that require knowledge from prior content.		Each module has an associated booklet to be completed in parallel to the teaching. It covers key words and defintions, a PLC and exam question practice.		Throughout the two year course students willl complete a minimum of 12 assessed practicals to allow them to demonstrate consistent aptitude with a number of key skills. This will lead to a separate practical endorsment qualification.	
	Topic Texts	Biological Sciences Review Journals - *Hodder Education* Four editions per academic year which cover a wide variety of topics and research. They are designed to accompany the A level specification and examiners may refer to articles in exam questions.					
Impact	**Year 12 Review Points**	RP1: T1, Wk3		RP2 (PPE1): T3, Wk2			RP3 (PPE2): T6, Wk4
	Year 13 Review Points		RP1 (PPE1): T2, Wk1		RP2: T4, Wk1	RP3 (PPE2): T5, Wk1	
	How It Is Used / Skills Set Developed / Outcomes	Research skills, independent skills, practical skills, analysis skills, problem solving skills, teamwork skills.					
	Links to Higher Education	Studying A level Biology, in conjunction with other subjects, can lead to the following types of degree course: Biomedical Sciences, Biochemistry, Natural Sciences, Dentistry, Environmental Science, Medical Science, Marine Biology, Zoology, Medicine, Microbiology, Pharmacy, Physiotherapy, Veterinary Science and more.					
	Careers in the Curriculum	Studying a Biology related degree at university will enable career opportunities including: Vetinary, Dentistry, Medicine, Zoologist, Research Biologist, Laboratory Technician, Forensics, Academia, Toxicologist, Microbiologist, Conservationist, Forestry Commison, Food Technologist, Pharmacology and more.					