

Science Curriculum Topic Overview for Key Stage 4

September 2022 – July 2023



TDA = Teacher designed activity, which is practical coursework

ESA = Externally set assessment, which is a short exam.

Class	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
10.1 GCSE	Chemistry foundation – Periodic table, elements and compounds pH scale,	Physics foundation – Change of state, density, EM spectrum, forces, energy, circuits, resources	Bio 1 – cells, digestive system, healthy lifestyles, heart and circulatory system, lungs and gas exchange	Bio 3 – The immune system	Bio 4 – Plants	Bio 5 – ecology End of year exam
10.2 Entry Level Cert	Chem unit 3 – Atoms and elements, mixtures TDA	Chem unit 3 - metals and polymers ESA	Bio unit 1 – cells to systems, our body TDA	Bio unit 1 – immunity, nerves and hormones ESA	Phys unit 5 – Energy TDA ESA	Phys unit 5 - Forces and radiation TDA Assessment catch-up
10.3 Unit Award Scheme	Recording the season – start of year-long project Lab hazards and safety Lab practical & skills	Recording the season Animals including humans Lab practical & skills	Recording the season Living things and their habitats Lab practical & skills	Recording the season Plants Lab practical & skills	Recording the season Forces and Magnets Lab practical & skills	Recording the season Seasonal changes Lab practical & skills

	Everyday materials					
11.1 GCSE	Bio 2 – Nervous system and hormones, homeostasis, the brain, the kidney, the eye, water and nitrogen balance	Bio 6 – Classification and genetics Mock exams	Bio 7 – Human effects on the environment	Revision Exam skills Revisit required practical's	Revision Exam skills Final Exams	Ecology project for remaining students
11.2 Entry Level Cert	Bio unit 2 – Ecology and evolution TDA ESA	Chem unit 4 - Reactions TDA	Chem unit 4 – Atmosphere and water ESA	Phys unit 6 – Electricity, magnets and waves TDA ESA	Assessment catch-up Entry by 15 May	Investigation skills Optional projects
11.3 Unit Award Scheme	Forces Lab practical and skills	Living things and their habitats Lab practical and skills	Electricity Lab practical and skills	Properties and changes of materials Lab practical and skills	Animals including humans Lab practical and skills	Evolution and inheritance Lab practical and skills