

Key Stage 4 (10)	
Course title: Combined science: Biology	
Exam board: AQA	
Specification code: 8464 or 8461	
Autumn 1 (September – October) to Autumn 2 (October – December)	Organisation- digestive system Students now learn about a second organ system in the body- the digestive system. They will bring in and expand their knowledge from KS3 on the topic of enzymes
	Cell division This topic builds on the cells knowledge from year 9. It allows students to make the link between the generic model cell and the specialised cells discussed in the context of organisation
	Organisation in animals – Non communicable disease Students will examine how lifestyle and environmental factors can lead to disease, particularly in the context of the organ systems previously studied. Cancer will also be studied, with a link being made to the failure of the cell cycle to proceed normally.
Spring 1 (January – February) to Spring 2 (February – March)	Organisation in plants This builds on organisation in animals and forms link to the later photosynthesis topic. The emphasis in this topic is on the transport of nutrients
	Infection and Immunity Having previously studied non communicable diseases, students will cover how pathogens can transmit disease in both plants and animals.
	Bioenergetics – photosynthesis and respiration Builds on organisation topics and introduces concepts of energy transfer in biology, building on chemistry understanding.
Summer 1 (April – June) Summer 2 (June – July)	Ecology Placed in summer term to enable students to take part in real field work including quadrats and transects. Builds on respiration (food chains and energy transfer) and photosynthesis (impact on plant distribution).
	Paper 1 Students will complete a paper 1 (all content covered so far excluding ecology) as their end of year assessment