

# Fareham Academy Science Overview – Year 11 Biology

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic(s)	Topic 5: Homeostasis and response	Topic 6: Inheritance, variation and evolution	Topic 7: Ecology	Paper 2: Full preparation and mock exam	Official exam revision in line with whole school drive	
Topic Objectives	Explore how a range of conditions are controlled in the body.	Explore how variation exists in species and how gene technology works.	Explore how we rely on the earth resources and importance of these.	Memory retention, application to new contexts, application of knowledge, effective revision and preparation.	Memory retention, application to new contexts, application of knowledge, effective revision and preparation.	
Acquired Knowledge/Skills	<p>Explore that cells can only survive within narrow physical and chemical limits such as temperature, pH and a supply of dissolved food and water.</p> <p>Explore the body requires control systems that constantly monitor and adjust the composition of the blood and tissues.</p> <p>Explore the nervous system and how it can bring about fast responses.</p> <p>Explore the hormonal system which brings about slower changes.</p>	<p>Discover how meiosis works in producing offspring.</p> <p>Explain gene mutations occur continuously and on rare occasions can affect the functioning of the animal or plant.</p> <p>Investigate variation generated by mutations.</p> <p>Discover genes from one species and introducing them into the genome of another happens by genetic engineering and explore the associated controversy.</p>	<p>Discover that materials including carbon and water are continually recycled by the living world.</p> <p>Explore adaptations of a range of species.</p> <p>Know that ecosystems provide essential services that support human life.</p> <p>Explore how humans are threatening biodiversity and the actions needed to ensure our future health, prosperity and well-being.</p>	<p>Revision methods.</p> <p>Quality of revision.</p> <p>Learning key model answers off by heart.</p> <p>Learning equations off by heart.</p> <p>Exam technique.</p> <p>Time management.</p> <p>Exam anxiety management.</p>	<p>Revision methods.</p> <p>Quality of revision.</p> <p>Learning key model answers off by heart.</p> <p>Learning equations off by heart.</p> <p>Exam technique.</p> <p>Time management.</p> <p>Exam anxiety management.</p>	
Assessments	B5 topic test: homeostasis and response	B6 topic test: inheritance, variation and evolution	B7 topic test: ecology	Full biology paper 2 mock	Official public exams as per AQA's exam calendar	