PCHS Curriculum Information - Year 13 A Level Biology

Course Title: A Level Biology	Exam Board: AQA	Specification Code: 7401

How will students be assessed?

Students will sit three two-hour external exams at the end of Year 13. During the course, along with other practical work, students will carry out 12 assessed practical's which will lead to the students being awarded their practical skills endorsement.

Biology Paper 1: (91 marks)

Students will complete short and long answer questions on the topic areas mainly from year 12. Questions will be knowledge based including a large proportion of knowledge application, as well as drawing on the practical work that students have completed throughout the course.

Biology Paper 2: (91 marks)

Students will complete short and long answer questions as well as a comprehension question on the topic areas from year 13. Questions will be knowledge based including a large proportion of knowledge application, as well as drawing on the practical work that students have completed throughout the course.

Biology Paper 3: (78 marks)

Students will complete structured questions including practical techniques, critical analysis and an essay.

Half term	KEY CONTENT- Teacher 1	KEY CONTENT- Teacher 2
1	**Genetics, populations, evolution and ecosystems: Populations in ecosystems** • Populations and their sizes in ecosystems • Competition and Predation • Succession and Conservation *Required practical 12* **Assessment on Populations** **Organisms respond to changes in their internal and external environment** • Survival and response	**Energy transfers** • Photosynthesis (catch up from the summer) • Respiration (catch up from the summer) **Assessment on Photosynthesis and Respiration**

	• Receptors • Control of heart rate *Required practical 10*	
2	**Organisms respond to changes in their internal and external environment: Nervous coordination** • Nerve impulses • Synaptic transmission • Skeletal muscles **Assessment on Nervous Coordination**	**Genetics, populations, evolution and ecosystems: Populations and evolution** • Inheritance • Populations • Evolution may lead to speciation **Assessment on Populations and evolution**
3	**Homeostasis** • Principles of homeostasis and negative feedback • Control of blood glucose concentration • Control of blood water potential *Required practical 11* **Assessment on Homeostasis**	**Control of gene expression: Gene expression** • Gene mutations • Gene expression and control of • Regulation of transcription and translation • Gene expression and cancer • Using genome projects
4	**Energy transfers: Energy and ecosystems** • Energy and ecosystems • Productivity • Nutrient cycles • Fertilisers and their issues **Assessment on Energy and Ecosystems**	**Control of gene expression: Gene expressions and Technologies** • Recombinant DNA technology • Identification and diagnosis of heritable conditions • Genetic fingerprinting **Assessment on Gene expressions and Technologies**
5	**Exam preparation**	**Exam preparation**