



**Year 11 Biology Curriculum Overview**

- ✓ Each lesson will start with a series of questions linked to both the previous lesson and topics studied previously.
- ✓ Formative assessment of skills linked to practical work will enable students to demonstrate their acquisition of new skills.
- ✓ Students are encouraged to consolidate learning at least once a week and seek tutor help if unsure on any topics.
- ✓ Within each unit, time will be allocated for consolidation and recall before assessment, this includes for mock exams.
- ✓ The following questions will be explored within the units
- ✓ **Content in blue is only taught to the A pathway (students on the triple science route)**

Half Term 1	
Date	<b>Topic: Inheritance, variation and evolution.</b>
WC 29/08	How do organisms reproduce?
WC 05/09	How are gametes formed?
WC 12/09	Why are there different reproductive methods?
WC 19/09	What is DNA? What is the structure of DNA?
WC 26/09	How do I inherit characteristics from my parents?
WC 03/10	What are genetic disorders?
WC 10/10	How can I show the chances of having a boy or a girl? Why are we all different?
Half Term 2	
Date	<b>Topic: Inheritance, variation and evolution</b>
WC 31/10	How do species change over time?
WC 07/11	What is selective breeding?
WC 14/11	What is genetic engineering? What are the steps in the process of genetic engineering?
WC 21/11	What is cloning? Who was Charles Darwin? How do different species evolve?
WC 28/11	How has our understanding of genetics changed?
WC 05/12	How do we group living things? Why are evolutionary trees important?
WC 12/12	<b>Mock examinations</b>
Half Term 3	
Date	<b>Topic: Ecology</b>
WC 02/01	How do living things interact within an ecosystem?
WC 09/01	What are abiotic and biotic factors?
WC 16/01	How are organisms adapted to survive in their habitats?
WC 23/01	Why are producers so important?
WC 30/01	How and why do we sample species?
WC 06/02	What is the carbon cycle? What is the water cycle?
Half Term 4	
Date	<b>Topic: Ecology</b>
WC 20/02	Why is decomposition important? How does the temperature affect the rate of decay?
WC 27/02	What is biodiversity and how is it maintained? What is deforestation and how does it affect global warming?
WC 06/03	What is waste management and why is it necessary?
WC 13/03	What are trophic levels?
WC 20/03	What is food security and what factors affect it? What is sustainable farming and fishing?
WC 27/03	What is biotechnology and how can we use it to make food?
Half Term 5	
Date	<b>Topic: Consolidation</b>
WC 17/04	<b>Walking talking mocks</b>
WC 24/04	What types of cells are there? <b>Required practical: Microscopy.</b>
WC 01/05	<b>Required practical: Osmosis. Required practical: Culturing microorganisms.</b>
WC 08/05	How are organisms structured? <b>Required practical Enzymes. Required practical: Food tests</b>
WC 15/05	How do organisms use energy? <b>Required practical: Photosynthesis.</b>
WC 22/05	What are communicable diseases? How does the body defend itself against pathogens? What is homeostasis? <b>Required practical: Reaction times.</b> <b>Required practical: Investigating the effect of light and growth.</b>
Half Term 6	
Date	<b>Topic: Exam season</b>
WC 05/06	
WC 12/06	
WC 19/06	
WC 26/06	
WC 03/07	
WC 10/07	
WC 17/07	