

KS3	Autumn Term		Spring Term		Summer Term	
	HT1	HT2	HT3	HT4	HT5	HT6
Year 7	Structure and Function of Living Organisms- <i>Cells and Organisation</i>	The particulate nature of matter- <i>The Particle Model</i>	Forces and Motion - <i>Speed</i>	Inheritance, Chromosomes DNA and Genes- <i>Variation</i>	Space Physics- <i>The Solar System</i>	Waves- <i>Sound Waves</i>
	Electricity and Electromagnetism- <i>Voltage and Current</i>	Reproduction - <i>Reproduction in Plant</i>	Pure and Impure Substances- <i>Separating Mixture</i>	Chemical Reactions- <i>Acids and Alkali</i>	Earth and Atmosphere- <i>Climate</i>	Reproduction- <i>Reproduction in Humans</i>
Year 8	Waves- <i>Light Waves</i>	The Periodic Table and Materials- <i>Mendeleev principles and Reactivity</i>	Atoms, Elements and Compounds- <i>Elements and Compounds</i>	Structure and Function of Living Organism- <i>Gas Exchange System</i> Health- <i>Effects of Recreational drugs (Smoking)</i>	Earth and Atmosphere- <i>Earth Structure</i>	Interactions and Interdependencies- <i>Interdependence</i>
		Energy Changes and Transfers	Electricity and Electromagnetism- <i>Resistance</i>	Electromagnets and Magnetism- <i>Magnetism</i>		
	Structure and Function of Living Organisms- <i>The Skeletal and muscular Systems</i>	Structure and Function of Living Organisms- <i>Nutrition and Digestion</i>				
Year 9	Material cycles and Energy- <i>Cellular Respiration and Photosynthesis</i>	Chemical Reactions - <i>Metals and Non Metals</i>	Genetics and Evolution- <i>Inheritance, chromosomes, DNA and Genes</i>	Forces- <i>Work</i>	Earth and Atmosphere- <i>Earths Resources</i>	Bridging Unit
				Genetics and Evolution- <i>Biodiversity.</i>	Pressure in Fluids	
	Waves- <i>Observed Waves, Energy and Waves.</i>	Forces- <i>Contact Forces, balanced and unbalanced forces. Gravity</i>	Chemical Reaction and Energetics <i>Types of reactions and exo/endermomic</i>	Energy Changes and Transfers - <i>Heating and Cooling</i>		

Curriculum 2022-23

KS4 Biology	Autumn Term		Spring Term		Summer Term	
	HT1	HT2	HT3	HT4	HT5	HT6
Year 10	Cell Biology	Organisation	Communicable and Non-communicable disease	Bioenergetics	Culmination of Cell Biology, Organisation, communicable- non-communicable disease and Bioenergetics.	Ecology
Year 11	Homeostasis and response	Inheritance, Variation and Evolution	Inheritance, Variation and Evolution and recap of Paper 2	Culmination of Cell Biology, Organisation, communicable- non-communicable disease and Bioenergetics, homeostasis and response, inheritance and evolution	Culmination of Cell Biology, Organisation, communicable- non-communicable disease and Bioenergetics, homeostasis and response, inheritance and evolution	

Curriculum 2022-23

KS4 Chemistry	Autumn Term		Spring Term		Summer Term	
	HT1	HT2	HT3	HT4	HT5	HT6
Year 10	Atomic Structure and the Periodic Table	Bonding, Structure and the properties of matter	Quantitative Chemistry	Chemical Changes, Energy Changes	Culmination of Atomic Structure and the Periodic Table, Bonding, Structure and the properties of matter Quantitative Chemistry a Chemical Changes, Energy Changes	Chemistry of the atmosphere
Year 11	The Rate and Extent of chemical change	Organic Chemistry Chemical Analysis	Chemical Analysis Using Resources	Culmination of Atomic Structure and the Periodic Table, Bonding, Structure and the properties of matter Quantitative Chemistry a Chemical Changes, Energy Changes, Organic Chemistry, Chemical Analysis, Chemistry of the Atmosphere, Using Resources.	Culmination of Atomic Structure and the Periodic Table, Bonding, Structure and the properties of matter Quantitative Chemistry a Chemical Changes, Energy Changes, Organic Chemistry, Chemical Analysis, Chemistry of the Atmosphere, Using Resources.	

Curriculum 2022-23

KS4 Physics	Autumn Term		Spring Term		Summer Term	
	HT1	HT2	HT3	HT4	HT5	HT6
Year 10	Energy	Electricity	Particle Model of Matter	Atomic Structure	Culmination of Energy, Electricity, Particle Model of Matter and Atomic Structure	Forces
Year 11	Waves	Magnetism and Electromagnetism	Culmination of Energy, Electricity, Particle Model of Matter and Atomic Structure, Forces, Waves and Magnetism and Electromagnetism	Culmination of Energy, Electricity, Particle Model of Matter and Atomic Structure, Forces, Waves and Magnetism and Electromagnetism	Culmination of Energy, Electricity, Particle Model of Matter and Atomic Structure, Forces, Waves and Magnetism and Electromagnetism	

Curriculum 2022-23

A-Level Biology	Autumn Term		Spring Term		Summer Term	
	HT1	HT2	HT3	HT4	HT5	HT6
Year 12	Teacher A Module 2 Foundations in biology: Teacher B Module 3 Exchange and transport	Teacher A Module 2 Foundations in biology Teacher B Module 3 Exchange and transport	Teacher A Module 2 Foundations in biology: Teacher B Module 3 Exchange and transport	Teacher A Module 2 Foundations in biology Teacher B Module 4 Biodiversity evolution and disease	Teacher A Module 2 Foundations in biology Teacher B Module 4 Biodiversity evolution and disease	Teacher A Module 2 Foundations in biology Teacher B Module 4 Biodiversity evolution and disease
Year 13	Teacher A Module 5 Communication, homeostasis and energy Teacher B Module 6 Genetics, evolution and ecosystems	Teacher A Module 5 Communication, homeostasis and energy Teacher B Module 6 Genetics, evolution and ecosystems	Teacher A Module 5 Communication, homeostasis and energy Teacher B Module 6 Genetics, evolution and ecosystems	Teacher A Module 5 Communication, homeostasis and energy Teacher B Module 6 Genetics, evolution and ecosystems	Consolidation of all topics	Consolidation of all topics

Curriculum 2022-23

A-level Chemistry	Autumn Term		Spring Term		Summer Term	
	HT1	HT2	HT3	HT4	HT5	HT6
Year 12	Module 2: Foundations in chemistry <ul style="list-style-type: none"> Atoms, compounds, molecules and equations Amount of substance Electrons, bonding and structure 	Module 2: Foundations in chemistry <ul style="list-style-type: none"> Acid-base and redox reactions Enthalpy changes Module 3 - Periodic table and energy <ul style="list-style-type: none"> The periodic table and periodicity 	Module 3 - Periodic table and energy <ul style="list-style-type: none"> Group 2 and the halogens Qualitative analysis Reaction rates and equilibrium (qualitative) 	Module 4 - Organic chemistry <ul style="list-style-type: none"> Basic concepts Hydrocarbons Alcohols and haloalkanes 	Module 4-Organic chemistry <ul style="list-style-type: none"> Organic synthesis Analytical techniques (IR and MS) Polymers 	Module 5: Physical chemistry and transition elements <ul style="list-style-type: none"> Orders, rate equations and rate constants Module 6: Organic chemistry and analysis <ul style="list-style-type: none"> Benzene and aromatic compounds
Year 13	Teacher A-Module 5: Physical chemistry and transition elements <ul style="list-style-type: none"> rate equations, orders of reaction, the rate determining step equilibrium constants, Kc and Kp Teacher B-Module 6: Organic chemistry and analysis <ul style="list-style-type: none"> aromatic compounds 	Teacher A-Module 5: Physical chemistry and transition elements <ul style="list-style-type: none"> acid-base equilibria including pH, Ka and buffer solutions lattice enthalpy and Born-Haber cycles entropy and free energy Teacher B-Module 6: Organic chemistry <ul style="list-style-type: none"> carboxylic acids and esters organic nitrogen compounds: amines and amino acids 	Teacher A-Module 5: Physical chemistry and transition elements <ul style="list-style-type: none"> electrochemical cells. redox chemistry Teacher B-Module 6: Organic chemistry and analysis <ul style="list-style-type: none"> polymerisation: addition polymers and condensation polymers 	Teacher A-Module 5: Physical chemistry and transition elements <ul style="list-style-type: none"> transition elements Teacher B-Module 6: Organic chemistry and analysis <ul style="list-style-type: none"> synthetic organic chemistry and further development of practical skills the importance of modern analytical techniques in organic analysis. 	Consolidation of all topics in preparation for terminal exam	Consolidation of all topics in preparation for terminal exam

Curriculum 2022-23

A-level Physics	Autumn Term		Spring Term		Summer Term	
	HT1	HT2	HT3	HT4	HT5	HT6
Year 12	A - Foundations of physics Charge and current B - Motion Forces in action	A - Energy, power and resistance Electrical circuits B - Work, energy and power Revision for mock 1	A - Waves 1 B - Materials	A - Waves 2 B - Laws of motion Revision for mock 2	A - Quantum B - Laws of motion Revision for End of year test	Begin Y13 content: A - Thermal physics B - Capacitance
Year 13	A - Thermal physics Ideal gases B - Capacitance Electric fields	A - Circular motion Oscillations B - Magnetic fields Revision for mock 1	A - Gravitational fields Stars Cosmology B - Particle physics Radioactivity	A - Medical imaging B - Nuclear physics Revision for exams	Consolidation of all topics	Consolidation of all topics

Curriculum 2022-23

BTEC Applied Science	Autumn Term		Spring Term		Summer Term	
	HT1	HT2	HT3	HT4	HT5	HT6
Year 13	<p>Teacher A Unit 12 Diseases and Infections LA A Investigate different types of diseases and infections that can affect humans</p> <p>Unit 3 Science Investigation Skills: F) Plants and their environment</p> <p>Teacher B Unit 3 Science Investigation Skills: H) Electrical circuits</p> <p>Unit 3 Science Investigation Skills: G) Energy content of fuels (Calorimetry)</p>	<p>Teacher A Unit 3 Enzymes</p> <p>Unit 12 Diseases and Infections LA B Examine the transmission of infectious diseases and how this can be prevented</p> <p>Teacher B Unit 3 Science Investigation Skills: G) Energy content of fuels (Calorimetry) Unit 3 Diffusion</p>	<p>Unit 3 Science Investigation Skills: Externally assessed assignment attempt 1</p> <p>Teacher A Unit 12 Diseases and Infections LA B Examine the transmission of infectious diseases and how this can be prevented</p> <p>Unit 12 Diseases and Infections LA C Understand how infectious diseases can be treated and managed</p> <p>Teacher B Unit 3 Science Investigation Skills: Alternative Elec prac Unit 3 Science Investigation Skills: Alternative Energy content</p>	<p>Teacher A</p> <p>Unit 12 Diseases and Infections LA C Understand how infectious diseases can be treated and managed</p> <p>Unit 12 Diseases and Infections LA D Understand how the human body responds to diseases and infections</p> <p>Teacher B Unit 3 Science Investigation Skills: Alternative Diffusion Unit 3 Science Investigation Skills: Alternative Enzymes prac</p>	<p>Unit 3 Science Investigation Skills: Externally assessed assignment attempt 1</p> <p>Coursework development and preparation for unit 1 and unit 3 re-sits</p>	<p>Coursework development</p>

Curriculum 2022-23

BTEC Applied Human Biology	Autumn Term		Spring Term		Summer Term	
	HT1	HT2	HT3	HT4	HT5	HT6
Year 12	<p>Unit 1: Principles of Applied Human Biology</p> <p>A1 Cells, Tissues and Biological Molecules</p>	<p>Unit 1: Principles of Applied Human Biology</p> <p>A1 Fundamental Development and Function</p> <p>A2 Nervous System</p> <p>A3 Cardiovascular and Respiratory System</p>	<p>Unit 1: Principles of Applied Human Biology</p> <p>A4 Digestive System</p> <p>A5 Cellular injury and Repair</p> <p>A6 Diagnostic Techniques</p>	<p>Unit 1: Principles of Applied Human Biology</p> <p>B1 Immune Response</p> <p>B2 Immune Dysfunction</p> <p>C1 Gene expression</p> <p>C2 Genetic Disorders</p>	<p>Unit 1: Principles of Applied Human Biology</p> <p>Consolidation of all learning outcomes.</p>	<p>Unit 3 Huma Biology and Health Issues</p> <p>A1 Understand Health issues and associated initiative and research</p>
	<p>Unit 2 Portfolio Task- Practical Microbiology and Infectious Disease</p> <p>A1 Characteristics of different of microorganisms, A2 Methods of pathogenicity, A3 Classification Strategies, B1 Classification overview of infectious disease, B2 Transmission of Infectious agents, B3 Infectious disease, signs symptoms and progression, B4 Prevention and treatment of infectious disease, C1 Health and Safety, C2 Microscopy and Staining technique, C3 Culture of Microorganisms, C4 Quantitative analysis of microbes, D1 Investigating the substances that inhibit growth of microorganisms, D2 Interpretation, analysis and evaluation.</p>					
Year 13	<p>Unit 3 Huma Biology and Health Issues</p> <p>A2 Understand the influence of organizations/individuals on health issues</p>	<p>Unit 3 Huma Biology and Health Issues</p> <p>B1 Interpret, analyses and evaluate scientific information</p> <p>C1 Understand how health issues and initiatives are reported in different media and for different audiences.</p>	<p>Consolidation of all learning aims for Unit 3.</p>	<p>Unit 4 Portfolio Task- Functional Physiology</p> <p>A Examine the structure, function and disorders of the muscular and skeletal systems.</p> <p>B Understand the structure, function and disorders of the endocrine and nervous systems</p> <p>C Understand the role of homeostasis in controlling and coordinating the body systems.</p>		