

Biology – Year 10

Course Title: GCSE Biology	Exam Board: AQA	Specification Code: 8461
How will students be assessed? Students will sit two external exams at the end of Year 11. Each paper is worth 50% of their final GCSE grade. Both exams will be 1 hour and 45 minutes in length requiring students to answer multiple choice, structured, closed short answer and open response questions. Questions will be knowledge based as well as drawing on the practical work that students have completed throughout the course. Biology GCSE Paper 1: This will assess the topic areas of Cell biology, Organisation, Infection and response and Bioenergetics Biology GCSE Paper 2: This will assess the topic areas of Homeostasis and response, Inheritance, variation and evolution and Ecology		

Half Term	Key Content
1	Organisation: Circulatory System • The heart and blood vessels • Blood • Lungs • Non-communicable diseases: coronary heart disease, health issues, lifestyle and cancer Assessment on the Circulatory system
2	Infection and response • Communicable disease: viral, bacterial, fungal and protist • Culturing microorganisms • Human defense system • Vaccination • Antibiotics and painkillers • Discovery and development of drugs • Monoclonal antibodies (higher tier)

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| | <ul style="list-style-type: none">• Plant disease defenses• Plant disease identification (higher tier) |
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Required practical 2: Microbiology

Assessment on Infection and response

3	Bioenergetics • Respiration • Metabolism • Structure of plants • Photosynthesis • Uses of glucose Required Practical 6: Photosynthesis Assessment on Bioenergetics
4	Homeostasis and response: Nervous System • The nervous system • The brain • The eye • Body temperature Required Practical 7: Reaction time Assessment homeostasis – Nervous control
5	Homeostasis and response: Hormonal control • Human Endocrine System • Blood glucose • Kidneys • Hormones in human reproduction, contraception and fertility • Negative feedback • Plant Hormones • Uses of plant hormones (higher tier) Required practical 8: Plant hormones Assessment on Hormonal control
6	Year 10 Exams

	Ecology 1 • Communities • Factors affecting communities • Adaptations • Levels of organisation in ecosystems Required Practical 9: Sampling Ecosystems
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- Communities
- Factors affecting communities
- Adaptations
- Levels of organisation in ecosystems

Required Practical 9: Sampling Ecosystems