

Science - Biology

What are the aims and intentions of this curriculum?

Continuation of the GCSE AQA Biology course. Developing students understanding of key scientific ideas and their ability to investigate scientifically and have an in depth understanding of their findings.

Term	Topics	Knowledge covered	Skills developed	Assessment
Autumn 1	Inheritance	Reproduction Meiosis Sex determination DNA Genetic inheritance Inherited diseases Genetic engineering Variation Selective breeding Evolution Evidence for evolution	Practical skills - planning investigations using correct terminology for variables. Understanding accuracy and reliability. Collecting valid results. Plotting and analysing graphs.	Mock exams - Biology paper 1 - Chemistry paper 1 - Physics paper 2
Autumn 2				
Spring 1	Further Biology	Culturing microorganisms Monoclonal antibodies Plant diseases, plant control and coordination The brain, the eye	Understanding accuracy and reliability. Plotting and analysing graphs.	Mock exams - Biology paper 2 - Chemistry paper 2 - Physics paper 1
Spring 2	Further Ecology	Trophic levels Pyramids of biomass Factors affecting food security Impact of environmental change Role of biotechnology	Mathematical skills relating to statistics and ecological surveys	
Summer 1	Revision of year 9 and 10 topics Revision (specific to student needs)	Cells, organisation, infection and response, ecology, homeostasis, bioenergetics	Required practical tasks for year 9 and 10 topics will be covered and the relevant skills in data collection, analysis, evaluation will be further developed.	