

## Year 12 Curriculum Overview

Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Psychology</b>	VWW - Cognitive Psychology Biological Psychology Research Methods, Maths	VWW - Cognitive Psychology Biological Psychology Research Methods, Maths	VWW - Social Psychology, Revision, Exam Practice J59 - Learning theories, Revision, Exam practice	VWW - Social Psychology, Revision, Exam Practice J59 - Learning theories, Revision, Exam practice, inferential statistical tests	VWW - Practical Investigations, Revision, Exam Practice J59 - Practical Investigations, Revision, Exam Practice, inferential statistical tests	VWW - Issues and Debates, Revision, Exam Practice J59 - Issues and Debates, Revision, Exam Practice
<b>English Literature</b>	Othello The Great Gatsby	Othello Tess of the D'Urbervilles	William Blake Tess of the D'Urbervilles	William Blake The Handmaid's Tale	NEA The Handmaid's Tale	NEA The Handmaid's Tale
<b>Maths</b>	Pure Unit - Algebra and functions Pure Unit - Further algebra Pure Unit - Coordinate geometry Pure Unit - Differentiation Applied Unit - Statistical sampling Applied Unit - Data presentation and interpretation Applied - Quantities and units in mechanics Applied Unit - Kinematics 1	Pure Unit - Differentiation Pure Unit - Vectors Pure Unit - Further algebra Pure Unit - Vectors Applied Unit - Data presentation and interpretation Applied Unit - Kinematics 1	Pure Unit - Integration Pure Unit - Trigonometry Pure Unit - Coordinate geometry in the x-y plane Applied Unit - Data presentation and interpretation Applied Unit - Probability Applied Unit - Forces and Newton's laws	Pure Unit - Trigonometry Pure Unit - Coordinate geometry in the x-y plane Pure Unit - Exponentials and logarithms Pure Unit - Algebra and functions part 2 Applied Unit - Statistical distributions Applied Unit - Statistical hypothesis testing Applied Unit - Kinematics 2	Pure Unit - Algebra and functions part 2 Pure Unit - Exponentials and logarithms Applied Unit - Statistical hypothesis testing Applied Unit - Kinematics 2 Pure Unit (year 2) - Differentiation	Pure Unit (year 2) - Differentiation Pure Unit (year 2) - Algebraic and partial fractions
<b>Further Maths</b>	Core Unit 1 Complex numbers Core Unit 2 Matrices Core Unit 3 Complex numbers part 2 Decision Unit 1 Algorithms and graph theory	Core Unit 2 Matrices Core Unit 3 Complex numbers part 2 Core Unit 4 Series Core Unit 5 Algebra and functions Decision Unit 2 Algorithms on graphs 1	Core Unit 2 Matrices Core Unit 3 Complex numbers Core Unit 6 Proof Core Unit 8 Calculus Decision Unit 2 Algorithms on graphs 1 Decision Unit 3 Algorithms on graphs 2 Decision Unit 4 Linear programming part 1 Mechanics Unit 1 Momentum and impulse part 1 Mechanics Unit 2 Work, energy and power	Core Unit 7 Vectors Core Unit 8 Calculus Core Unit 1 Complex numbers (year 2) Core Unit 2 Hyperbolic functions (year 2) Decision Unit 4 Linear programming Decision Unit 5 Critical path analysis Mechanics Unit 2 Work, energy and power Mechanics Unit 3 Elastic collisions in one dimension	Core Unit 1 Complex numbers (year 2) Core Unit 2 Hyperbolic functions (year 2) Decision Unit 5 Critical path analysis Mechanics Unit 4 Momentum and impulse	Core Unit 1 Complex numbers (year 2) Core Unit 2 Hyperbolic functions (year 2) Decision Unit 5 Critical path analysis Decision Unit 6 Algorithms and graph theory part 2 Decision Unit 7 Algorithms on graphs 1 part 2
<b>Biology</b>	Biological Molecules, different types of biological molecules and functions Exchange, features of exchange surfaces in different animals	Nucleic acids Mass transport, heart and lungs, haemoglobin and functions.	Cell Structure, eukaryotic DNA genes and functions and Protein synthesis Transcription and translation	Transport across membranes DNA genes and Protein synthesis, Transcription and translation	Cell recognition and the immune system, features of the immune system Genetic diversity Biodiversity	Mock exams revision and upgrade
<b>Chemistry</b>	Atomic structure - Mass spectrometry calculations, Time of Flight Spectrometer, the history and structure of an atom. amount of substance including mole and titration calculations and a required practical. Intro to organic chemistry nomenclature, skeletal formulas and geometric isomerism.	Bonding and Energetics. Types of bonding, shapes of molecules and specific intermolecular forces. Alkanes - nomenclature, reactions and crude oil. Halogenalkanes their formation and reactions, including nucleophilic substitution and elimination reactions. Alkenes their reactivity and uses, including electrophilic addition reactions	Kinetics and equilibria. Le chatelier principle and a required practical. Alcohols classification, nomenclature and reactivity. Includes oxidation (partial and fully) with a required practical, and organic analysis- Looking at testing for the main functional groups. Required practical investigation,	Oxidation, reduction and redox Group 7 - Reactions of group 7 and reasons behind this.	Thermodynamics, Kinetics; looking at rate of reactions in detail by determining orders of reactants and overall orders of equations. Determining the rate-determining step. Required practical, Equilibrium constant Electrode potentials, Acids bases and buffers; pH of strong and weak acids and bases. The ionic product of water and buffer solutions- what are they? How do we calculate them.	Thermodynamics, Kinetics; looking at rate of reactions in detail by determining orders of reactants and overall orders of equations. Determining the rate-determining step. Required practical, Equilibrium constant Electrode potentials, Acids bases and buffers; pH of strong and weak acids and bases. The ionic product of water and buffer solutions- what are they? How do we calculate them.
<b>Physics</b>	Constituents of the atom. Proton, neutron, and electron, charge and mass. radiation, to include the neutrino as lepton/energy conservation requirement. Particle zoo, with conservation of lepton number and baryon number. Motion in a straight line including uniform acceleration, with motion graphs. Projectile motion in two dimensions. Energy, work and power	Conservation, or otherwise, of strangeness. Use of Feynman diagrams. Particle nature of light, with photoelectric effect. De Broglie's suggestion of particle waves. Use of quantum ideas to explain frequency of emitted light from atoms/electrons. Dynamics and Newton's Laws. Momentum in terms of Nil. Moments and equilibrium. Energy conservation. Materials, density, Hooke's Law, and the Young Modulus	Progressive and stationary wave. Use of wave equation. Superposition and formation of stationary waves. Characteristics of lamp, diode, LDR, thermistor, and resistor.	Refraction, diffraction and interference. Diffraction using a laser. Detail of refraction at a plane surface. Total internal reflection. Resistivity of a conductor. Resistance in parallel and series. Use of potential divider. EMF and internal resistance of a cell	Refraction, diffraction and interference. Diffraction using a laser. Detail of refraction at a plane surface. Total internal reflection. Resistivity of a conductor. Resistance in parallel and series. Use of potential divider. EMF and internal resistance of a cell	Circular motion. Simple Harmonic Motion. Gravitational fields
<b>Physical Education</b>	Socio Cultural - Modern Sport Skill Acquisition - Classification of Skill, Practice methods, Transfer of skills A+P - Musculo-Skeletal System	Socio Cultural - Modern Sport Skill Acquisition - Theories of learning, Stages of learning Cardiovascular system	Socio Cultural - Ethics Skill Acquisition - Guidance, Feedback, Memory models A+P - Respiratory system	Socio Cultural - Ethics Sports Psychology - Individual differences A+P: Energy systems	Socio Cultural - Commercialisation Sports Psychology - Individual differences A+P - Environmental factors and recovery	Socio Cultural - Commercialisation A+P - Physical Training Sports Psychology - Individual differences
<b>BTEC Sport</b>	Unit 1: LAA - Skeletal System Unit 3: LAA - Career opportunities.	Unit 1: LAB - Muscular System Unit 3: LAA - Career opportunities	Unit 1: LAC - Respiratory System Unit 3: LAB - Skills audit	Unit 1: LAD - Cardiovascular System Unit 3: LAC - Recruitment	Unit 1: LAE - Energy Systems Unit 3: LAD - Reflection	Unit 1: Exam Unit 3: LAD - Reflection
<b>Geography</b>	Human - Urban Environments Physical - water carbon cycles	Human - Urban Environments Physical - water and carbon cycles	Human - Urban Environments Physical - water and carbon cycles	Human - Urban Environments Physical - water and carbon cycles	Human - Global Governance Physical - Coasts	Human - Global Governance Physical - Coasts
<b>History</b>	Making of Modern Britain 1945-51 including the post war political context - Tsarist and Communist Russia Geography of Russia and the reign of Alexander II	Making of Modern Britain 1951-64 Thirteen years of Conservatism = Tsarist and Communist Russia - The reigns of Alexander II and Nicholas II	Making of Modern Britain - Transition to modernity and scandal - Tsarist and Communist Russia - Opposition to the Tsarist regime and radical groups	Making of Modern Britain - Swinging 60s 1964-70 - Tsarist and Communist Russia - The impact of the First World War on Russia and the Provisional Government	Making of Modern Britain - From Heath to Wilson - Tsarist and Communist Russia - The events of the Russia revolution and the establishment of the Bolshevik dictatorship	Making of Modern Britain - The end of consensus - Tsarist and Communist Russia - The Communist dictatorship and the emergence of Stalin
<b>Sociology</b>	Families & Households Theories of the family - JS Couples - LT Childhood - JS Demography - LT Changing family patterns - LT	Families & Households Family Diversity - JS Families and social policy - LT	Education Class Differences - internal JS Class Differences - external JS Gender - LT The role of education - LT	Education Ethnic differences - JS Education policy - LT	Research Methods	Methods in Context / Theory & Methods
<b>BTEC Business</b>	Unit 3(AB) - Explore the features of two contrasting businesses and to investigate how businesses are organised.	Unit 3(CD) - Examine the environment in which businesses operate and examine business markets.	Unit 3(E) - Investigate the role and contribution of innovation and enterprise to business success. Unit 2(A) - Introduction to the principles and purposes of marketing that underpin the creation of a rationale for a marketing campaign	Unit 2 (B) - Using information to develop the rationale for a marketing campaign, including the use of the product life cycle.	Unit 2 (C) - Planning and developing a marketing campaign to include the use of the marketing mix (7Ps).	Unit 3 (AB) - Understand the importance of managing personal finance and explore the personal finance sector.
<b>BTEC Health &amp; Social Care</b>	Unit 1 LAA - LAA: Human growth and development through the life stages LAB - Factors affecting human growth and development	Unit 1 LAC - Effects of ageing	Unit 5 LAA - Examine principles, values and skills which underpin meeting the care and support needs of individuals Unit 2 LAA - As The roles of people who work in health and social care settings LAA - As The responsibilities of people who work in health and social care settings	Unit 5 LAB - Examine the ethical issues involved when providing care and support to meet individual needs. Unit 2 - LAA - A3 Specific responsibilities of people who work in health and social care settings A4 - Multidisciplinary working in the health and social care sector A5 - Monitoring the work of people in health and social care settings	Unit 5 LAC - Investigate the principles behind enabling individuals with care and support needs to overcome challenges B5 - Responsibilities of organisations towards people who work in health and social care settings B2 - Issues that affect access to services	Unit 5 LAA - Investigate the principles behind enabling individuals with care and support needs to overcome challenges. Unit 2 LAA - B5: Work organisations represent interests of service users B6 - The role of organisations that regulate and inspect health and social care services B5 - Responsibilities of organisations towards people who work in health and social care settings
<b>Media</b>	Introduction to Media Music Videos - LT Advertising - OC	Film - LT Advertising / Unseen - OC	Newspapers - LT Gaming - OC	Newspapers - LT NEA - OC (TV Les Revanants)	Radio - LT NEA - OC	NEA / Mock prep - LT NEA - OC
<b>BTEC Art &amp; Design</b>	Unit 12 Fine Art, Materials, Techniques and Processes. Artist Specimen container	Unit 12 Fine Art, Materials, Techniques and Processes. Artist Specimen container	Unit 1: Visual Recording and Communication. Externally set unit	Unit 1: Visual Recording and Communication. Externally set unit	Unit 12 Fine Art, Materials, Techniques and Processes. Artist Specimen container	Unit 12 Fine Art, Materials, Techniques and Processes. Artist Specimen container
<b>BTEC Performing Arts</b>	Unit 2: Developing skills and techniques for live performance	Unit 1: Investigating practitioners' work & Unit 2: Developing skills and techniques for live performance.	Unit 2: Developing skills and techniques for live performance	Unit 2: Developing skills and techniques for live performance	Unit 2: Developing skills and techniques for live performance	Unit 2: Developing skills and techniques for live performance
<b>BTEC Travel &amp; Tourism</b>	Unit 1: The World of Travel and Tourism Unit 9: Visitor Attractions	Unit 2: The World of Travel and Tourism Unit 9: Visitor Attractions	Unit 2: The World of Travel and Tourism Unit 9: Visitor Attractions	Unit 2: The World of Travel and Tourism Unit 9: Visitor Attractions	Unit 3: Principles of Marketing Unit 1: Revision and exam prep	Unit 3: Principles of Marketing Unit 2: Global Destinations