

Year 13 Art and Design Curriculum Outline 2021/22 – OCR H601

Autumn Term	Spring Term	Summer Term
<p>TOPIC: PERSONAL INVESTIGATION / WITH RELATED WRITTEN PERSONAL STUDY (Related Personal Study due October 2021) Key Skills: Students pursue their own lines of enquiry informed by guided cultural, contemporary and historical references. They explore different types of art in a chosen style that enables them to produce exciting, creative and innovative pieces. Students will show evidence of trying to extend their own work by seeing examples from different cultures and time periods.</p> <ul style="list-style-type: none"> • related personal study guidance • individual student presentations and digital portfolio creation • contextual links to practical work • mock 15 hour timed test • practical investigation/portfolio development • related written personal study due by October half term <p><i>Independent enquiry and portfolio development:</i></p> <ul style="list-style-type: none"> • exploring ideas • presenting ideas • developing successful outcomes • personal study and investigation completion • final outcomes of portfolio development 	<p>FINAL COURSEWORK PORTFOLIO ASSESSMENT (Due end of January 2022)</p> <p>TOPIC: EXTERNALLY SET ASSIGNMENT PREPARATION PERIOD (paper released in early February) Key Skills: develop appropriate processes and techniques, using traditional and or digital media, appropriate to chosen subject area, enabling research, exploration and the creation of final outcome(s)</p> <ul style="list-style-type: none"> • timed examination preparation • controlled assessment presentation • galleries visit • artist workshop or art studio visit • contextual links to personal work • practical workshops for media mastery • subject development and practical mastery in printing, life drawing, painting, photography, sculpture • sketchbook/portfolio development • digital portfolio completed • final practical work for exhibition resolved and completed 	<p>TOPIC: EXTERNALLY SET ASSIGNMENT (Timed exam, moderation/assessment and final Exhibition) Key Skills: Careers and planning for chosen subject area, Portfolio planning and interview tasks, planning and curation of exhibition, planning and preparing for ESA (early April deadline. tbc)</p> <ul style="list-style-type: none"> • 15 hour timed externally set assignment • exploring ideas • developing ideas • contextual links • presenting ideas • developing successful outcomes • planning for public exhibitions and next steps • careers planning/work experience in the field • preparation for assessment and moderation • critical reflection and analysis • maximising impact and presentation • course review and evaluation • entry to external shows and national student exhibitions • exhibition curation and planning • networking and celebrations

Year 13 Biology Curriculum 2021/22 – OCR H420

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none">Statistics for Biology <u>Module 6</u> <ul style="list-style-type: none">Ecosystems <u>Module 5</u> <ul style="list-style-type: none">RespirationPhotosynthesisNeuronal communicationExcretion & homeostasis	<u>Module 5</u> <ul style="list-style-type: none">Excretion & homeostasis cont'd <u>Module 6</u> <ul style="list-style-type: none">Genetics, variation and patterns of inheritanceManipulating genomesCloning & biotechnology	<ul style="list-style-type: none">Revision of all topics

Year 13 Chemistry Curriculum 2021/22 – OCR H432

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none">• chromatography and qualitative analysis• spectroscopy• carboxylic acids and esters• nitrogen compounds and polymers• how far• acids, bases and buffers	<ul style="list-style-type: none">• how fast• redox and electrode potentials• transition elements• qualitative analysis• organic synthesis	<ul style="list-style-type: none">• how fast continued• transition elements continued• revision programme
Development of practical skills runs throughout		

Year 13 Classical Civilisations Curriculum 2021/22 – OCR H408

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none">• Completion of Greek Art & World of the Hero <p style="text-align: center;">GREEK RELIGION</p> <ul style="list-style-type: none">• Sanctuaries• The Greek Pantheon	<ul style="list-style-type: none">• Mythology• Religion in daily life• Religion in Literature	Thorough revision using past papers

Year 13 Computer Science Curriculum Outline 2021/22 – OCR H446

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none">• 2.1.1 Thinking abstractly• 2.1.2 Thinking ahead• 2.1.3 Thinking procedurally• 2.1.4 Thinking logically• 2.1.5 Thinking concurrently• 2.2.2 Computational Methods• Programming – Project Design & Development	<ul style="list-style-type: none">• 2.3.1 Algorithms• Mock exam process• Programming – Project Development, Testing, Evaluation• Revision – all topics	<ul style="list-style-type: none">• Revision – all topics• Personalised/targeted revision• Exam practice• Open revision sessions

Year 13 Economic Curriculum 2021/22 – AQA 7136

Autumn Term	Spring Term	Summer Term
<p>Microeconomics Unit</p> <p>Individual economic decision making</p> <ul style="list-style-type: none"> • Consumer behaviour • Imperfect information • Rationality • Utility theory • Behavioural economics theory <p>Production Costs and Revenue</p> <ul style="list-style-type: none"> • Developing on concepts studied at Year 12 such as the Law of Diminishing Returns but also introducing the importance of profits, technological change and marginal costs and revenues to the individual firm. <p>Perfect Competition, Imperfect Competition and Monopoly</p> <ul style="list-style-type: none"> • Market structures • Objectives of firms • Perfect competition • Monopoly • Monopolistic Competition • Oligopoly • Price Discrimination • The dynamics of competition <p><i>Half term</i></p>	<p>Distribution of income and wealth: poverty and inequality</p> <ul style="list-style-type: none"> • Distribution of income and wealth • The problem of poverty • Government policies to alleviate poverty and influence the distribution of income and wealth. <p>Macroeconomics Unit</p> <p>Revisiting and Developing Macroeconomic Theory</p> <ul style="list-style-type: none"> • Economic growth • Inflation and deflation • Unemployment • The Phillips Curve <p>Fiscal and Supply Side Policies</p> <p>Financial Markets and Monetary policy</p> <ul style="list-style-type: none"> • Financial markets and financial assets • Commercial and investment banks • Central banks and monetary policy • Financial regulation <p><i>Half Term</i></p>	<p>Extensive revision and exam paper application for the A Level exams</p>

Year 13 Economic Curriculum 2021/22 – AQA 7136 (Cont'd)

Autumn Term	Spring Term	Summer Term
<p>Government intervention in markets</p> <ul style="list-style-type: none"> • Competition policy • Public ownership • Privatisation • Regulation and deregulation • Contestable and non-contestable markets <p>Revisiting market failure</p> <p>Marginal analysis and market failure</p> <ul style="list-style-type: none"> • Environmental market failure • Property rights <p>The Labour Market</p> <ul style="list-style-type: none"> • Demand and supply of labour • Perfectly and imperfectly competitive labour markets • Trade unions and their influence on wages and employment • The national minimum wage • Discrimination in the labour market 	<p>The International Economy</p> <ul style="list-style-type: none"> • Balance of payments • Exchange rates • Balance of Payments • Trade <p>Economic Growth and Development</p> <ul style="list-style-type: none"> • Trade blocs and 21st Century trade patterns • UK's membership of the EU • Rise of the BRICS • Case Studies and independent projects 	

Year 13 English Language Curriculum 2021/22 – AQA 7702

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none">• Child Language Acquisition• Language Change• Language Investigation (NEA)	<ul style="list-style-type: none">• Child Language Acquisition (cont.)• Language Change (cont.)• Revisit sociolinguistics, to include ethnolects and international varieties of English• Revisit language and representation, to include texts from different times and places	<ul style="list-style-type: none">• Revision and exam practice

Year 13 English Literature Curriculum 2021/22 – OCR H472

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"> • <i>The World's Wife</i> – completion of close textual analysis section of the NEA • <i>The Prime of Miss Jean Brodie</i> and <i>The History Boys</i> – completion of comparative essay for the NEA • <i>Mrs Dalloway</i> – preparation for comparative and contextual study – Paper 2 	<ul style="list-style-type: none"> • <i>Twelfth Night</i> and extract analysis – Shakespeare – preparation for Paper 1 • <i>A Doll's House</i> – Ibsen - preparation for Paper 1 • Preparation for the comparative and contextual study – <i>Women in Literature</i> texts 	<ul style="list-style-type: none"> • Revision and examination practice

Year 13 French Curriculum 2021/22 – AQA 7652

Autumn Term	Spring Term	Summer Term
<p>Revision and consolidation of Grammar Points</p> <p>Baseline Assessment</p> <p>Aspects of French-speaking society: current issues</p> <p>Unit 1: Positive features of a diverse society</p> <p>Unit 2: Life for the marginalised</p> <p>Unit 3: How criminals are treated</p> <p>Aspects of political life in the French-speaking world</p> <p>Unit 5: Demonstrations, strikes, who holds the power?</p> <p>Film Study: La Haine - Mathieu Kassovitz</p> <p>Literary text Study: No et moi -Delphine de Vigan</p> <p>Individual Research project</p> <p>Vocabulary Tests, Translations, Reading and Listening Summary, Card Discussion, Essay Writing and End of Topic Assessment for each topic</p> <p>30 minutes Speaking Practice & 1 hour Study Support with FLA</p>	<p>Aspects of political life in the French-speaking world</p> <p>Unit 4: Teenagers, the right to vote and political development</p> <p>Unit 6: La politique et l’immigration</p> <p>La Haine: Weekly Essay Writing</p> <p>No et moi : Weekly Essay Writing</p> <p>Individual Research project: Speaking</p> <p>Examination Preparation</p> <p>Vocabulary Tests, Translations, Reading and Listening Summary, Card Discussion, Essay Writing and End of Topic Assessment for each topic</p> <p>30 minutes Speaking Practice & 1 hour Study Support with FLA</p>	<p>Exams Preparation</p> <p>La Haine: Weekly Essay Writing</p> <p>No et moi : Weekly Essay Writing</p> <p>Exam Pro Practice for Listening and Reading</p>

Year 13 Further Mathematics Curriculum 2021/22 – Edexcel 9FM0

Autumn Term	Spring Term	Summer Term
<p>Core Pure Mathematics (AS): Unit 1 Complex numbers 1.1 Imaginary and complex numbers 1.2 Multiplying complex numbers 1.3 Complex conjugation 1.4 Roots of quadratic equations 1.5 Solving cubic and quartic equations</p> <p>Unit 2 Argand diagrams 2.1 Argand diagrams 2.2 Modulus and argument 2.3 Modulus-argument form of complex numbers 2.4 Loci and 2.5 Regions in the Argand diagram</p> <p>Unit 3 Series 3.1 Sums of natural numbers, 3.2 Sums of squares and cubes</p> <p>Unit 4 Roots of polynomials 4.1 Roots of quadratic, 4.2 Roots cubic and 4.3 Roots of quartic equation 4.4 Expressions relating to the roots of a polynomial 4.5 Linear transformation of roots</p> <p>Unit 5 Volumes of revolution 5.1 Volumes of revolution around the x axis 5.2 Volumes of revolution around the y axis 5.3 Adding and subtracting volumes of revolution 5.4 Modelling with volumes of revolution</p>	<p>Core Pure Mathematics (A level): Unit 1 Complex numbers 1.1 Exponential form of complex numbers 1.2 Multiplying and dividing complex numbers 1.3 De Moivre’s Theorem 1.4 Trigonometric identities 1.5 Sums of series 1.6 nth roots of a complex number 1.7 Solving geometric problems</p> <p>Unit 2 Series 2.1 The method of differences 2.2 Higher derivatives 2.3 Maclaurin series 2.4 Series expansions of compound functions</p> <p>Unit 3 Methods in calculus 3.1 Improper integrals 3.2 The mean value of a function 3.3 Differentiating inverse trigonometric functions 3.4 Integrating inverse trigonometric functions 3.5 Integrating using partial fractions</p> <p>Unit 4 Volumes of revolution 4.1 Volumes around the x axis 4.2 Volumes around the y axis 4.3 Volumes of revolution of parametrically defined curves 4.4 Modelling with volumes of revolution</p> <p>Unit 5 Polar coordinates 5.1 Polar coordinates and equations 5.2 Sketching curves 5.3 Area enclosed by a polar curve 5.4 Tangents to polar curves</p>	<p>Core Pure Mathematics (A level): Unit 8 Modelling with differential equations 8.1 Modelling with first order differential equations 8.2 Simple harmonic motion 8.3 Damped and forced harmonic motion 8.4 Coupled first order simultaneous</p> <p>Further Mechanics: Unit 5 Elastic collisions in two dimensions 5.1 Oblique impact with a fixed surface 5.2 Successive oblique impacts 5.3 Oblique impact of smooth spheres</p> <p style="text-align: center;">EXTERNAL A LEVEL MATHEMATICS AND A LEVEL (OR AS) FURTHER MATHEMATICS EXAMINATIONS</p>

Year 13 Further Mathematics Curriculum 2021/22 – Edexcel 9FM0 (Cont'd)

Autumn Term	Spring Term	Summer Term
<p>Unit 6 Matrices 6.1 Introduction to matrices 6.2 Matrix multiplication 6.3 Determinants 6.4 Inverses of 2x2 6.5 Inverses of 3x3 matrices 6.6 Solving systems of equations using matrices</p> <p>Unit 7 Linear transformations 7.1 Linear transformations in two dimensions 7.2 Reflections, rotations, 7.3 Enlargements and stretches 7.4 Successive transformations 7.5 Linear transformations in 3 dimensions 7.6 The inverse of a linear transformation</p> <p>Unit 8 Proof by induction 8.1 Proof by induction 8.2 Proving divisibility results 8.3 Proving statements involving \log and matrices</p> <p>Unit 9 Vectors 9.1 Equation of a line and a plane in 3 dimensions 9.2 Equation of a plane in three dimensions 9.3 Scalar product 9.4 Calculating angles between lines and planes 9.5 Points of intersection 9.6 Finding perpendiculars</p> <p>Decision Mathematics: Unit 1 Algorithms 1.1 Using and understanding algorithms 1.2 Flow charts 1.3 bubble sort 1.4 quick sort 1.5 Bin-packing algorithms 1.6 Order of an algorithm</p>	<p>Unit 6 Hyperbolic functions 6.1 Introduction to hyperbolic functions 6.2 Inverse hyperbolic functions 6.3 Identities and equations 6.4 Differentiating hyperbolic functions 6.5 Integrating hyperbolic functions</p> <p>Unit 7 Methods in differential equations 7.1 First-order differential equations 7.2 Second-order homogeneous differential equations 7.3 Second-order non-homogeneous differential equations 7.4 Using boundary conditions</p> <p>Further Mechanics: Unit 1 Momentum and impulse 1.1 Momentum in one direction 1.2 Conservation of momentum 1.3 Momentum as a vector 2) Work, energy and power Work done Kinetic and potential energy Conservation of mechanical energy and the work-energy principle Power</p> <p>Unit 3 Elastic strings and springs 3.1 Hooke's law and equilibrium problems 3.2 Hooke's law and dynamics problems 3.3 Elastic energy 3.4 Problems involving elastic energy</p> <p>Unit 4 Elastic collisions in one dimension 4.1 Direct impact and Newton's law of restitution 4.2 Direct collision with a smooth plane 4.3 Loss of kinetic energy 4.4 Successive direct impacts</p>	

Year 13 Further Mathematics Curriculum 2021/22 – Edexcel 9FM0 (Cont'd)

Autumn Term	Spring Term	Summer Term
<p>Unit 2 Graphs and networks 2.1 Modelling with graphs 2.2 Graph theory 2.3 Special types of graph 2.4 Representing graphs/networks using matrices 2.5 The planarity algorithm</p> <p>Unit 3 Algorithms on graphs 3.1 Kruskal's algorithm, 3.2 Prim's algorithm 3.3 Applying Prim's algorithm to a distance matrix 3.4 using Dijkstra's algorithm to find the shortest path 3.5 Floyd's algorithm</p> <p>Unit 4 Route inspection 4.1 Eulerian graphs 4.2 using Route inspection algorithm 4.3 Networks with more than 4 odd nodes</p> <p>Unit 5 The travelling salesman problem 5.1 Classical/practical travelling salesman problems 5.2 Minimum spanning trees for upper bound 5.3 Minimum spanning trees for lower bounds 5.4 Nearest neighbour algorithm</p> <p>Unit 6 Linear programming 6.1 Linear programming problems 6.2 Graphical methods 6.3 Locating the optimum point 6.4 Solutions with integer values</p>		

Year 13 Further Mathematics Curriculum 2021/22 – Edexcel 9FM0 (Cont'd)

Autumn Term	Spring Term	Summer Term
<p>Unit 7 The simplex algorithm 7.1 Formulating LP problems 7.2 The simplex method 7.3 Problems requiring integer solutions 7.4 Two-stage simplex method 7.5 The Big-M method</p> <p>Unit 8 Critical path analysis 8.1 Modelling a project 8.2 Dummy activities 8.3 Early/late event times 8.4 Critical activities 8.5 The float of an activity 8.6 Gantt (cascade) charts 8.7 Resource histograms 8.8 Scheduling diagrams</p>		

Year 13 Geography Curriculum 2021/22 – AQA 7037

Autumn Term	Spring Term	Summer Term
Hazards – Tectonic	Hazards – Weather & Multihazard Environments	Hazards – Weather & Multihazard Environments
Global Systems	Global Governance	Global Governance
NEA	NEA	NEA

Year 13 German Curriculum 2021/22 – AQA 7662

Autumn Term	Spring Term	Summer Term
<p>Finish studying the film “Goodbye Lenin” and developing essay writing skills.</p> <p>Study the play “der Besuch der alten Dame” and practise essay writing skills.</p> <p>Continue work on IRP (independent research project)</p> <p>Language topics: -Reunification of Germany and its consequences -Immigration -Racism</p>	<p>Language topics: -Integration -Germany and the European Union -Politics and young people</p> <p>Continued practice of essay writing skills</p> <p>January: mock exams papers 1 and 2</p> <p>March: mock oral exam (before Easter)</p>	<p>Preparation for the oral examination.</p> <p>May: oral exam (first week)</p> <p>Revision and practice of examination skills</p>

Year 13 History Curriculum 2021/22 – AQA 7042

Autumn Term	Spring Term	Summer Term
<p><u>England: Turmoil and Triumph, 1547-1603</u></p> <p>Instability and consolidation: The Mid-Tudor Crisis, 1547–1558</p> <ul style="list-style-type: none"> • Government of Edward VI. Problems of rebellions and the succession crisis. Personality and policies of Mary I • Edward VI, Somerset and Northumberland: royal authority; problems of succession; relations with foreign powers • The social impact of religious and economic changes under Edward VI; rebellion; intellectual developments; humanist and religious thought • Mary I and her ministers; royal authority; problems of succession; relations with foreign powers • The social impact of religious and economic changes under Mary I; rebellion; intellectual developments; humanist and religious thought • Elizabeth I: character and aims; consolidation of power, including the Act of Settlement and relations with foreign powers • The impact of economic, social and religious developments in the early years of Elizabeth's rule 	<p>Preparation for Mock Examinations</p> <p>The triumph of Elizabeth, 1563-1603</p> <ul style="list-style-type: none"> • Elizabethan government: court, ministers and parliament; factional rivalries • Foreign affairs: issues of succession; Mary, Queen of Scots; relations with Spain • Society: continuity and change; problems in the regions; social discontent and rebellions • Economic development: trade, exploration and colonisation; prosperity and depression • Regional developments; change and continuity; the English renaissance and 'the Golden Age' of art, literature and music • The last years of Elizabeth: the state of England politically, economically, religiously and socially by 1603 	<p>Revision</p>

Year 13 History Curriculum 2021/22 – AQA 7042 (Cont'd)

Autumn Term	Spring Term	Summer Term
<p><u>The Failure of international peace and the origins of the Second World War, 1917-1941</u> The end of the First World War and the peace settlement, 1917-1923</p> <ul style="list-style-type: none"> • Treaty of Versailles and other peace treaties. The political map of Europe post World War 1. • The collapse of the autocratic empires: Russia, Germany, Austria-Hungary and the Ottoman Empire: nationalist ambitions and the impact of international relations and peace-making • Peace-making, 1919-1923: the roles and aims of Clemenceau, Wilson and Lloyd George; the Treaty of Versailles; the East and Southern European settlements and the settlement with Turkey • Challenges to the peace settlement: the consequences of the USA's return to isolationism and the League of Nations; the responses to the post-war settlement in France, Britain and Germany • The state of international relations by 1923: the position of the USA and Russia in world affairs; continuing border disputes; the occupation of the Ruhr and its consequences 	<ul style="list-style-type: none"> • Changing balance of power: the ambitions of Italy, Japan and Germany • The collapse of collective security: the reasons for and consequences of the failure of League of Nations in the Manchurian and Abyssinian Crises <p>The coming of war, 1935-1941</p> <ul style="list-style-type: none"> • Germany's challenges to the Treaty of Versailles: the aims and actions of Hitler • The international response to German, Italian and Japanese aggression: the Rhineland Crisis: the Anschluss: the Spanish Civil War: Italy and Albania: war in China: alliances amongst the aggressors • The outbreak of war in Europe: appeasement; the Czech Crisis; the crisis over Poland and the Nazi-Soviet Pact; the outbreak of war; the reaction of Italy to the outbreak of war • From Western European to World War: the reasons for the escalation to world war; the entry of the Soviet Union; Japan, Pearl Harbour and the entry of the USA 	<p>Revision</p>

Year 13 History Curriculum 2021/22 – AQA 7042 (Cont'd)

Autumn Term	Spring Term	Summer Term
<p>Attempts at maintaining peace, 1923-1935 The 'Spirit of Locarno': consolidation of the post-war settlement; attempts at disarmament and conciliation in international relations, including the Dawes Plan, the Geneva Protocol and the Kellogg-Briand Pact</p> <ul style="list-style-type: none"> • The Depression and its impact on international relations: the failures of the Lausanne and London Conferences on international debts and reparations 		
<p>Students to complete coursework write up.</p>	<p>Students to complete coursework write up by February half term. Allocated lessons for coursework to be used practising timed essays etc.</p>	<p>Allocated lessons for coursework to be used practising timed essays etc.</p>

Year 13 Latin Curriculum 2021/22 – OCR H443

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none">• consolidation of Grammar• focus on speed and accuracy in translation using prose unseen set author• analysis of Grammar for comprehension paper• Begin second set prose and verse literature text• vocabulary learning	<ul style="list-style-type: none">• continued focus with increasing complexity on unseen prose translation• verse unseen translation• vocabulary learning• use of past papers	<ul style="list-style-type: none">• revision of all set literature texts• practice translating and Grammar analysis• past papers

Year 13 Mathematics Curriculum 2021/22 – Edexcel 9MA0

Autumn Term	Spring Term	Summer Term
<p>Pure Mathematics: Unit 1 Algebraic Methods 1.1. Proof Examples including proof by deduction and proof by contradiction 1.2 Algebraic and partial fractions Simplifying algebraic fractions 1.3 Partial fractions 1.4 Repeated factors 1.5 Algebraic division</p> <p>Unit 2 Functions and modelling 2.1 Modulus function 2.2 Functions and mapping 2.3 Composite functions 2.4 Inverse functions 2.5 $y = f(x)$ and $y = f(x)$ 2.6 Combining transformations</p> <p>Unit 3 Sequences and Series 3.1 Arithmetic sequence 3.2 Arithmetic Series 3.3 Geometric sequence 3.4 Geometric Series 3.5 Sum to infinity 3.6 Sigma notation 3.7 Recurrence and iterations 3.8 Modelling with series</p> <p>Unit 4 The binomial theorem 4.1 Expanding $(1+x)^n$ 4.2 Expanding $(a+bx)^n$ for rational n; knowledge of range of validity 4.3 Expansion of functions by first using partial fractions</p>	<p>Pure Mathematics: Unit 11 Integration (part 1) 11.1 Integrating standard functions 11.2 Integrating $f(ax+b)$ 11.3 Using trigonometric identities 11.4 Reverse chain rule 11.5 Integration by substitution 11.6 Integration by parts 11.7 Partial fractions 11.8 Finding areas 11.9 The trapezium rule 11.10 Solving differential equations 11.11 Integration as the limit of a sum</p> <p>Unit 12 Vectors (3D) 12.1 3D coordinates 12.2 Vectors in 3D 12.3 Solving Geometric problems 12.4 Application to mechanics</p> <p>Statistics: Unit 1 Regression and correlation and hypothesis testing Exponential models Measuring correlation Hypothesis testing for zero correlation</p> <p>Unit 2 Conditional Probability 2.1 Set notation 2.2 Conditional probability 2.3 Conditional probabilities in Venn diagrams 2.4 Probability formulae 2.5 Tree diagrams</p>	<p>Unit 8 Further kinematics 8.1 Vectors in kinematics 8.2 Vector methods with projectiles.</p> <p style="text-align: center;">EXTERNAL A LEVEL MATHEMATICS EXAMINATION</p>

Year 13 Mathematics Curriculum 2021/22 – Edexcel 9MA0 (Cont'd)

Autumn Term	Spring Term	Summer Term
<p>Unit 5 Radians 5.1 Radians measures 5.2 Arc length 5.3 Areas of sectors and segment 5.4 Solving trig equations 5.5 Small angle approximation</p> <p>Unit 6 Trigonometric functions 6.1 Secant, cosecant and cotangent (definitions, identities and graphs); 6.2 Inverse trigonometrical functions; 6.3 Using inverse trigonometrical functions 6.4 Trigonometric identities 6.5 Inverse trigonometric functions Solving problems in context (e.g. mechanics)</p> <p>Unit 7 Trigonometry and modelling 7.1 Addition formulae 7.2 Using the angle addition formulae 7.3 Double angle formulae 7.4 Solving trigonometric equations 7.5 Simplifying $a\cos x \pm b\sin x$ 7.6 Proving Trigonometric identities 7.7 Modelling with trigonometric functions</p> <p>Unit 8 Parametric equations 8.1 Parametric equations 8.2 Using trigonometric identities 8.3 Curve sketching 8.4 Points of intersection 8.5 Modelling with parametric equations</p>	<p>Unit 3 The Normal distribution 3.1 The normal distribution 3.2 Finding probabilities for normal distributions 3.3 The inverse normal distribution function 3.4 The standard normal distribution function 3.5 Finding μ and σ 3.6 Approximating a binomial distribution 3.7 Hypothesis testing with the normal distribution</p> <p>Mechanics: Unit 4 Moments: 4.1 Moments 4.2 Resultant moments 4.3 Equilibrium 4.4 Centres of mass 4.5 Tilting</p> <p>Unit 5 Forces and Friction 5.1 Resolving forces 5.2 Inclined planes 5.3 Friction</p> <p>Unit 6 Projectiles 6.1 Horizontal projection 6.2 Horizontal and vertical components 6.3 Projection at any angle 6.4 Projectile motion formulae</p> <p>Unit 7 Applications of forces 7.1 Static particle 7.2 Modelling with statics 7.3 Friction and static particles 7.4 Static rigid bodies 7.5 Dynamics and inclined planes 7.6 Connected particles</p>	

Year 13 Mathematics Curriculum 2021/22 – Edexcel 9MA0

Autumn Term	Spring Term	Summer Term
<p>Unit 9 Differentiation 9.1 Differentiating $\sin x$ and $\cos x$ from first principles 9.2 Differentiating exponentials and logarithms 9.3 The chain rule 9.4 The product rule 9.5 The quotient rule 9.6 Differentiating trigonometric functions 9.7 Parametric differentiation 9.8 Implicit differentiation 9.9 Using second derivatives 9.10 Rates of change</p> <p>Unit 10 Numerical methods 10.1 Location of roots 10.2 Iteration 10.3 Newton-Raphson method 10.4 Application to modelling e</p> <p>Unit 11 Integration (part 1) 11.1 Integrating standard functions 11.2 Integrating $f(ax+ b)$ 11.3 Using trigonometric identities 11.4 Reverse chain rule 11.5 Integration by substitution 11.6 Integration by parts 11.7 Partial fractions 11.8 Finding areas 11.9 The trapezium rule 11.10 Solving differential equations 11.11 Integration as the limit of a sum</p>		

Year 13 Music Curriculum Outline 2021/22 – Edexcel 9MU0

Autumn Term	Spring Term	Summer Term
<p>Unit 1 – Performing Solo performance rehearsal</p> <p>Unit 2 – Composing Completion of 3rd compositional assignment Bach Chorale writing</p> <p>Unit 3 – Appraising (Vocal Music) Study and analysis of the following set works:</p> <ul style="list-style-type: none"> - Bernard Herrmann, <i>Psycho</i> excerpts - Rachel Portman, <i>The Duchess</i> excerpts - Mozart, <i>The Magic Flute</i>: Act 1 Nos. 4 and 5. - Clara Schumann, <i>Piano Trio in G minor</i>, Op.17: Movement 1 	<p>Detailed revision of Areas of Study and links to wider listening examples.</p> <p>Preparation for final composition ongoing</p>	<ul style="list-style-type: none"> - Record final performance - Complete and record final composition - Revision of all Areas of Study

Year 13 PE Curriculum Outline 2021/22 – AQA 7582

Autumn Term	Spring Term	Summer Term
Theory	Theory	Theory
<ul style="list-style-type: none"> • Biomechanical Principles • Levers • Linear Motion • Angular Motion • Projectile Motion • Motivation • Achievement Motivation Theory • Importance of Goal Setting • Attribution Theory • Drugs in Sport • Sport and the Law • Impact of Commercialisation on Physical Activity • The Relationship between Sport and the Media 	<ul style="list-style-type: none"> • Fluid Mechanics • Self-Efficacy and Confidence • Social Facilitation • Group Dynamics • Leadership • The Role of Technology in Physical Activity in Sport 	<p>Revision</p> <p>Revision</p> <p>Revision</p>

Year 13 Physics Curriculum 2021/22 – OCR H556

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none">• nuclear physics• circular motion and gravitational fields• simple harmonic oscillations• capacitors and exponential decay	<ul style="list-style-type: none">• electric fields• magnetic fields• thermal physics• medical imaging	<ul style="list-style-type: none">• electromagnetism• more momentum• practical skills• revision and past papers

Year 13 PSHCE Curriculum 2021/22

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none"> • Review Study skills/Summer review • Wellbeing wheel intro to PSHCE sessions and Vision Board • The Chimp Paradox; Introduction • The Chimp Paradox; Activities • Money Matters 5 How keep information secure • Sexual Health Talk from Brook • Money Matters 3 Student Finance • Drugs festivals and Parties • Free Speech and Hate Speech • Donna From Mind Mindfulness CBT strategies • Ageism • PC1 • The Chimp Paradox/Vespa Systems for revision • Gratitude and Celebration 	<ul style="list-style-type: none"> • Mock Week • Mocks Prep Review & Review view systems for revision • Money Matters Borrowing choices • Miscarriage and Unplanned pregnancy • Class A drugs 1 • Class A drugs 2 • Mari Presentation environmental talk • Careers Leadership Skills • Date Rape • Social Justice • Pay day Loans 	<ul style="list-style-type: none"> • Exam Arrangements • Cosmetic and plastic surgery • Toxic and positive masculinity Never Acceptable • Revision Strategies • Study Leave

Year 13 Psychology Curriculum 2021/22 - Edexcel 9PS01

Autumn Term	Spring Term	Summer Term
<p>Paper 2 – Applications of Psychology - Clinical Teacher 1</p> <ul style="list-style-type: none"> • 4 D's of Diagnosis and the Classification of Disorders <p><u>Schizophrenia</u></p> <ul style="list-style-type: none"> • Symptoms of Schizophrenia • Two Biological (neurological and Genes) • Contemporary Study (e.g. Carlsson) • One Non-Biological Explanation for Schizophrenia e.g. social causation hypothesis • Classic Study: Rosenhan • Biological (drugs) and Non-Biological Treatment for Schizophrenia • Individual differences and genes/ development • Methods involved in research into mental health • Revisiting statistical analysis • HCPC (ethical) guidelines • Key question re Clinical and Schizophrenia • Practical investigation relating to Clinical psychology <p>Teacher 2 Paper 2 – Applications of Psychology – Child</p> <ul style="list-style-type: none"> • Bowlby's theory of attachment • Ainsworth's research into the Strange Situation • Classic Study: Van Ijzendoorn • Deprivation (short term/ long term – 44 Juvenile Thieves) • Contemporary Study (e.g. Gagnon-Oosterwaal) • Privation (with reference to Genie) • The effect of Day Care • Culture and attachment • Individual and developmental influences on child development 	<p>Teacher 1 <u>OCD</u></p> <ul style="list-style-type: none"> • OCD Symptoms • Explanations - Biological (Neuroanatomical) and Non Biological • Contemporary Study (e.g. March the POTS study) <p>Preparation for Mocks - Revision of Paper 1</p> <p>MOCK EXAMINATIONS</p> <p><u>OCD/Schizophrenia</u></p> <ul style="list-style-type: none"> • Issues and Debates in Clinical psychology <p>Paper 3 – Psychological skills</p> <ul style="list-style-type: none"> • Conventions of reporting investigations, Ethical issues and Peer review • Revisiting Psychological skills – Issues and Debates • Revisiting Research methods • Revisiting Classic Studies <p>Teacher 2 Paper 2 – Applications of Psychology - Child continued ...</p> <ul style="list-style-type: none"> • Methods involved in research into child psychology • Ethics involved in child research including the UNCRC • Key question - relating to Child Psychology • Practical investigation - relating to Child psychology <p><u>Autism</u></p> <ul style="list-style-type: none"> • Biological explanations of Autism • Non-Biological explanations of Autism 	<p>Teacher 1 Paper 3 – Psychological skills</p> <p><u>Revision of Psychological skills & Preparation for Examinations</u></p> <ul style="list-style-type: none"> • <u>Revision of Paper 1</u> (Social/ Cognitive/ Bio/ Learning) & Mini MOCKS • Revision of Paper 2 (Clinical/ Child) & Mini MOCKS <p>PAPER 3 MOCK</p> <p>Teacher 2</p> <ul style="list-style-type: none"> • Individual differences and the effect on development re Autism • 2 Treatments for Autism <p>PAPER 2: CHILD MOCK</p> <p>EXAMINATIONS</p>

Year 13 RS: Philosophy and Ethics Curriculum 2021/22 – OCR H573

Autumn Term	Spring Term	Summer Term
<p>Philosophy of Religion</p> <ol style="list-style-type: none"> 1. Nature and Attributes of God 2. Religious Language 3. Religious Language in the 20th Century <p>Religious Ethics</p> <ol style="list-style-type: none"> 1. Meta-Ethics 2. Conscience 3. Sexual Ethics 	<p>Developments in Christian Thought</p> <ol style="list-style-type: none"> 1. Religious Pluralism and Theology 2. Religious Pluralism and Society 3. Gender and Society 4. Gender and Theology 5. The challenge of Secularism 6. Liberation Theology and Marx 	<p>Exam practice and revision</p> <p>A Level exams</p>